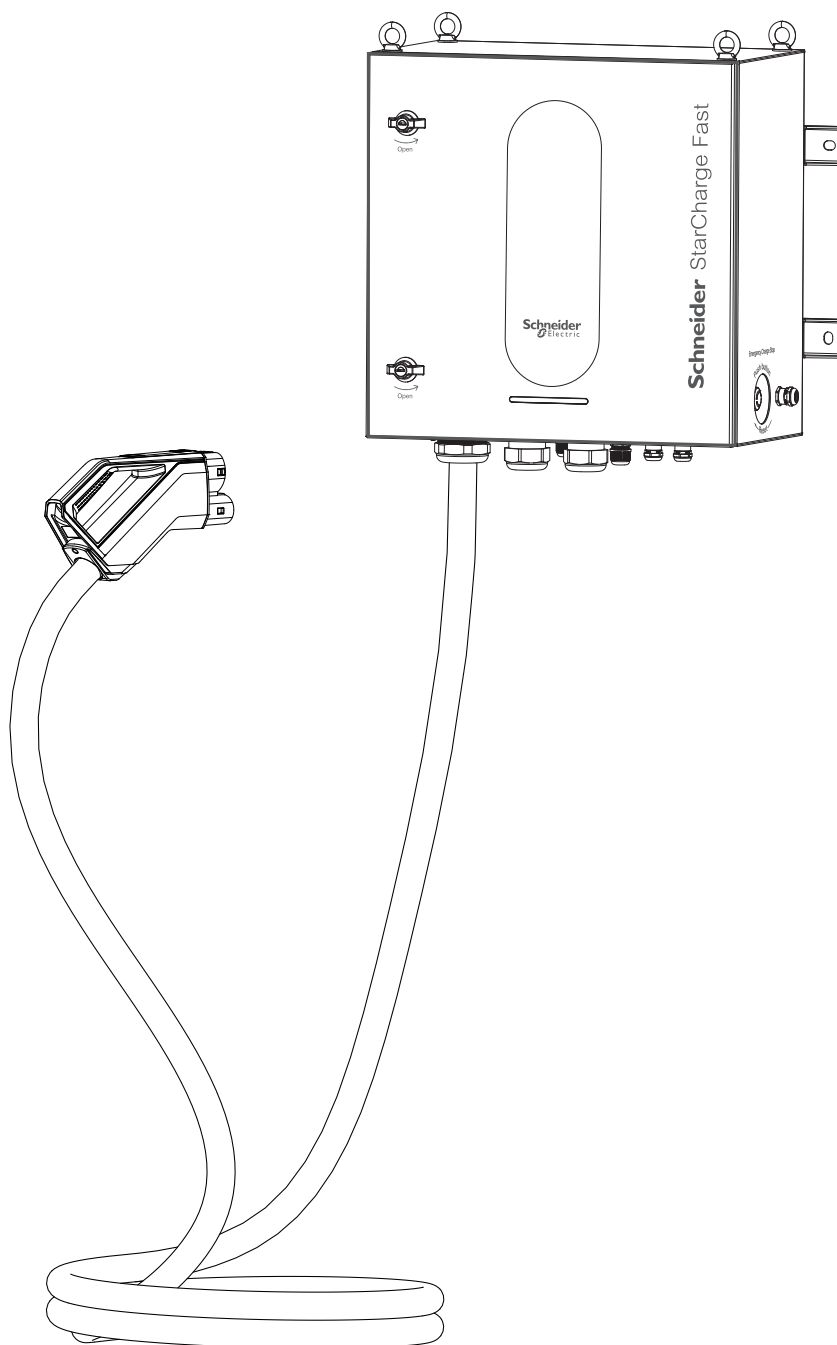
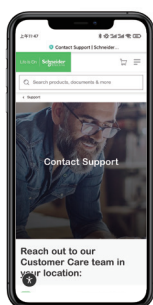


en Installation Manual

Schneider StarCharge Fast 720 Overhead Dispenser



Customer Care Center



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Legal Information



The information provided in this document contains general descriptions, technical characteristics and/or recommendations related to products/solutions.

This document is not intended as a substitute for a detailed study or operational and site-specific development or schematic plan. It is not to be used for determining suitability or reliability of the products/solutions for specific user applications. It is the duty of any such user to perform or have any professional expert of its choice (integrator, specifier or the like) perform the appropriate and comprehensive risk analysis, evaluation and testing of the products/solutions with respect to the relevant specific application or use thereof.

