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OPERATING MANUALS** 
www.fronius.com/galvo-manuals

Fronius Galvo Installation

Installation Instruction

Grid connected inverter



Safety EN



WARNING! Incorrect operation or poorly executed work can cause serious injury or damage. Commissioning of the inverter may only be carried out by trained personnel in accordance with the technical regulations. Read the safety rules before commissioning the equipment or carrying out maintenance work.



WARNING! An electric shock can be fatal. Danger due to grid voltage and DC voltage from solar modules that are exposed to light.

- Ensure that both the AC side and the DC side of the inverter are de-energised before carrying out any connection work.
- Only an authorised electrical engineer is permitted to connect this equipment to the public grid.



WARNING! An electric shock can be fatal. Danger of electric shock if the solar module is not grounded or is not grounded properly.

To comply with IEC 62109-2:2011, any grounding required by the manufacturer of the solar module within the inverter must only be carried out via the specified fuse.



WARNING! An electric shock can be fatal. Danger from DC voltage in solar modules. The inverter's insulation monitoring is deactivated when the solar modules are grounded.

- Ensure that grounded solar modules are assembled so that they are insulated according to Protection Class II
- Place the relevant safety sticker in a clearly visible place on the photovoltaic system
- Configure the inverter so that an error message is displayed if the fuse trips.



WARNING! An electric shock can be fatal. Danger due to grid voltage and DC voltage from solar modules.

- The DC main switch is only to be used to de-energise the power stage set. The connection area is still live when the DC main switch is switched off.
- Ensure that the power stage set and connection area are disconnected from one another before carrying out any maintenance or service tasks.
- The power stage set, which is enclosed in a separate housing, must only be disconnected from the connection area when in a de-energized state.
- Maintenance and servicing in the power stage set of the inverter must only be carried out by Fronius-trained service technicians.



WARNING! An electric shock can be fatal. Danger from residual voltage in capacitors. Wait for the capacitors to discharge. The discharge time is three minutes.



WARNING! An inadequate ground conductor connection can cause serious injury or damage. The housing screws provide a suitable ground conductor connection for grounding the housing and must NOT be replaced by any other screws that do not provide a reliable ground conductor connection.



CAUTION! Risk of damage to the inverter from dirt or water on the terminals and contacts of the connection area.

- When drilling, ensure that terminals and contacts in the connection area do not become dirty or wet.
- Without a power stage set, the wall bracket does not conform to the protection class of the inverter as a whole and so must not be installed without the power stage set.
The wall bracket should be protected from dirt and moisture during installation.





CAUTION! Risk of damage to the inverter as the result of incorrectly tightened terminals. Incorrectly tightened terminals can cause heat damage to the inverter that may result in a fire. When connecting AC and DC cables, ensure that all the terminals are tightened to the specified torque.



CAUTION! Risk of damage to inverter from overload.


- The maximum amperage when connecting to a single DC terminal is 20 A.
- Connect the DC+ and DC- cables to the DC+ and DC- terminals on the inverter, taking care to ensure that the polarity is correct.

 **NOTE!** If solar modules are grounded by a built-in grounding protection device in the inverter, they will not be grounded if the DC main switch is in the OFF position.


 **NOTE!** Degree of protection IP 65 is only applicable if


- the inverter is permanently attached to the wall bracket with screws
- the cover for the data communication area is permanently attached to the inverter with screws.


Degree of protection IP 20 applies to the wall bracket with no inverter.


 **NOTE!** When connecting aluminium cables:

- observe national and international guidelines regarding the connection of aluminium cables
- follow the instructions of the cable manufacturer.
- check every year that the cables are securely attached in accordance with the specified torque.

 **NOTE!** Ensure the polarity is correct when connecting the DC cables.

 **NOTE!** For grounding solar module frames or racks, the relevant specifications from the solar module manufacturer must be taken into account along with national guidelines.

 **NOTE!** Observe the ESD guidelines when handling option cards.

 **NOTE!** If the inverter is installed in Australia or New Zealand (required standard: AS4777.2:2015), the following applies:

- Functional grounding is **not** permitted
- The inverter must **not** be used as part of a three-phase combination, as there is no communication link between the inverters

Fronius manufacturer's warranty

Detailed, country-specific warranty terms are available on the internet:
www.fronius.com/solar/warranty

To obtain the full warranty period for your newly installed Fronius inverter or storage system, please register at: www.solarweb.com.

Fire Prevention EN



CAUTION! Risk of damage to inverters and other live photovoltaic system components due to poor or unprofessional installation.

Poor or unprofessional installation can cause overheating of cables and terminal connections and result in arcs. These can cause heat damage, which in turn may lead to fires.

Observe the following when connecting AC and DC cables:

- Tighten all terminals to the torque specified in the operating instructions
- Tighten all grounding terminals (PE / GND), including free ones, to the torque specified in the operating instructions
- Do not overload cables
- Check cables for damage and verify that they are laid correctly
- Take note of the safety instructions, operating instructions and any local connection regulations

Using fastening screws, always screw the inverter firmly to the wall bracket to the torque specified in the operating instructions.

Ensure that the fastening screws are tight before starting the inverter!

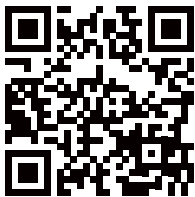


Manufacturer's instructions regarding connection, installation and operation must always be observed. To reduce the hazard potential to a minimum, perform all installation and connection work carefully according to the instructions and regulations.

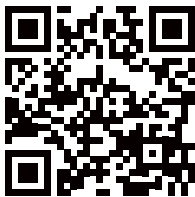
Refer to the device operating instructions / installation instructions for the tightening torques to be used at the relevant terminal connections.

Fronius Galvo Installation Help

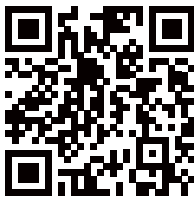
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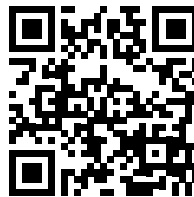
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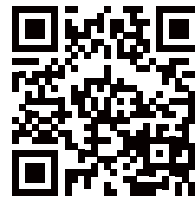
Italiano



Nederlands



Español



Deutsch

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Français

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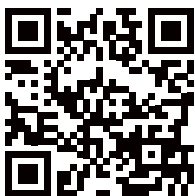
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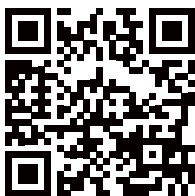
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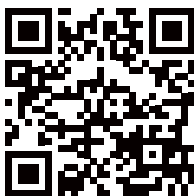
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(Brasil)



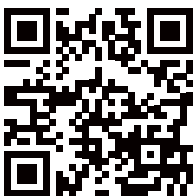
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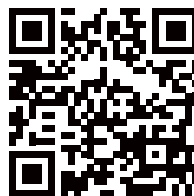
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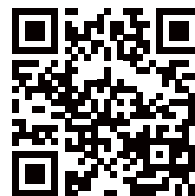
Svensk



ελληνικά



Türk



Português
(Brasil)

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Magyar

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Dansk

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Svensk

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ελληνικά

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Türk

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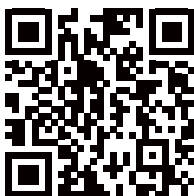
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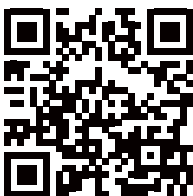
Ceština