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Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

General

Warning Symbols Definitions

The following safety messages may appear throughout this guide or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a "Danger" or "Warning" safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol.

It is used to alert you to potential personal injury hazards.

Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in death** or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in death** or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in minor or moderate injury**.

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

Safety Instructions

⚠ ⚠ DANGER

HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices or equivalent local standards.
- This equipment must only be installed, commissioned and serviced under normal weather (not allowed under rainy, snowy or any extreme weather).
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Do not use this product if the enclosure, EV cable, or the EV connector is broken, cracked, open, or shows any other indication of damage.
- Do not put fingers or objects into the electric vehicle connector.
- The use of extension DC cables or vehicle connector adapters is not permitted.

Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

RISK OF BURNING

- Do not store flammable and explosive materials near the Charging Station.
- In case of overheating or fire starting near the Charging Station, press the emergency charge stop button of the Charging Station and unplug the car. Move away from the Charging Station and call the fire department.
- For wall-mounted installations, ensure that the wall can hold an equipment with weight > 100kg.
- For wall-mounted installations, always follow the provided Wall Mounting Template in the package, or a Schneider Electric-approved mounting solution.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ CAUTION

HAZARD OF DEGRADATION OF EQUIPMENT PERFORMANCE

- You must be a licensed electrician and complete a training course to become a Schneider StarCharge Fast 720 Charging Station certified installer.
- Schneider Electric will not accept any liability for consequences arising from the use of this material. Do not modify any mechanical or electrical parts.
- A qualified person is a person who has the skills and know-how relating to the construction, installation and operation of electrical equipment and who has received a safety training which enables him to recognize and avoid risks.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

RISK OF DAMAGING

- Schneider StarCharge Fast 720 Overhead Dispenser should be installed, operated, serviced and maintained only by qualified personnel.
 - Schneider Electric will not accept any liability for consequences arising from the use of this material.
 - A qualified person is a person who has the skills and know-how relating to the construction, installation and operation of electrical equipment and who has received a safety training which enables him to recognize and avoid risks.
- Failure to follow these instructions can result in equipment damage.**

Radio Equipment Conformity

EU Declaration of Conformity

Schneider StarCharge Fast 720 Overhead Dispenser is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive: 2014/53/EU.

The EU declaration of conformity for Schneider StarCharge Fast 720 Overhead Dispenser (EU1008411-0) can be downloaded on: www.se.com/docs.

UK Declaration of Conformity

Schneider StarCharge Fast 720 Overhead Dispenser is in compliance with the essential requirements and other relevant provisions of Radio Equipment Regulations 2017-UK SI 2017 No.1206.

The UK declaration of conformity for Schneider StarCharge Fast 720 Overhead Dispenser offer (UK1008420-0) can be downloaded on: www.se.com/uk/docs.

Standards and Compliance

Low Voltage Directive (LVD): 2014/35/EU	Electromagnetic compatibility directive (EMC) 2014/30/EU
RoHS Directive: 2011/65/EU: 2015/863/EU	
Based on following standards:	
EN IEC 61851-1: 2019+AC: 2023-12, EN 61851-1:2011, EN 61851-23:2014+AC: 2016-06, EN 61851-24: 2014+AC: 2015, EN 61000-6-2: 2005+AC 2005,	
EN IEC 61000-6-2:2019*	
EN IEC 61851-21-2:2021	
EN IEC 61000-6-4: 2007+A1: 2011, EN IEC 61000-6-4:2019**, EN IEC 61851-21-2:2021***, IEC 61439 -7:2018	
EN IEC 63000: 2018	
* The EN IEC 61000-6-2:2019 is not a harmonized standard but the Schneider StarCharge Fast 720 Overhead Dispenser is already compliant with EN IEC 61000-6-2:2019.	
** The EN IEC 61000-6-4:2019 is not a harmonized standard but the Schneider StarCharge Fast 720 Overhead Dispenser is already compliant with EN IEC 61000-6-4:2019.	
*** The EN IEC 61851-21-2:2021 is not a harmonized standard but the Schneider StarCharge Fast 720 Overhead Dispenser is already compliant with EN IEC 61851-21-2:2021.	

Important

To help you make the best use of your Charging Station, we have prepared this guide with the utmost care. It provides all the information you need to prepare for the installation and to install your equipment.

We urge you to read it attentively and follow its instructions.

- The product must be installed according to the specifications and requirements as defined by Schneider Electric. No responsibility is assumed by Schneider Electric if these requirements are not respected.
- Non-approved installation methods are performed at the risk of the contractor and void the (limited) warranty.
- Under no circumstances will compliance with the information in this guide relieve the user of his/her responsibility to comply with all applicable codes or safety standards.
- This document describes the most used installation and mounting scenarios.
- If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact Schneider Electric.
- Schneider Electric is not responsible for any damages that may result from custom installations that are not described in this document or for any failure to adhere to installation recommendations.

Preface

This guide describes the planning and physical installation of the Schneider StarCharge Fast 720 Overhead Dispenser.

The Schneider StarCharge Fast 720 Charging Stations are easy to install for electric vehicles.

Fast Charging Stations are electrical installations with high electric currents.

Therefore, the installation must be planned carefully, and must be done by certified personnel only (according to local standards).

As the physical installation of all types is equal, they will be referred to hereafter as Schneider StarCharge Fast 720 Overhead Dispenser only and this will account for all types, unless specifically stated otherwise.

NOTE: Installing the Schneider StarCharge Fast 720 Overhead Dispenser requires at least two people and takes approximately 1-2 hours.
This time estimate does not include the time needed to commission the Overhead Dispenser.

Scope of Application

Type of equipment applicable to this guide: Schneider StarCharge Fast 720 Overhead Dispenser.

List of references supported are:

Commercial Reference	Vehicle Connector	Cable Management	Cable Range (m)
EVD1T720P0B	1 x CCS2	Yes	10

* For more customized commercial reference, please contact Schneider Electric.

⚠ CAUTION

RISK OF TRIPPING ON LOOSE CABLE

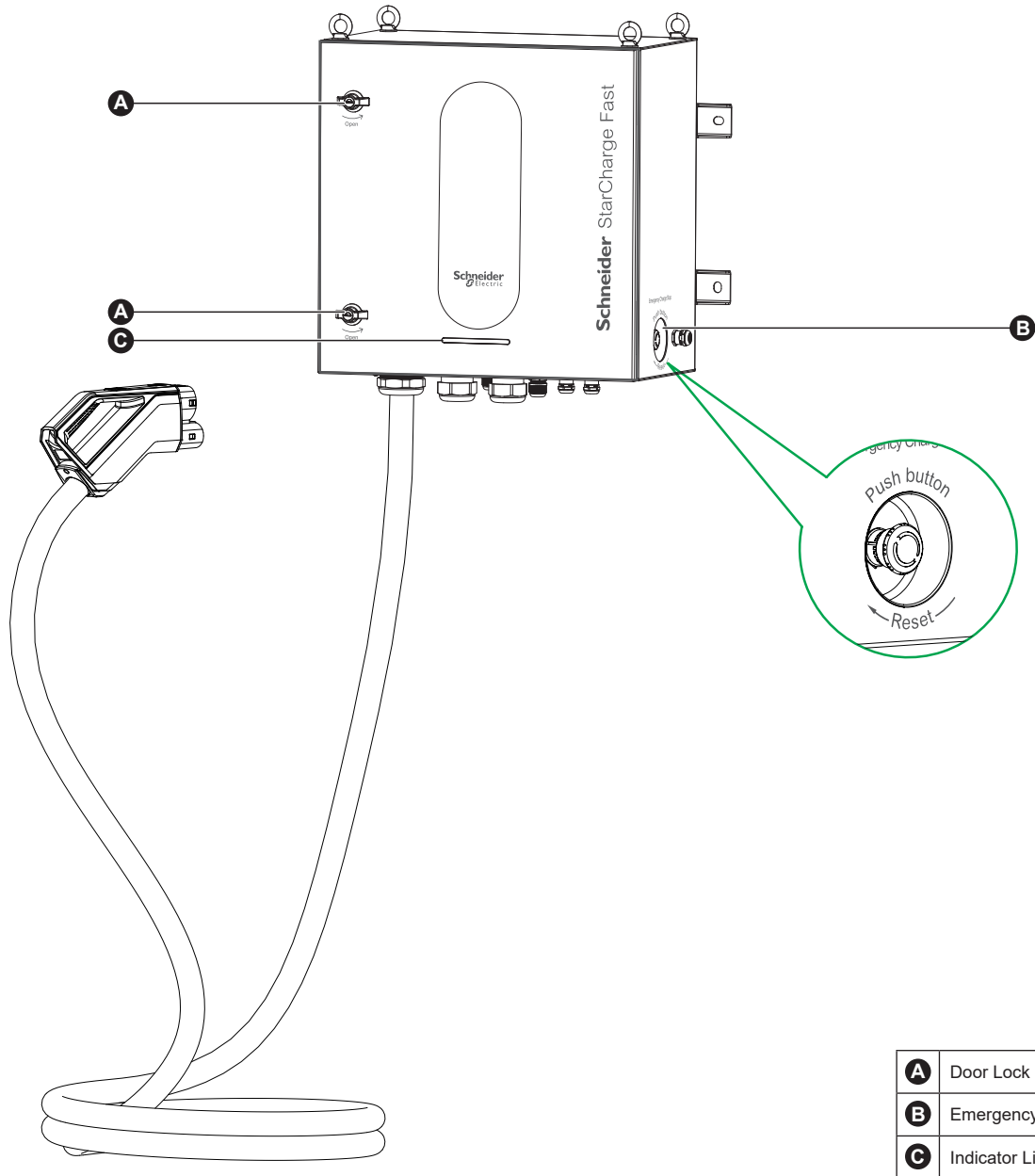
- For versions not equipped with cable management system, it is mandatory to allocate a solution or space to place the cable in order to prevent cars from running on it.