Slovenský



Român



Suomalainen



Polski

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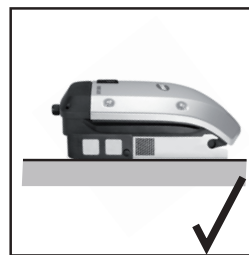
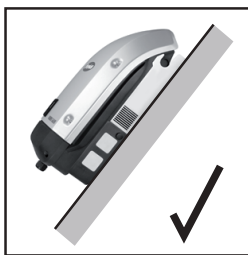
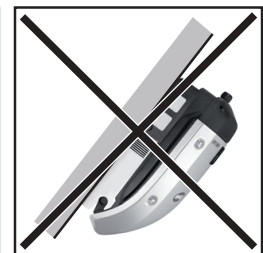
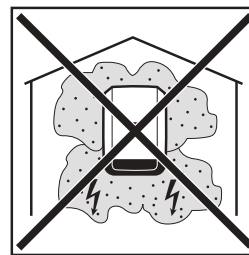
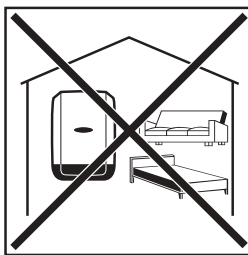
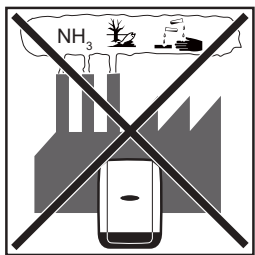
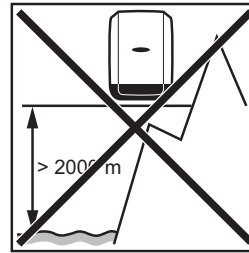
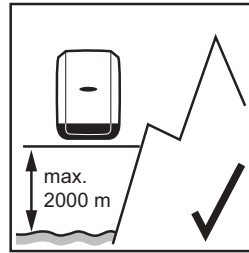
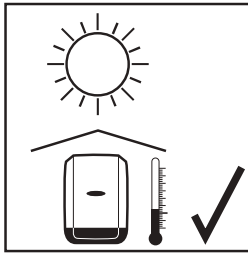
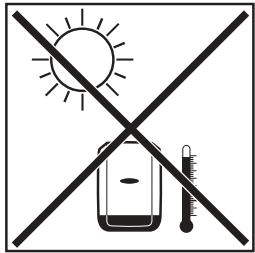
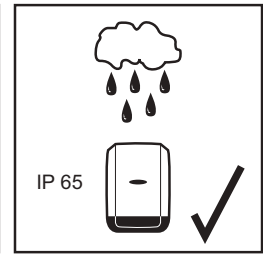
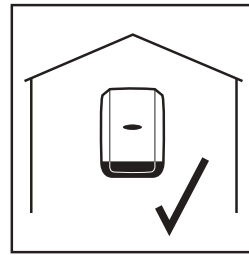
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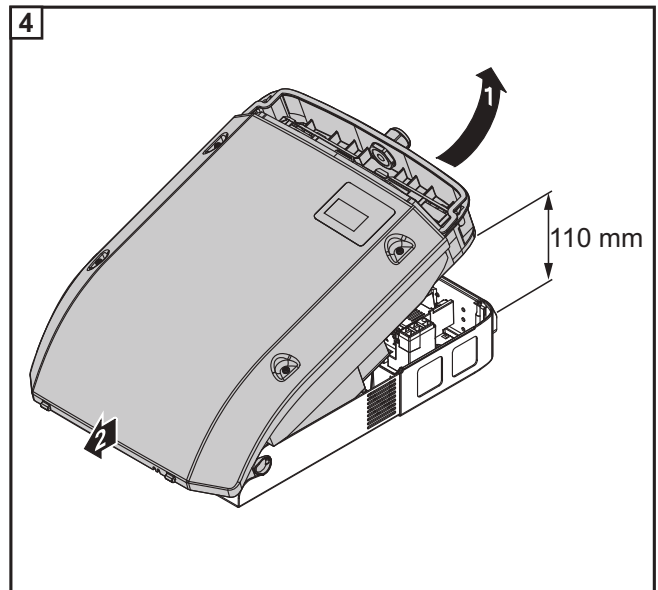
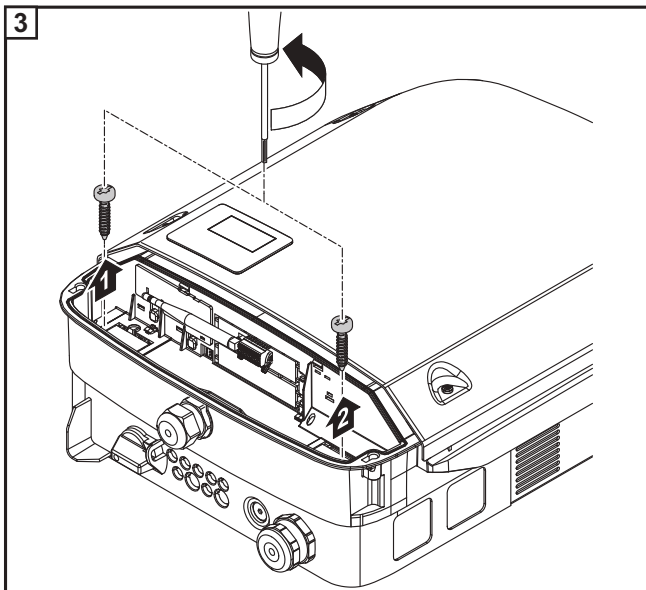
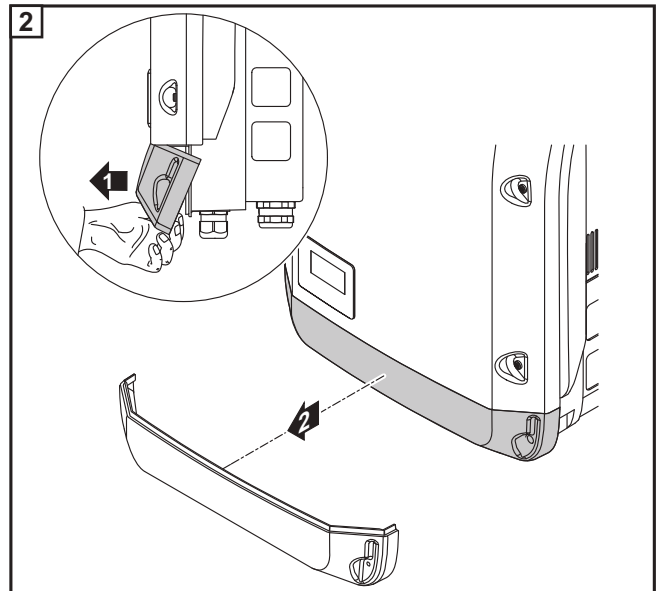
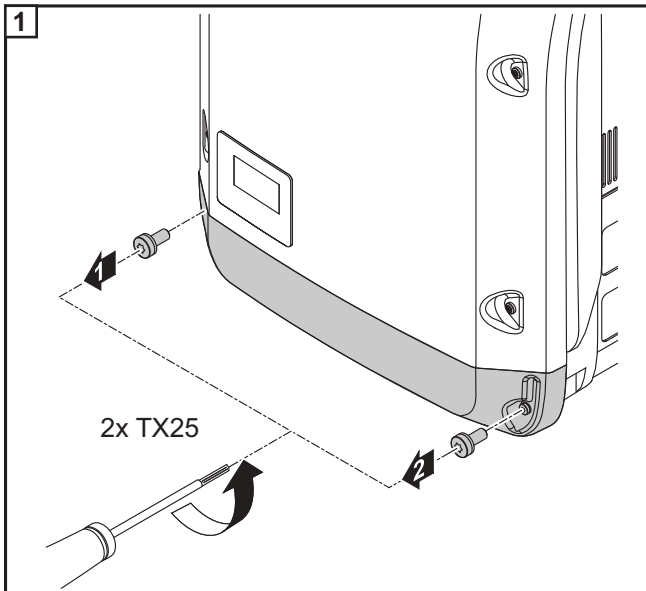
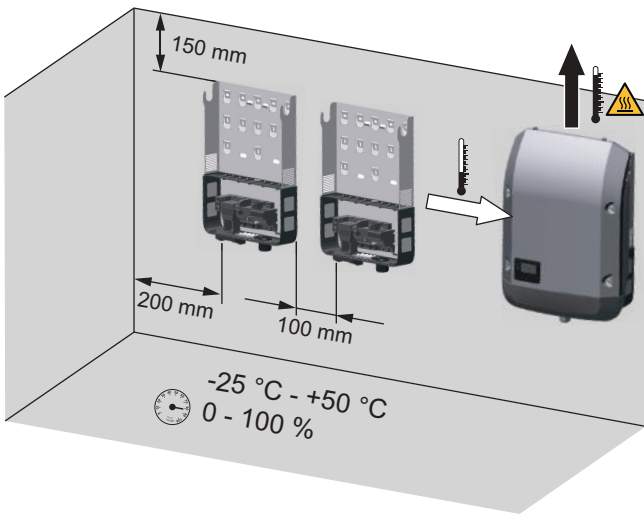
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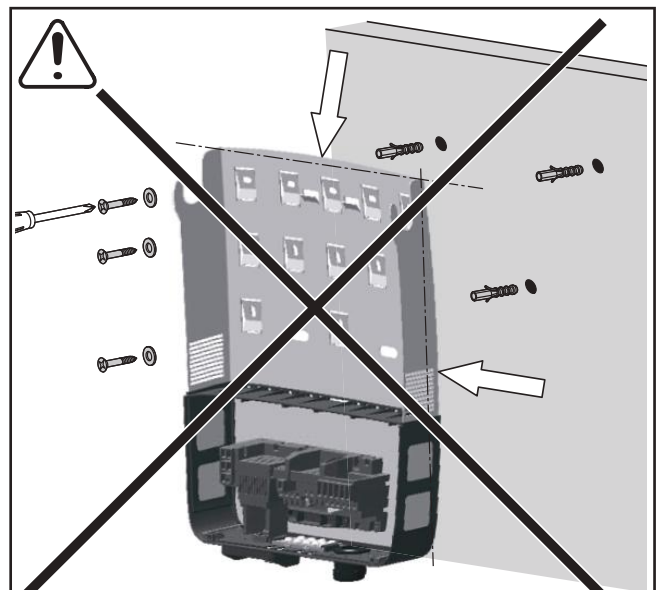
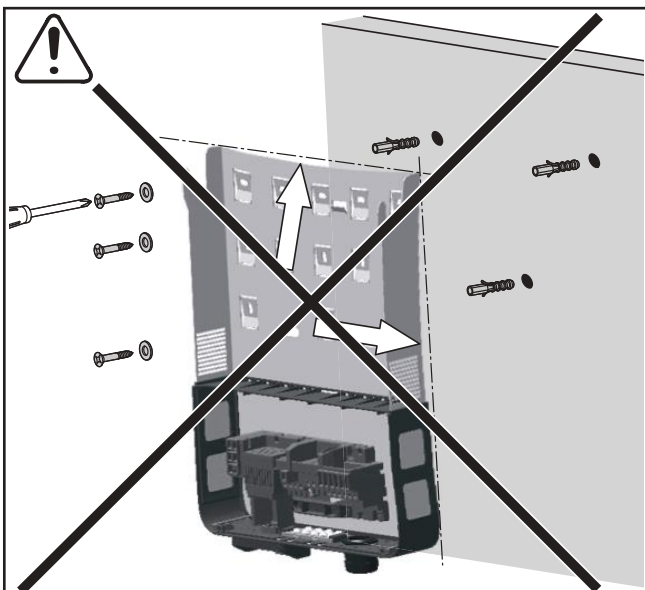
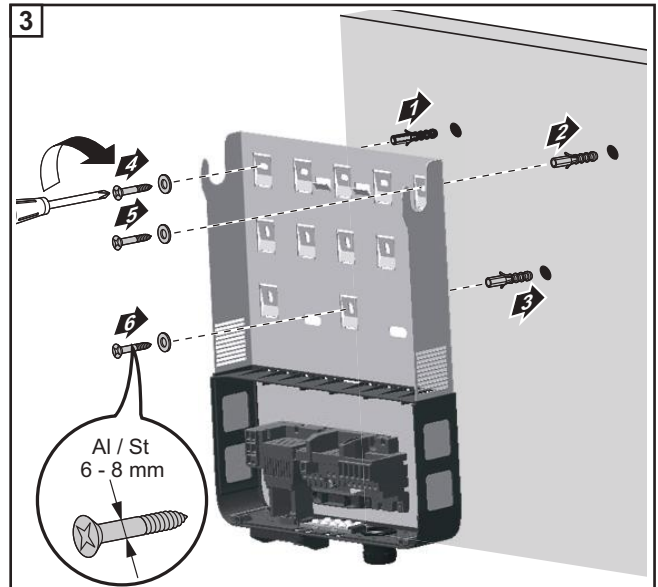
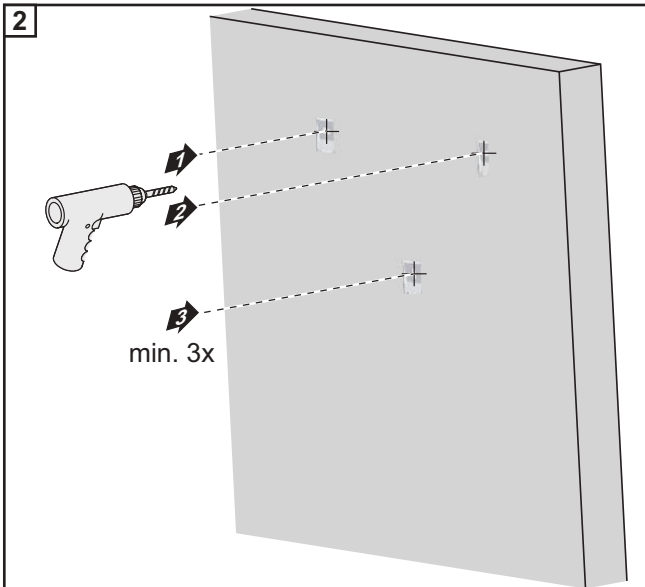
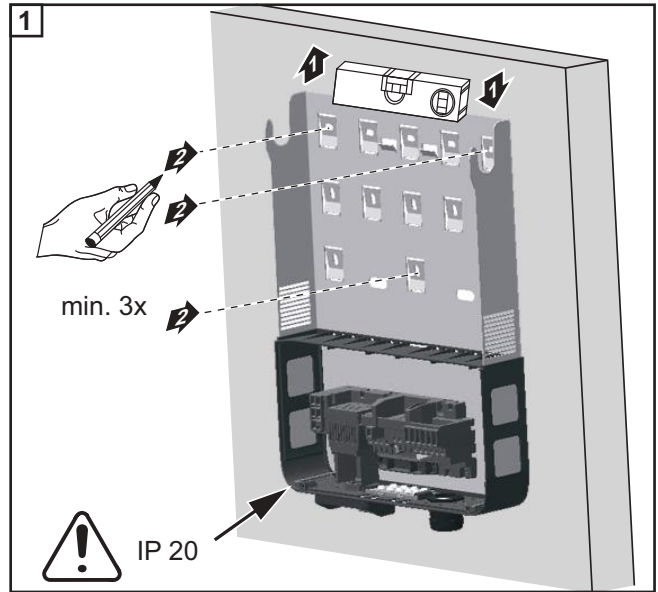
Suomalainen

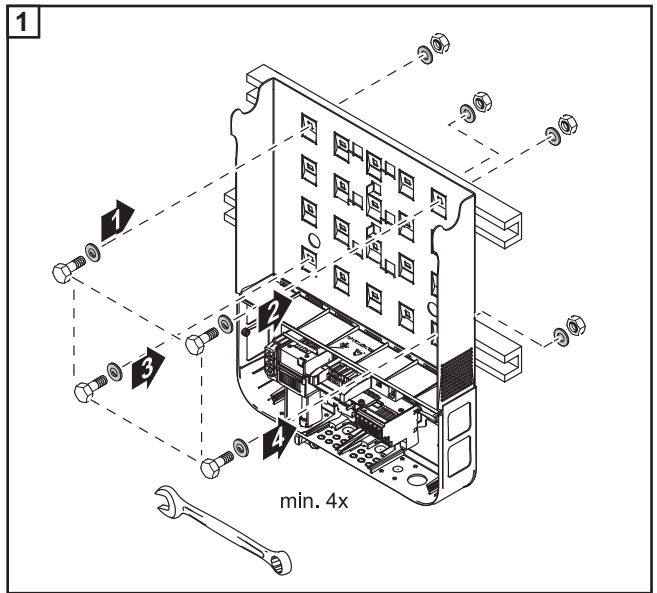
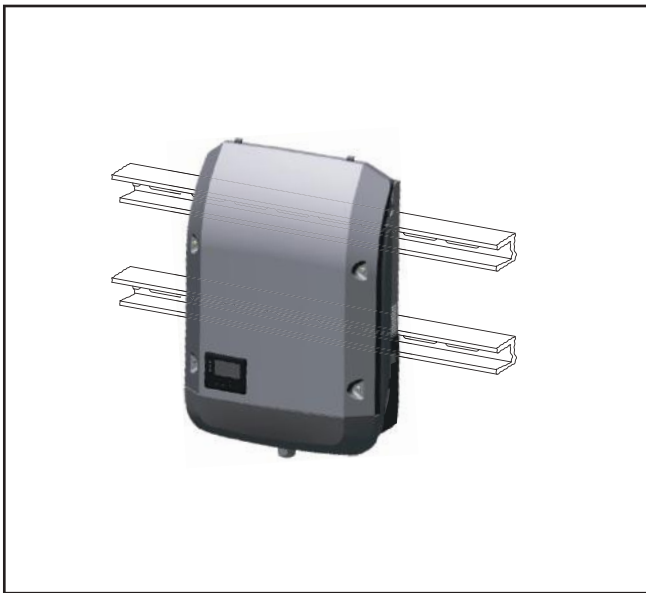
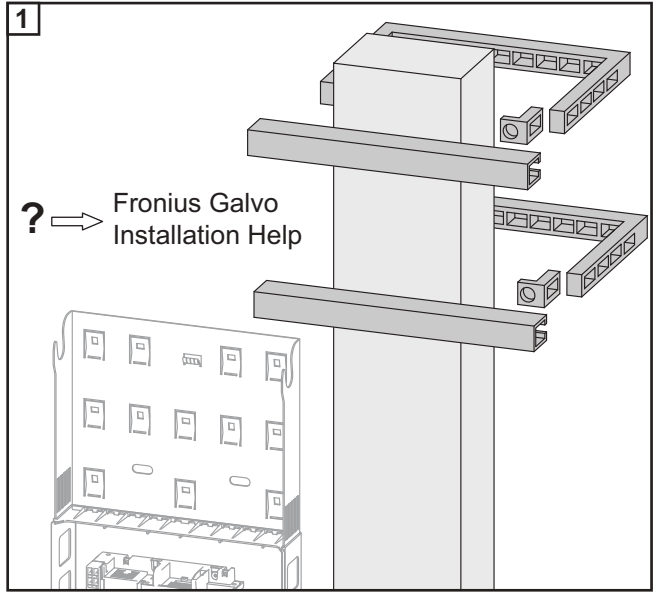
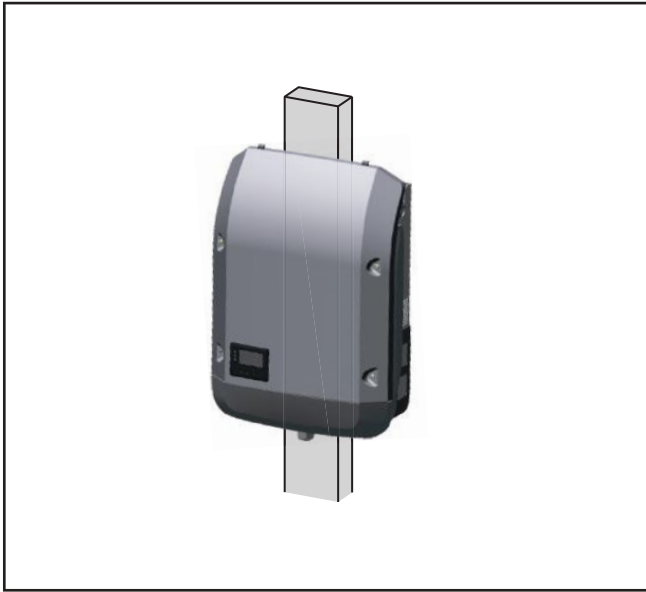
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Fronius Galvo Installation



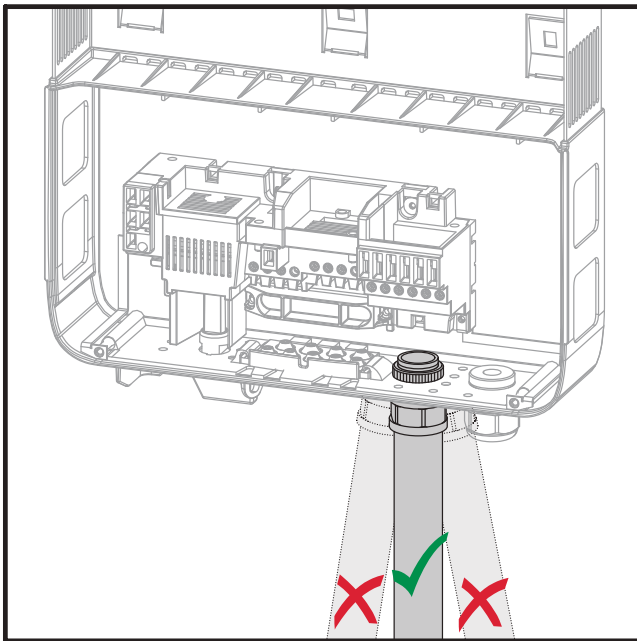
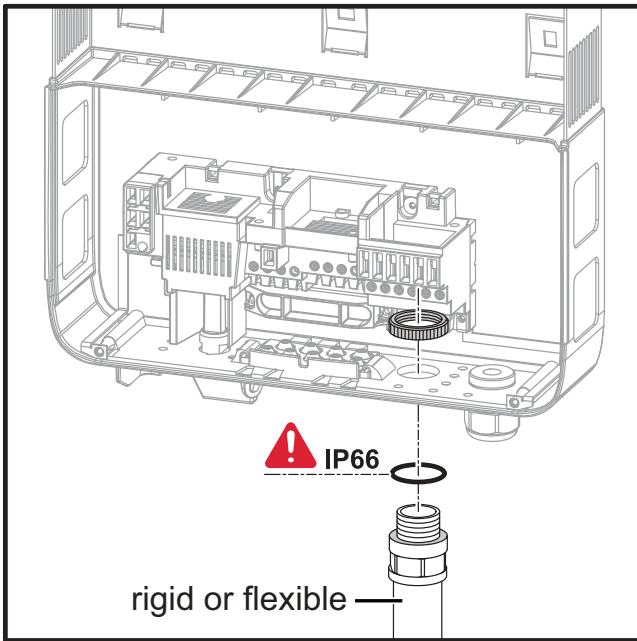




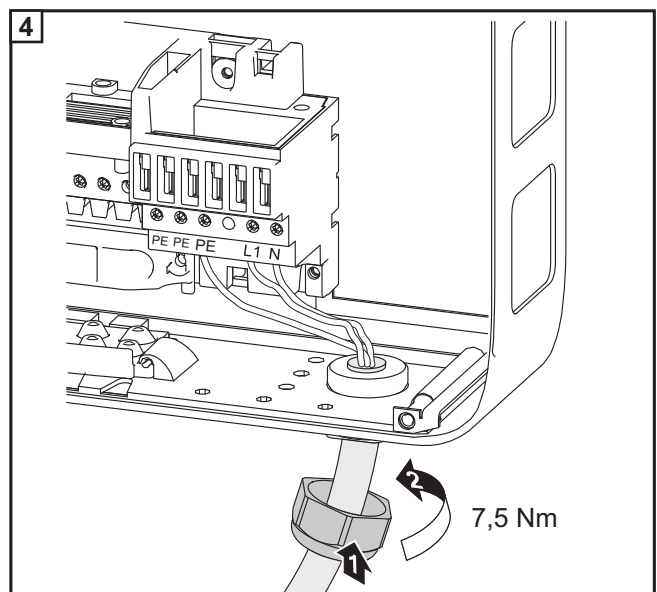
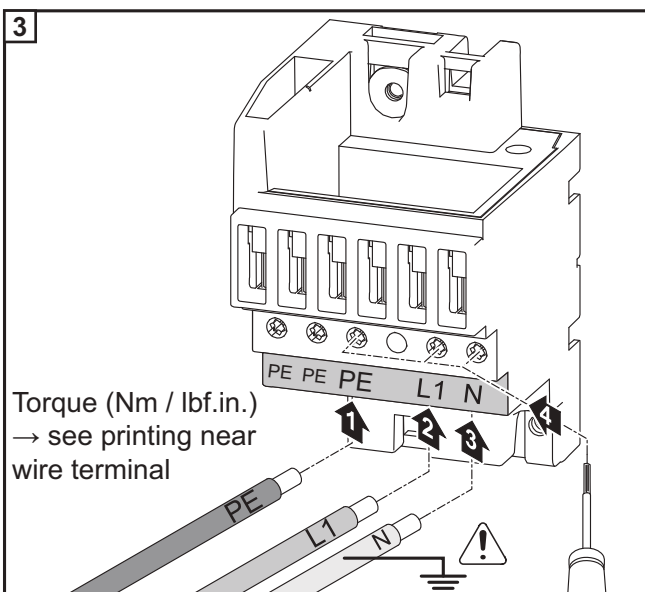
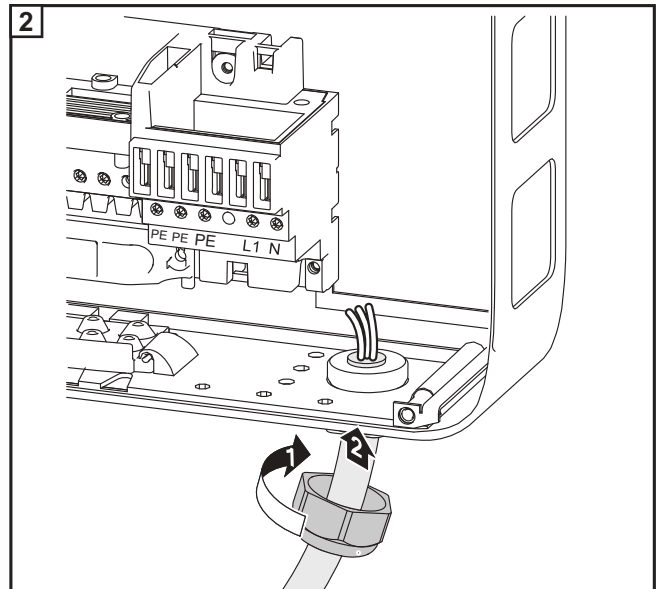
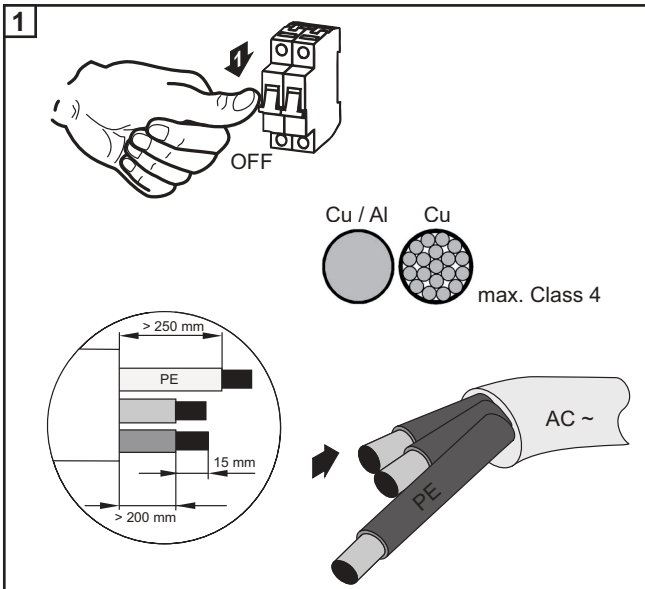
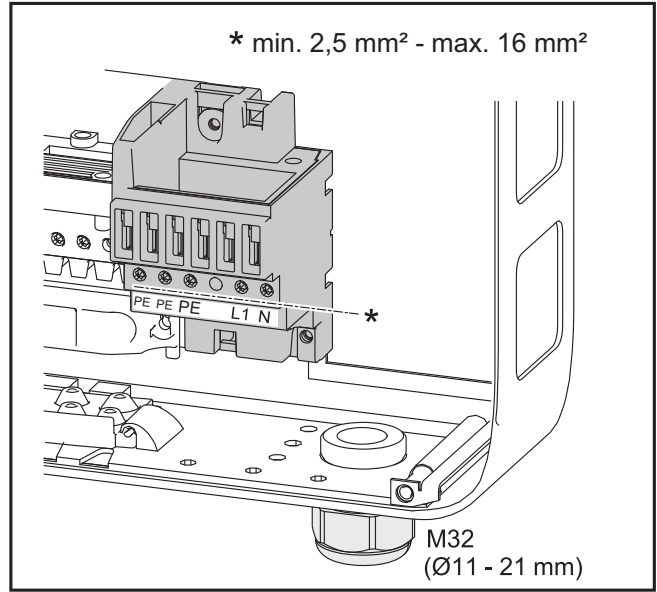
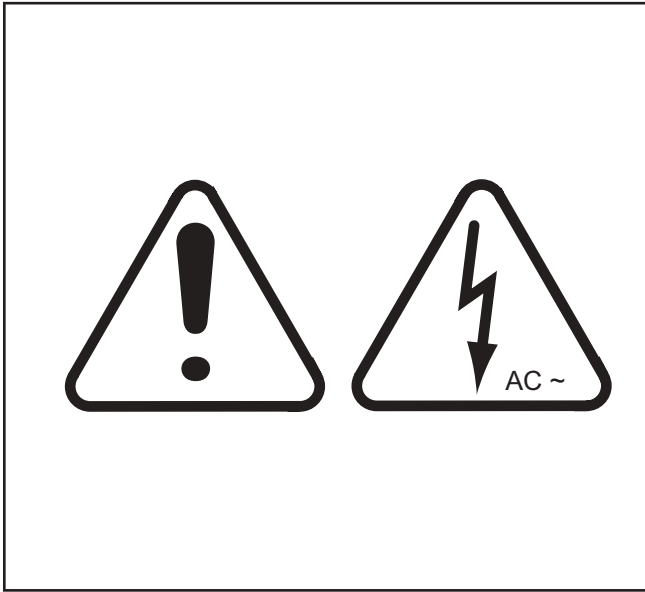