Failure to follow these instructions can result in injury or equipment damage.

Available Documentation

Schneider StarCharge Fast 720 Overhead Dispenser available documents for each phase of the project:

Document	Reference	Content	Audiences
Schneider StarCharge Fast 720 Datasheet	998-24285450	Full specifications	Site designer, installer, and station operator
Schneider StarCharge Fast 720 Overhead Dispenser Installation Manual	JPU0103001	Civil, mechanical, and electrical installation guidelines	Site engineer or installer/contractor
Schneider StarCharge Fast 720 Overhead Dispenser Owners Guide	D4075320	Operation and maintenance guidelines	Site operator and end user
Schneider StarCharge Fast 720 Overhead Dispenser Commissioning Guide	D4075319	Electrical and Communication guidelines	Site engineer or installer/contractor/ station operator
Schneider StarCharge Fast 720 OCPP Guide	D3999127	Integration rule of charger for Charge Point Operator	Charge Point Operator/Contractor
Schneider StarCharge Fast 720 Modbus Protocol Connectivity Guide	D4082297	Modbus connectivity guidelines for energy managementsystem intergration	Charge Point Operator/Contractor
Schneider StarCharge Fast 720 Cybersecurity Guide	D3999124	Cybersecurity rules and guidelines	Charge Point Operator/Contractor



The environmental conditions listed in the table below should be taken into consideration when selecting the installation site of the Schneider StarCharge Fast 720 Overhead Dispenser.

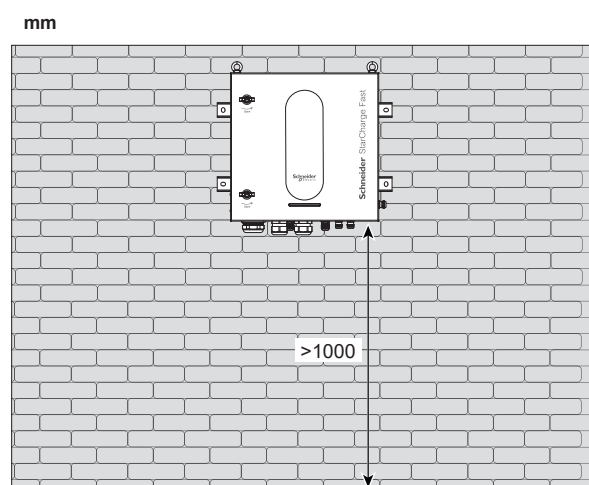
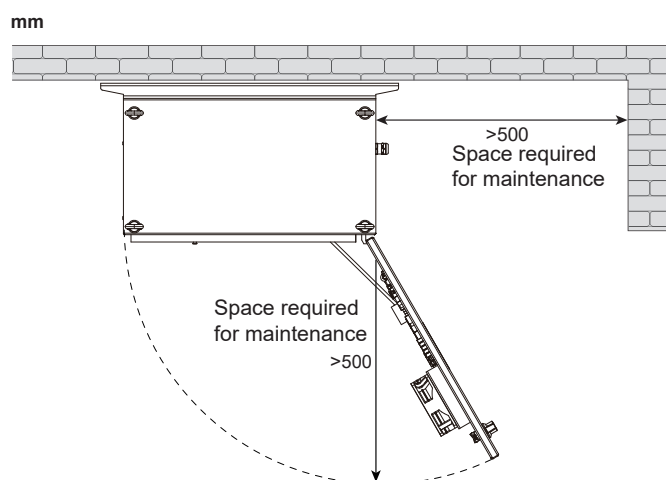
Environmental parameter	Permissible Conditions
EMC environment	Industrial environment – Class A
Ambient temperature	-30°C~50°C (up to 55°C with derating)
Humidity	5%~ 95%
Altitude	Up to 2000 m
Degree of protection	IP55
Mechanical impact protection	IK10
Pollution degree	PD3
Mounting method	Wall mounted or Gantry mounted
Ambience	Non explosive environments Housing corrosion protection level C4M Example of environment ■ Outdoor: Urban and industrial atmospheres, moderate sulphur dioxide pollution, coastal area with low salinity ■ Indoor: Production rooms with high humidity and some air pollution
Location	Avoid accumulation of sand, dust, snow etc.

NOTE: Contact Schneider Electric if the Charging Station will be installed closer than 4 km to a sea/ocean coastline.

3.1 Installation Distance

NOTICE**RISK OF EQUIPMENT DAMAGE**

Always follow the instructions described below when Charging Stations need to be installed near walls or other obstacles, a certain maintenance distance needs to be allocated.
Failure to follow these instructions can result in equipment damage.



NOTE: Ensure that enough space is available around the installation pad to use a forklift and other lifting equipment, unpack crates, remove packing materials, and allow two people to freely move throughout the area.

3.2 Wall mounted Site Requirements

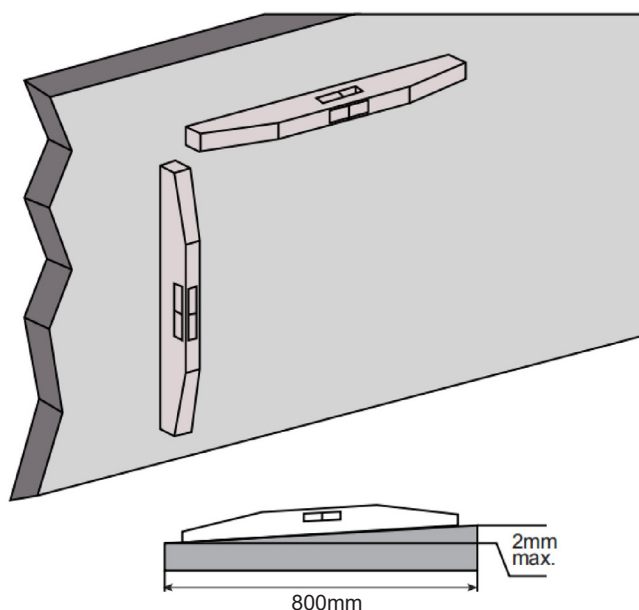
⚠ WARNING**HAZARD OF HEAVY EQUIPMENT FALLING**

- Always follow the instructions on this guide to install correctly the equipment. Ensure that the wall can hold an equipment with weight > 100kg.
 - Always follow the instructions and information provided in this guide or a Schneider Electric approved mounting solution, to install the Schneider StarCharge Fast 720 Overhead Dispenser.
 - Non-approved installation methods are performed at the risk of the contractor and void the limited warranty.
- Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Before the installation, check that the site meets these civil and mechanical requirements outlined below, as illustrated in the following image.

1. Wall Installation Preparation steps

- Define the wall where the Overhead Dispenser is to be installed.
- Check the evenness of the wall, and make sure it complies with the figure showing below.