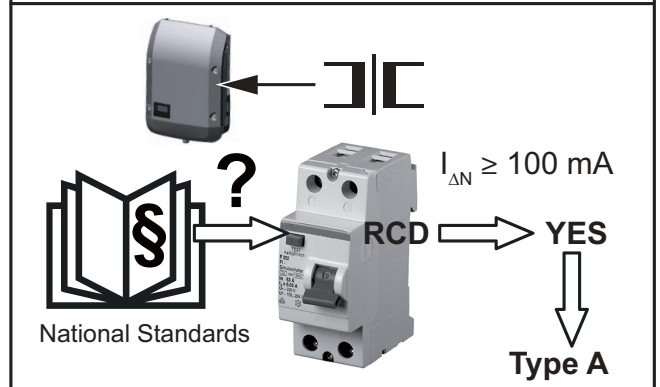
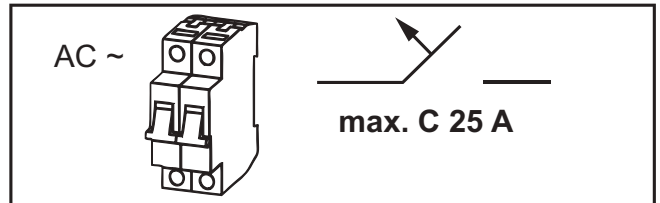
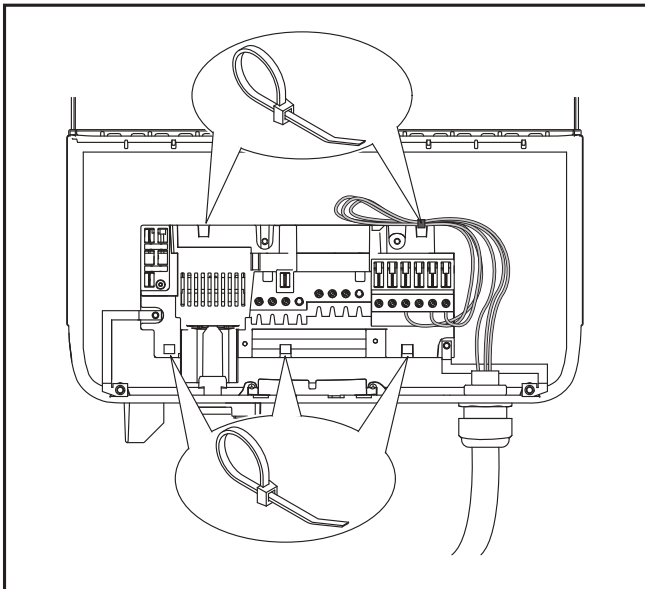
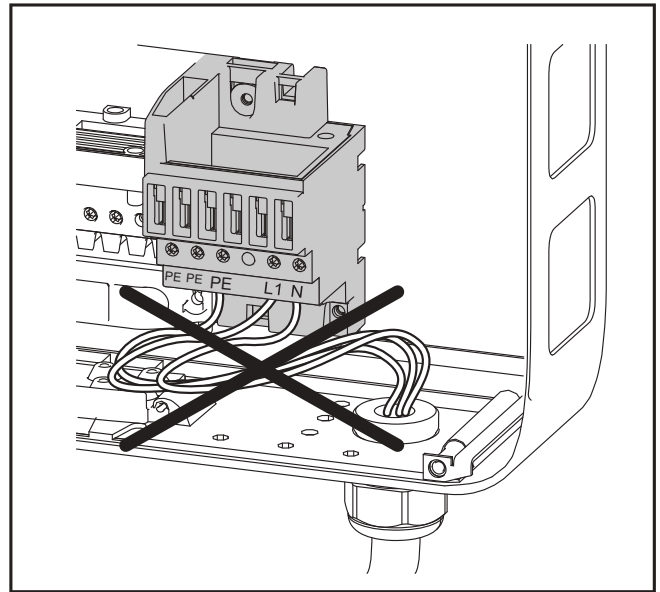
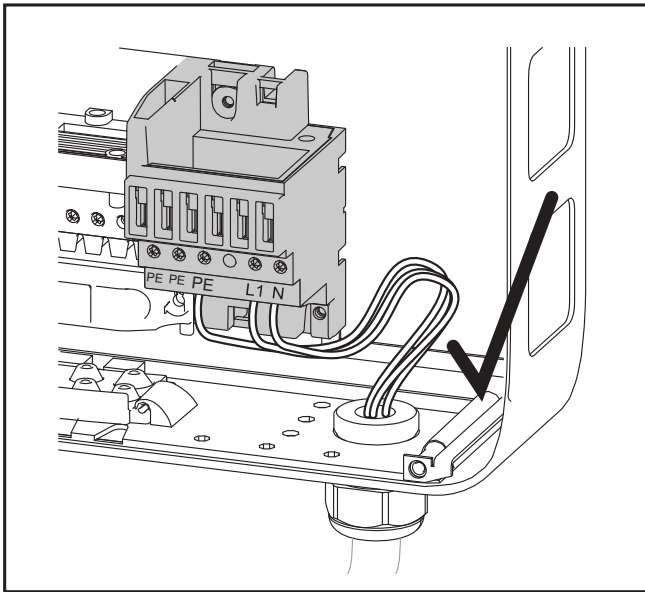
Australia - Conduits

Pay attention to the correct sealing of the conduits!

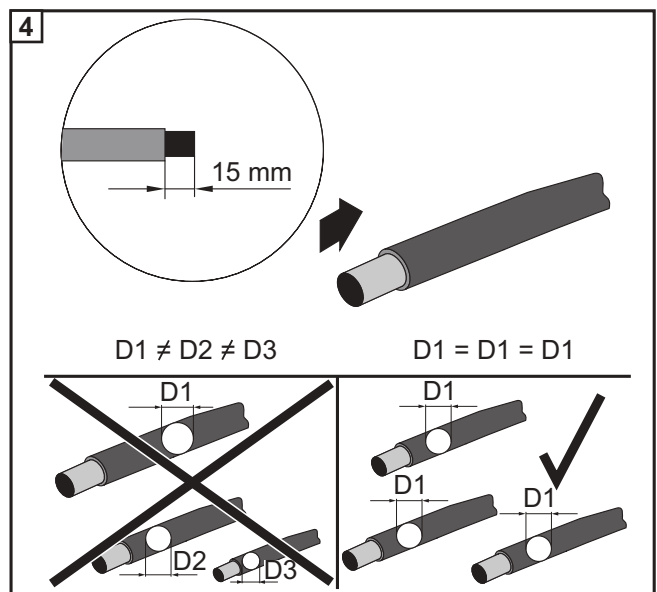
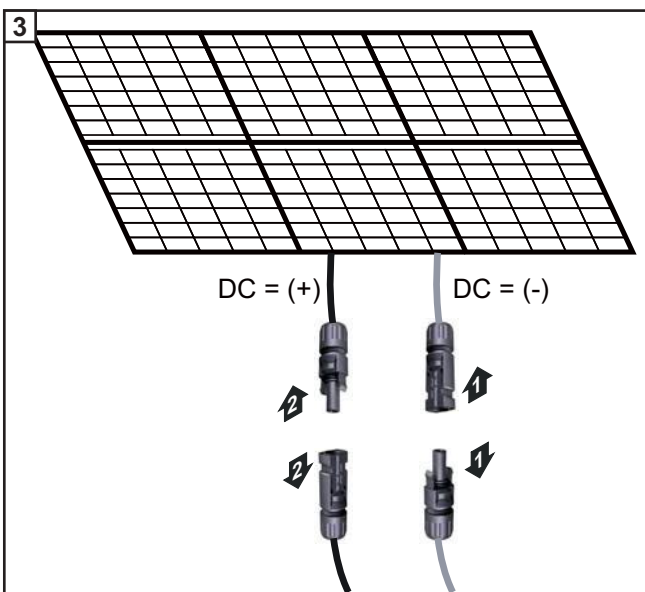
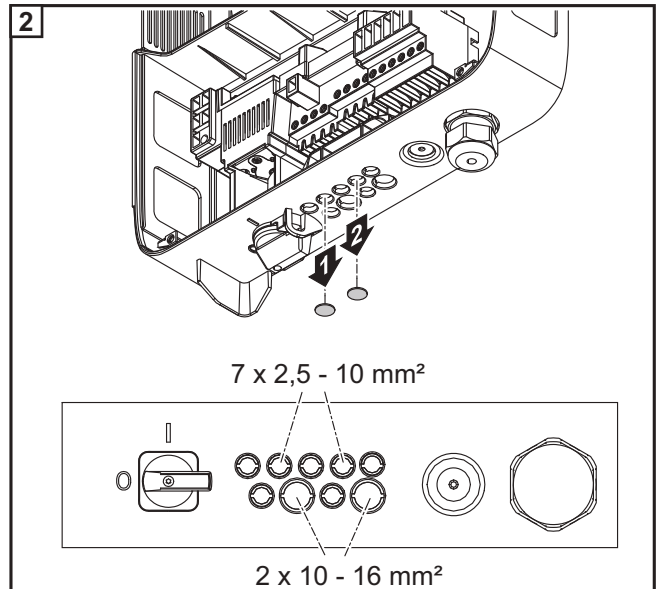
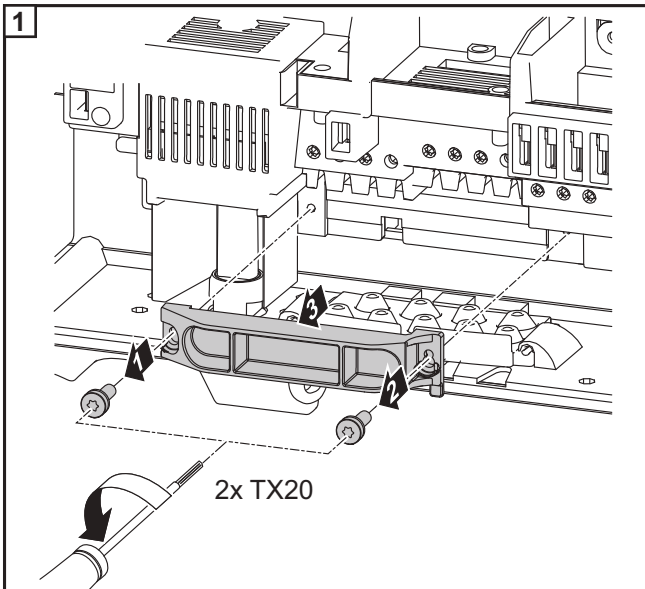
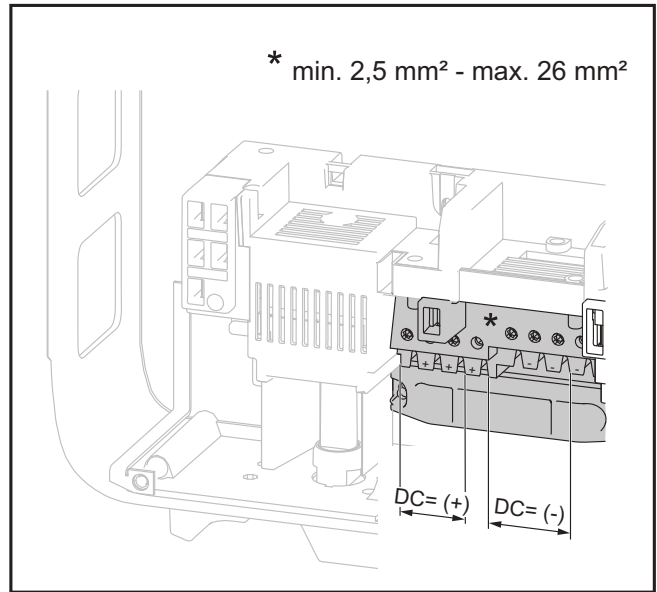
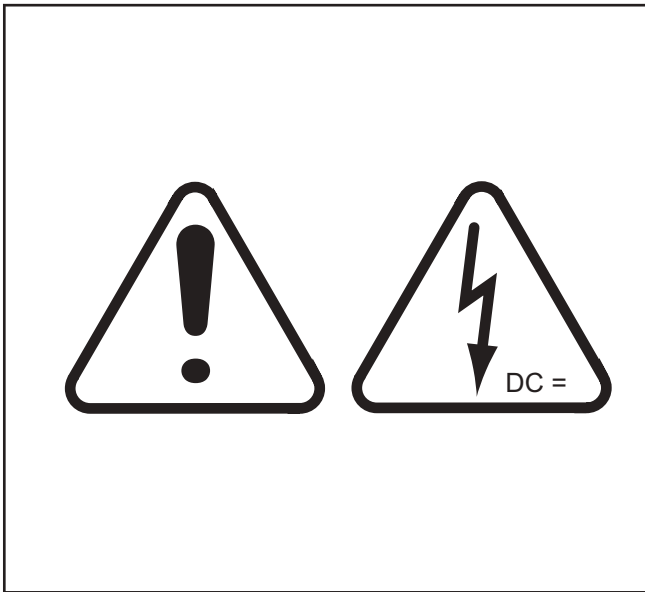


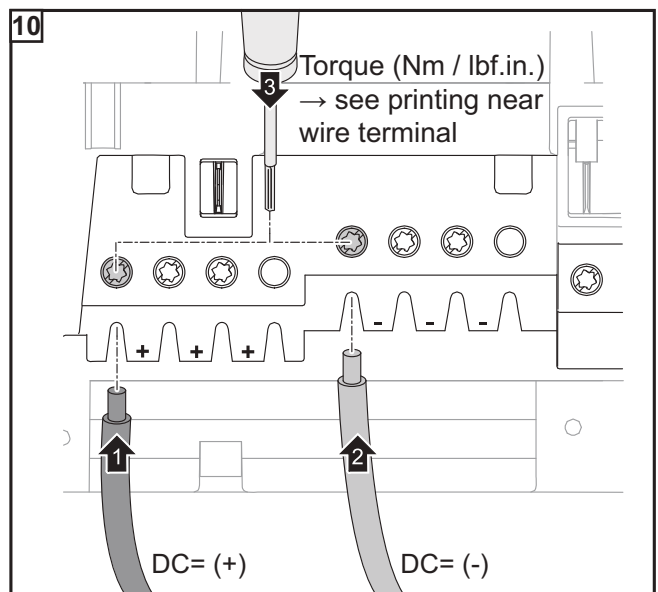
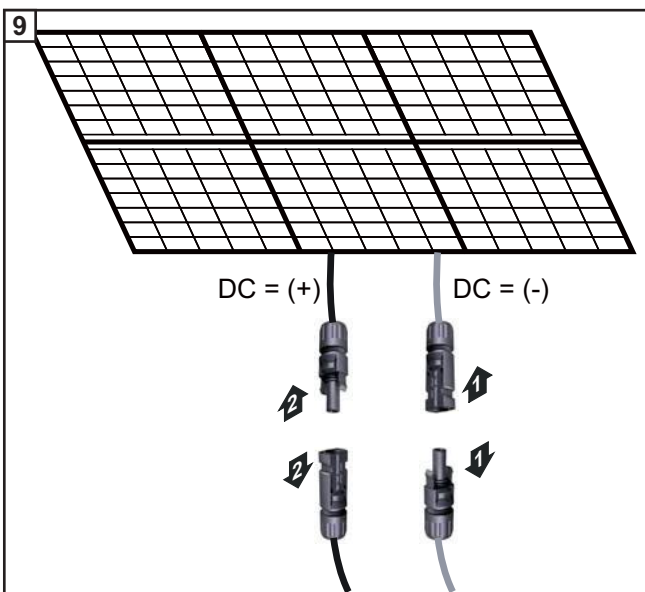
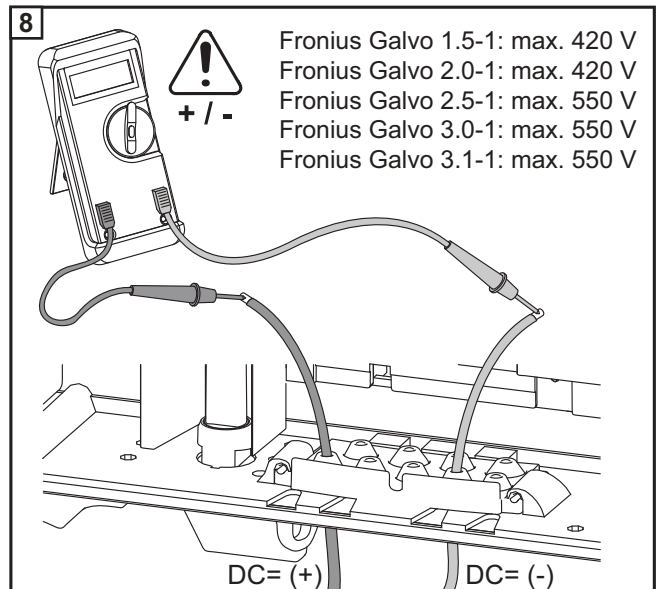
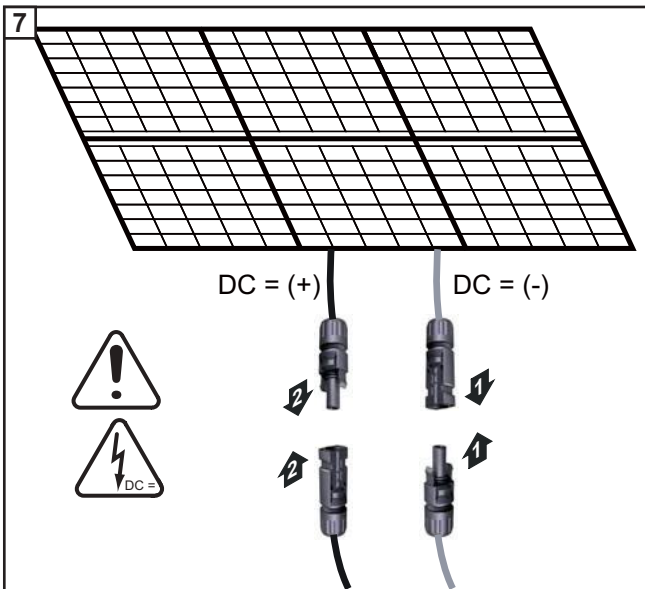
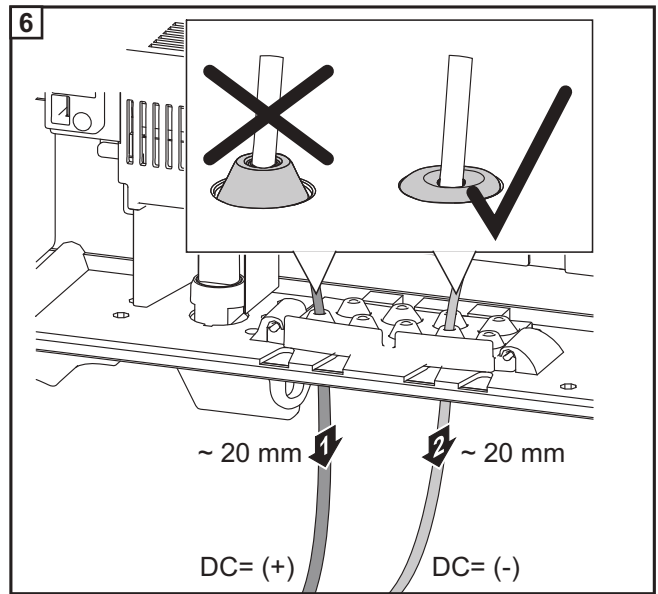
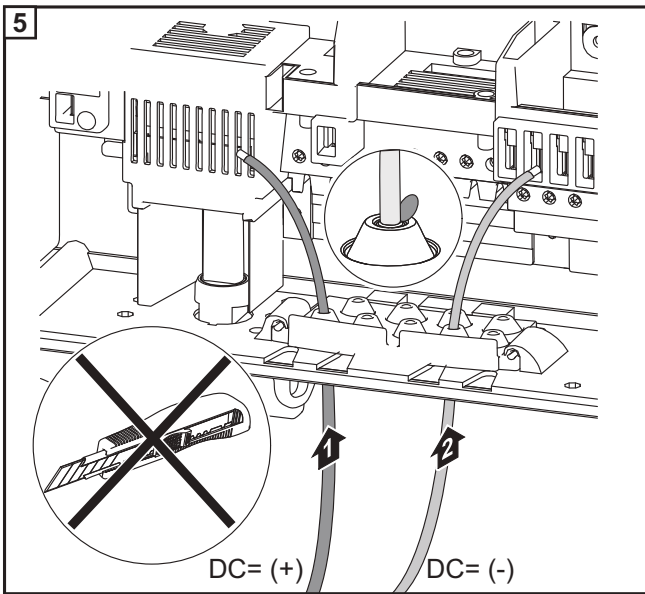
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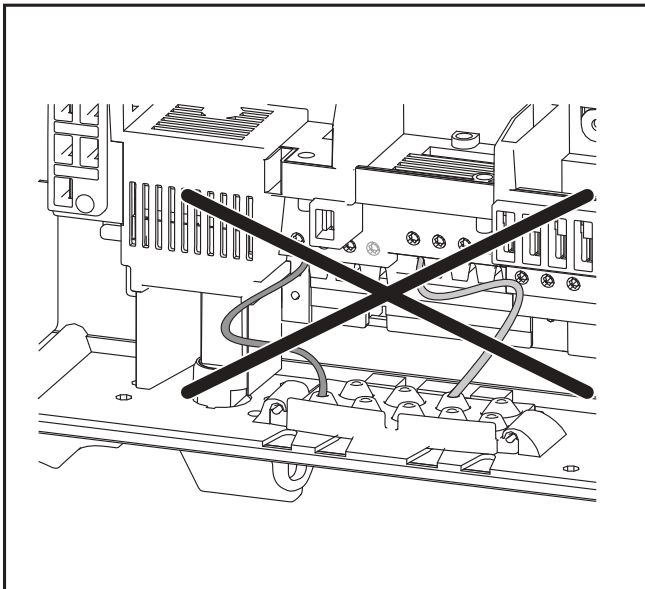
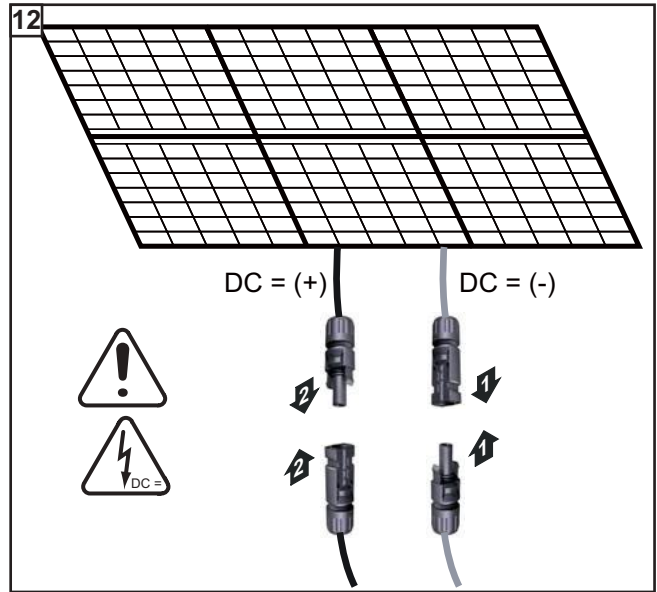
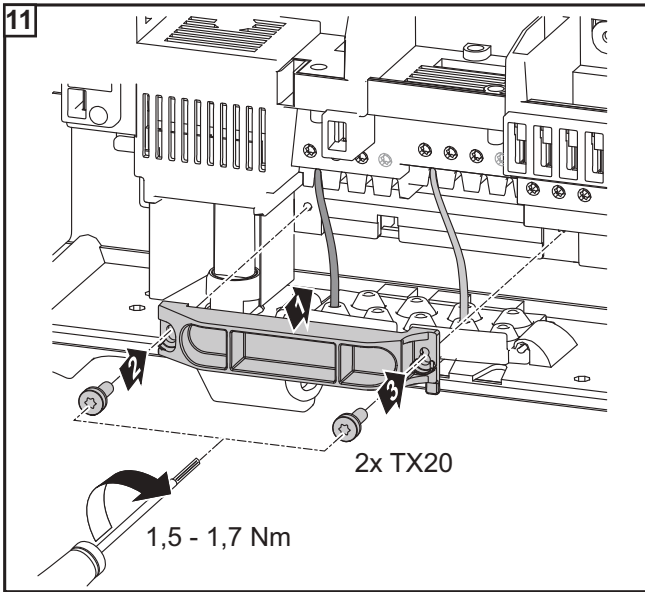


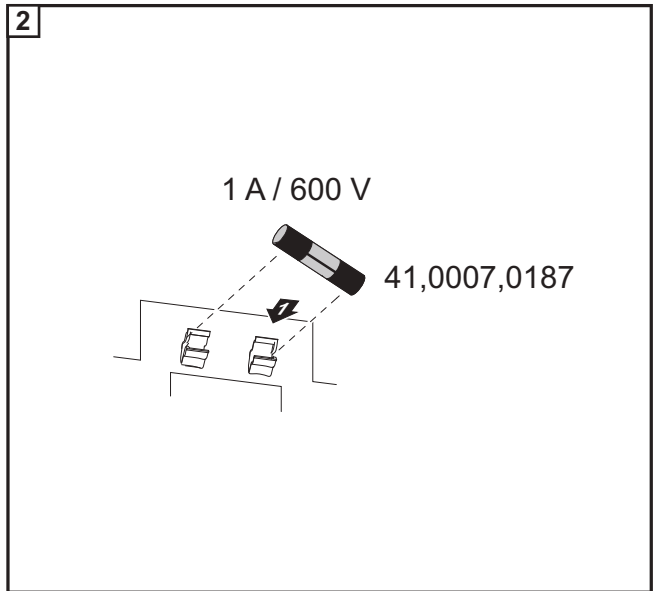
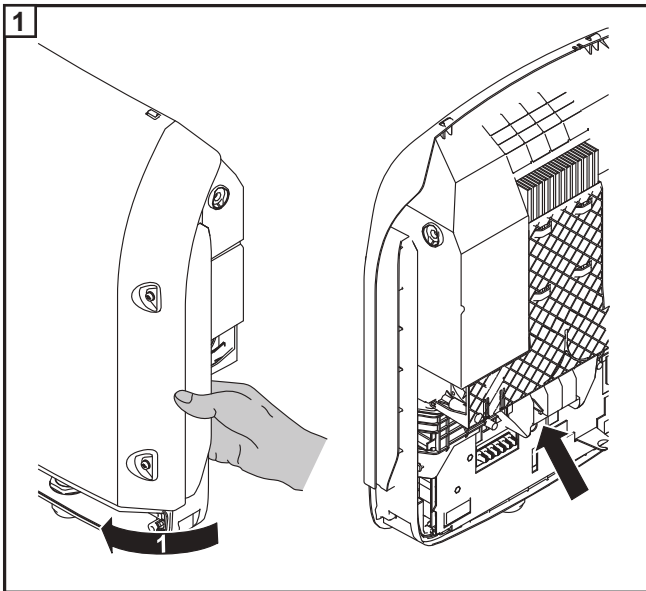
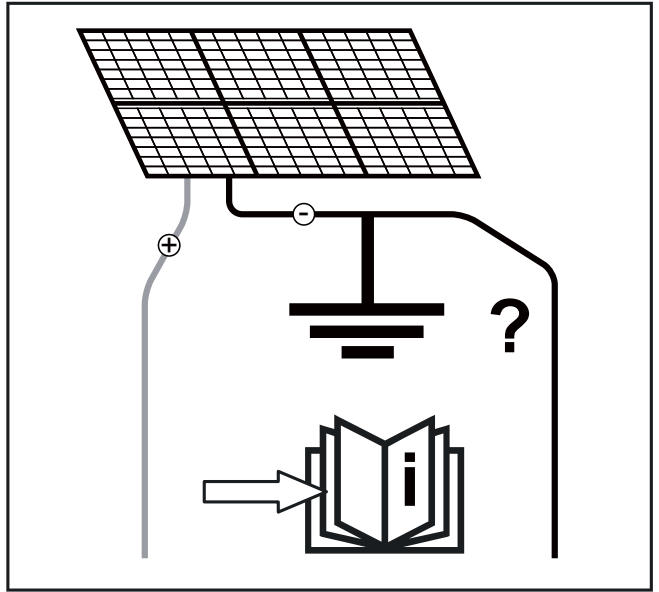
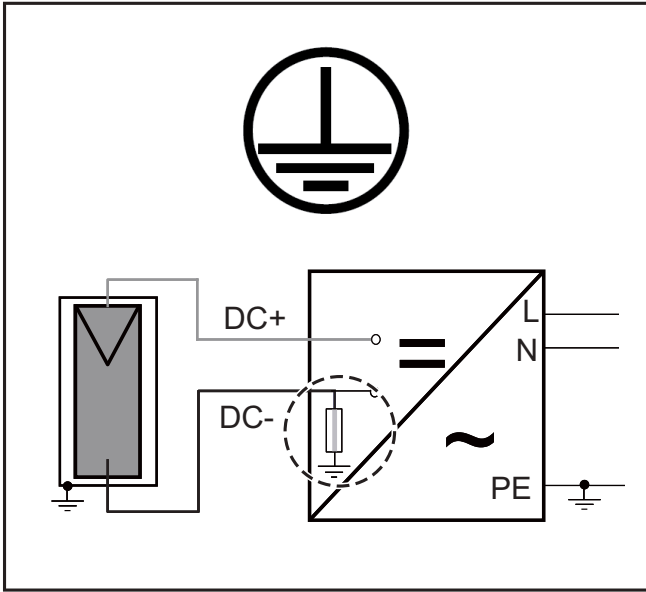


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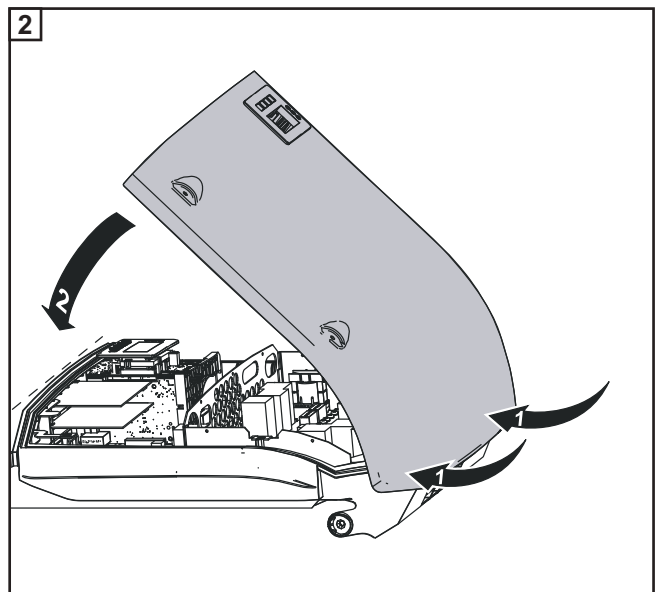
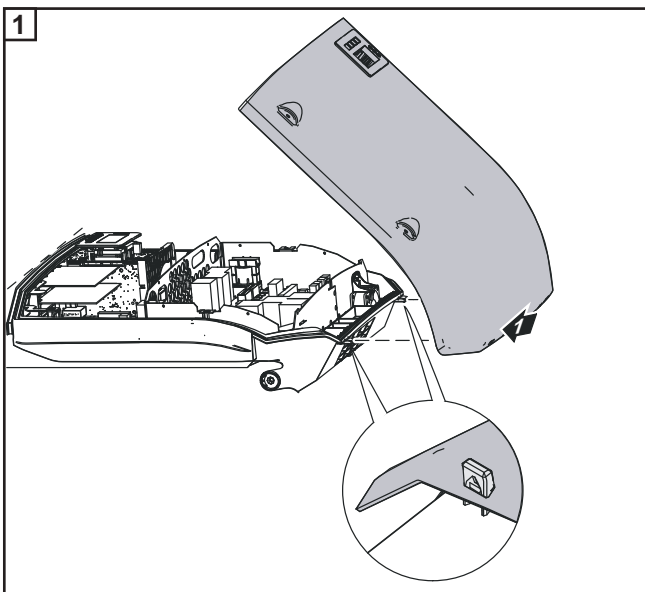
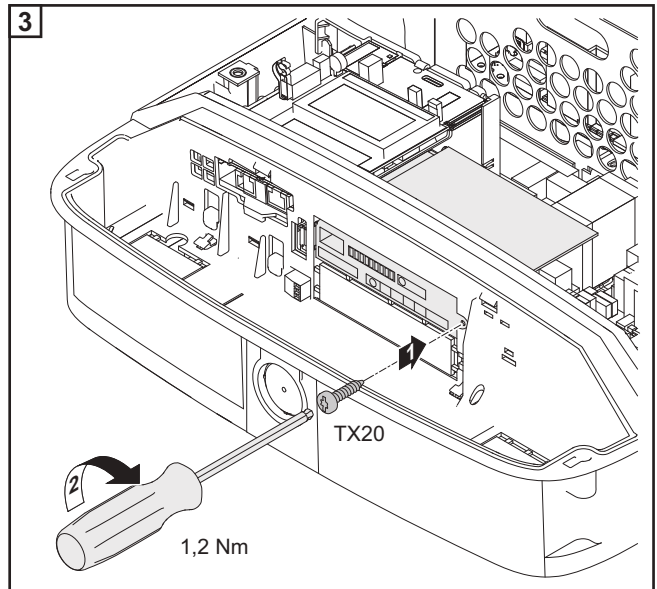
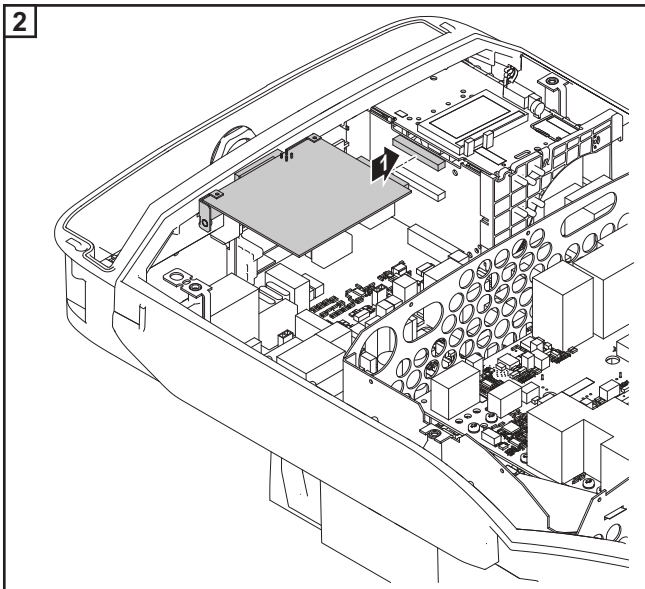
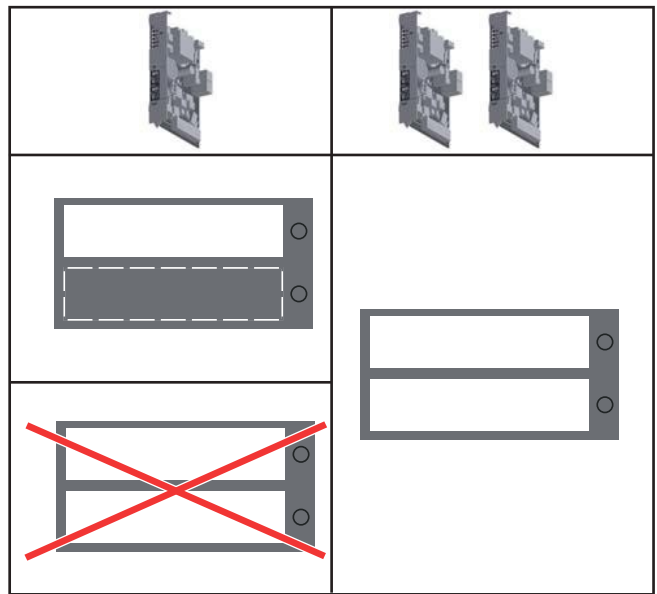
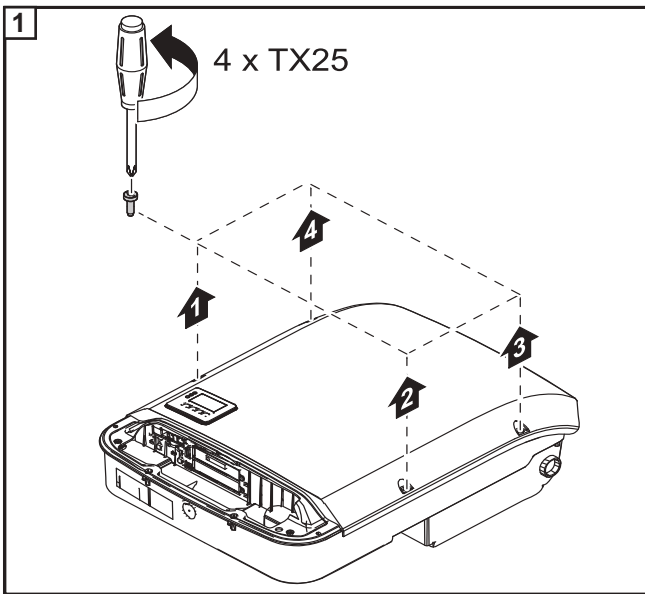


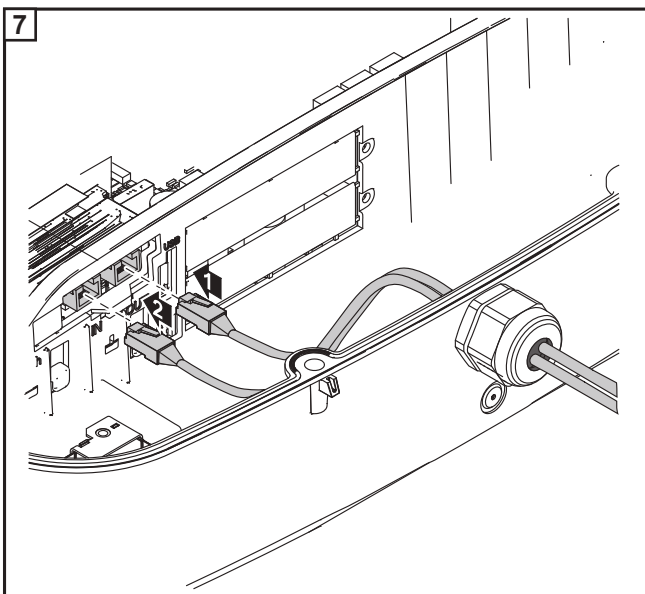
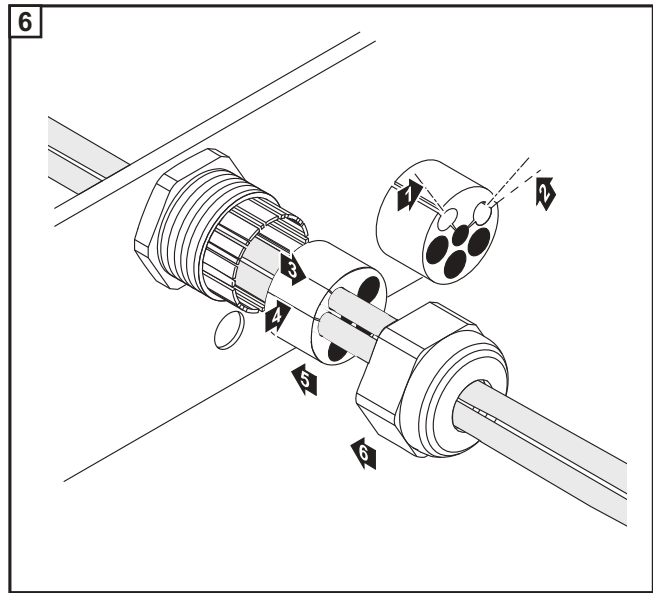
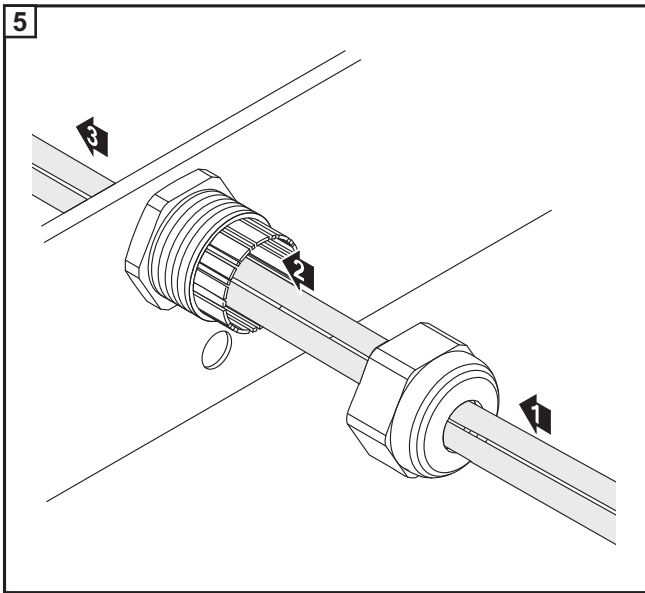
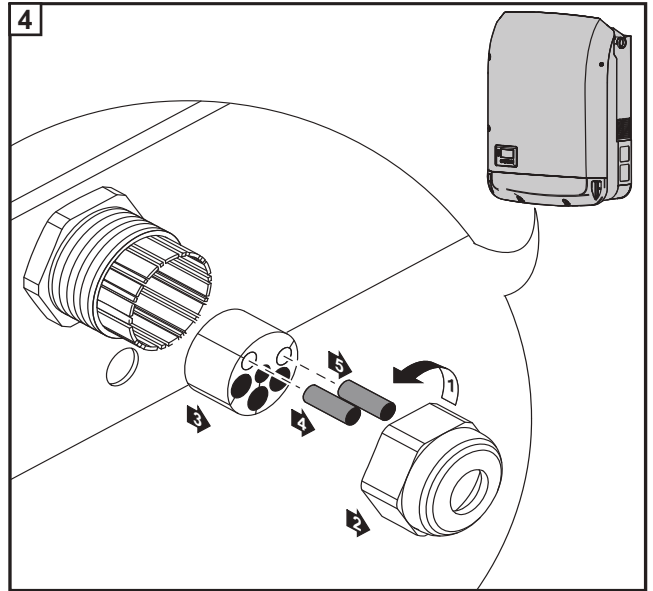
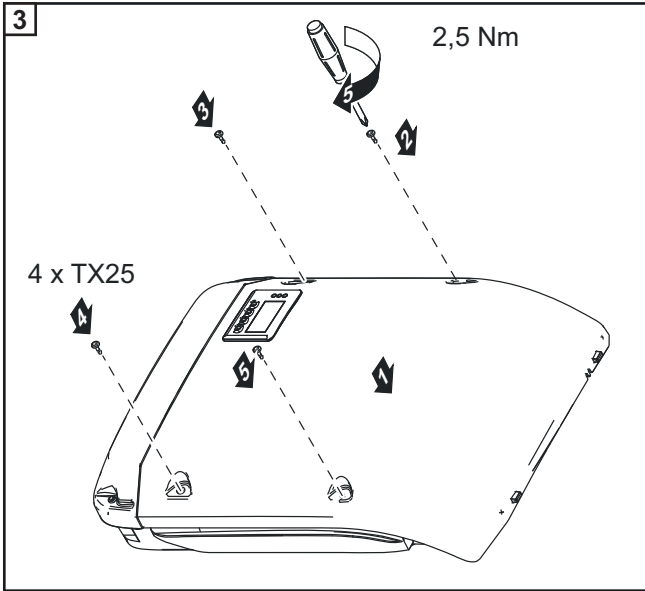




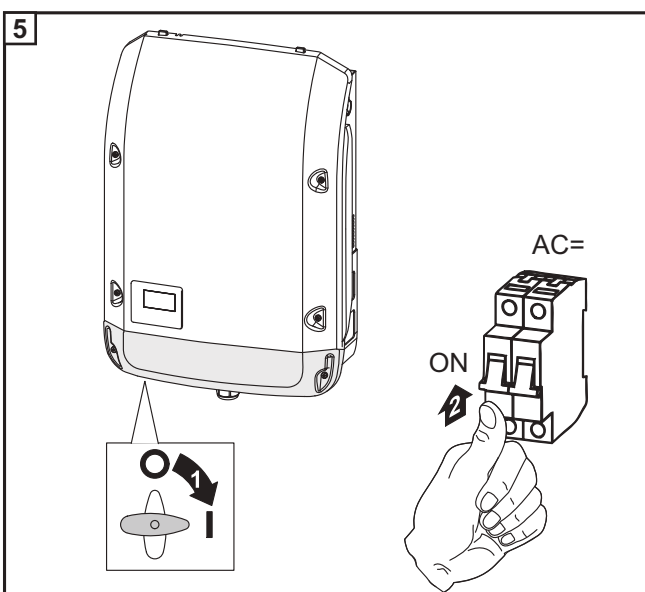
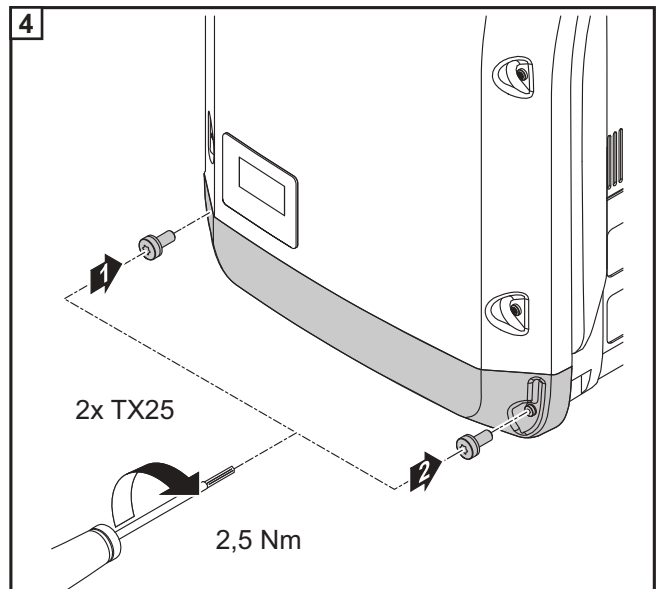
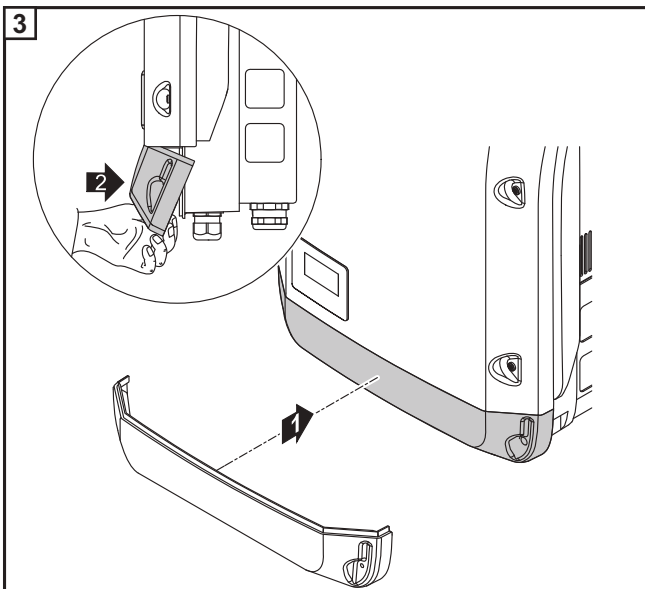
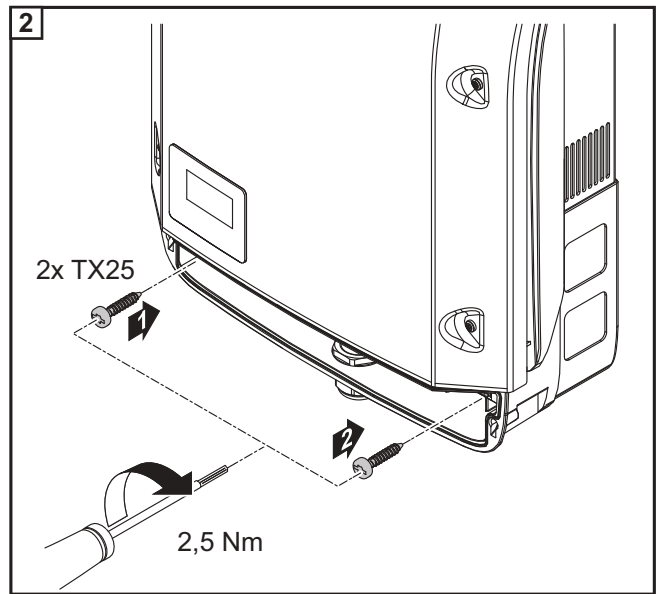
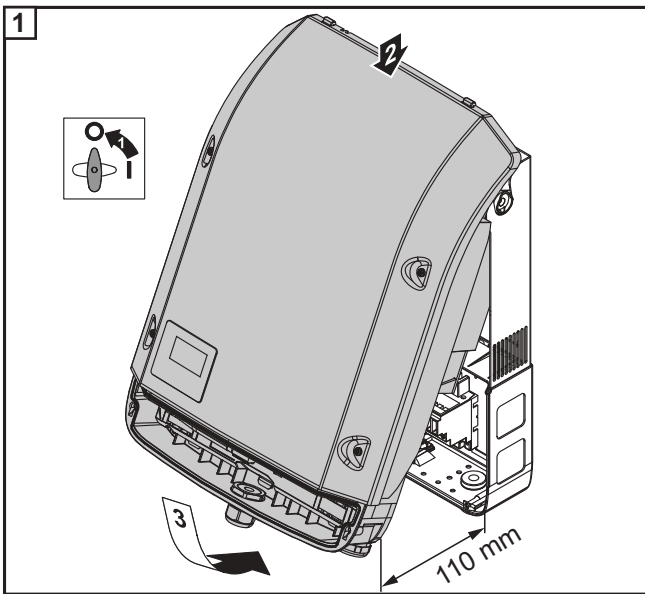
BASIC Menu / Grounding Settings / Grounding Mode / Negative / Enter

DATCOM





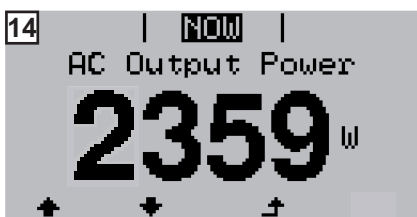
Operation



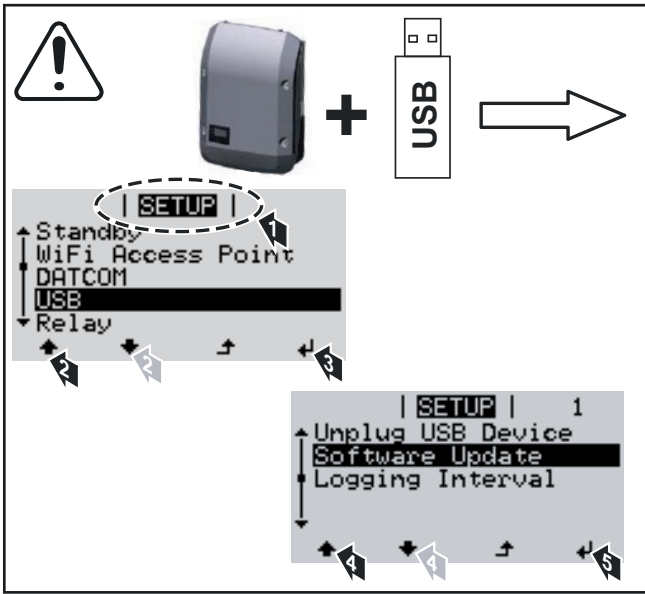


*** Country Setups**

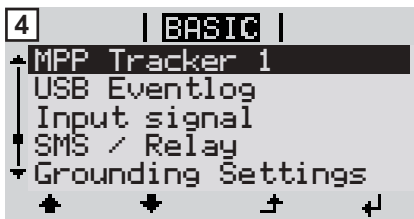
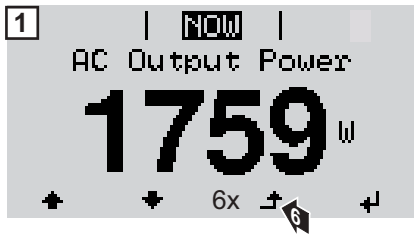
50Hz	International 50 Hz	DE3	Deutschland: Anlagengröße > 13,8 kVA	IT4	Italia < 11,08 kVA
60Hz	International 60 Hz	DKA1	Danmark	MG50	Microgrid 50 Hz
AT1	Österreich: Anlagengröße < 3,68 kVA	ES	España	MG60	Microgrid 60 Hz
AU	Australia	ESOS	Territorios españoles en el extranjero (Spanish Overseas Islands)	NIE1	Northern Ireland / Tuaisceart Éireann
BE	Belgique / België	Eesti	Vali Setup PT	NL	Nederland
BR	Brasil: < 3 kVA	FR	France	NO	Norge
CH	Schweiz / Suisse / Svizzera / Svizra	FROS	Territoire d'Outre-Mer (French Overseas Islands)	NZ	New Zealand
CL	Chile	GB	Great Britain	PF1	Polynésie française (French Polynesia)
CY	Κύπρος / Kibris / Cyprus	GR	Ελλάδα	PT	Portugal
CZ	Česko	HR	Hrvatska	RO	România
DE1	Deutschland: Anlagengröße < 3,68 kVA	HU	Magyarország	SE	Konungariket Sverige
DE2	Deutschland: Anlagengröße > 3,68 kVA und < 13,8 kVA	IE	Éire / Ireland; Malta	SK	Slovensko
		IL	לישראל / ישראל / Israel	TR	Türkiye
				ZA	South Africa / Suid-Afrika



Firmware Update

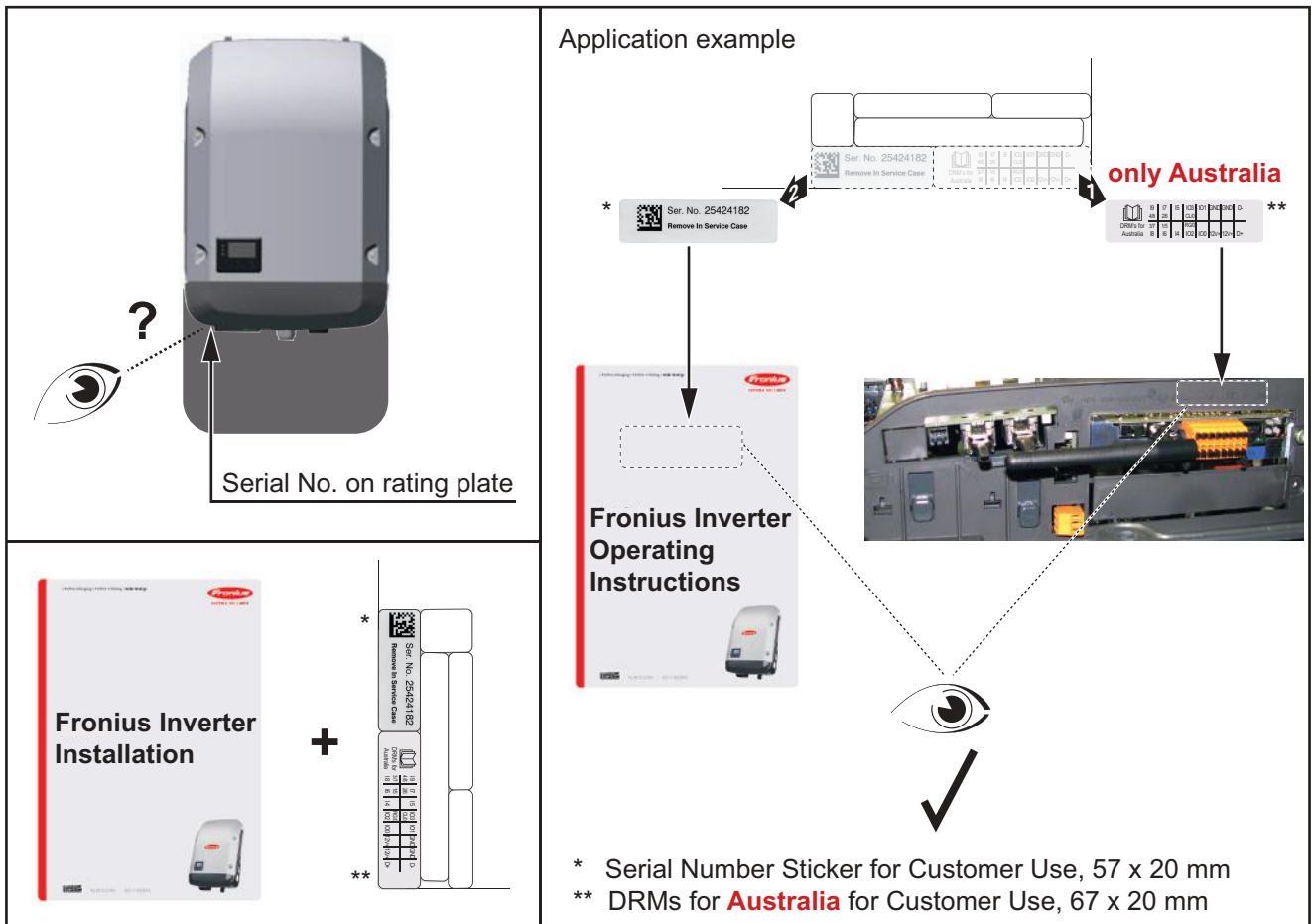


BASIC Menu



BASIC Menu:
MPP Tracker 1
USB Eventlog
Input Signal
SMS / Relay
Insulation Settings
TOTAL Reset

Serial Number Sticker for Customer Use



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Under <http://www.fronius.com/addresses> you will find all addresses of our sales branches and partner firms!