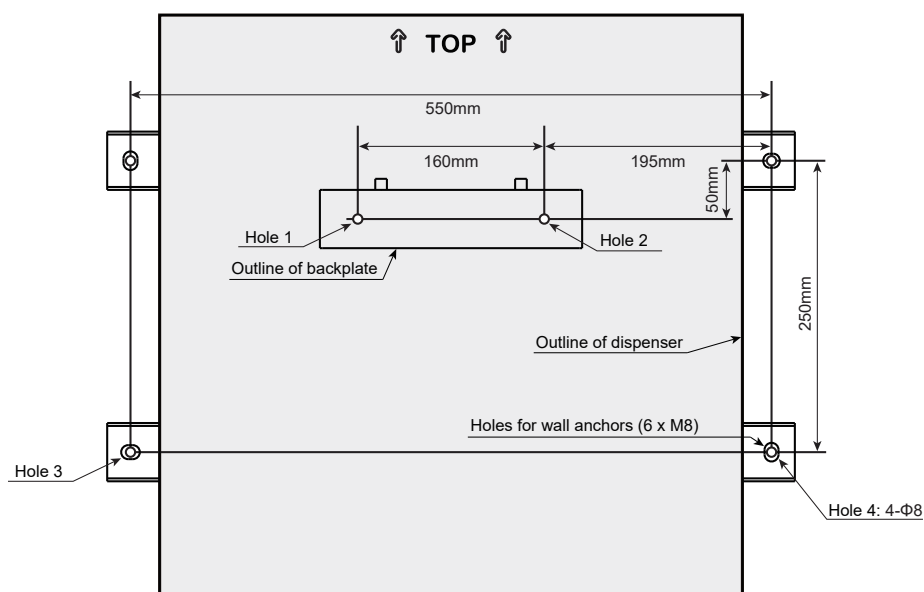


3.2 Wall mounted Site Requirements

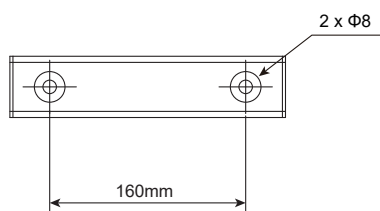
1. Wall Installation Preparation steps

- Mark the wall with the mounting hole positions of the wall mounted Overhead Dispenser, according to the template provided with the Overhead Dispenser.

Note: Select a suitable position on the wall and make sure it complies with local regulations and/or accessibility to disable people.



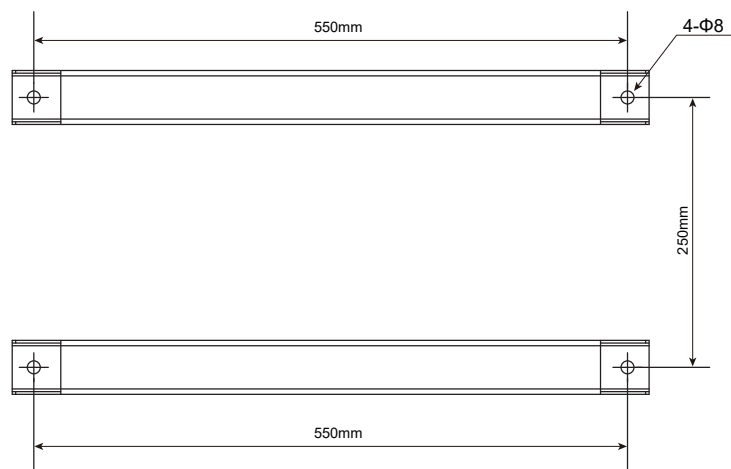
- Using a $\Phi 10$ drill bit and hand drill to make holes with the diameter of 8mm at the marked positions (Note: the drilling depth is about 60mm).
- Use the provided M8 x 50 expansion screws to install the bracket on the wall and tighten it. Check the wall mounting bracket is horizontal with horizontal instrument.



3.3 Gantry mounted Site Requirements

1. Gantry Installation Preparation steps

- Make the installation holes on the gantry, according to the template provided with the Overhead Dispenser.



3.4 Tilt / Collision Sensor

Schneider StarCharge Fast 720 Overhead Dispenser is equipped with a tilt sensor that will interrupt output power/charging session if the sensor detects a tilt in the cabinet in any direction, for example if a vehicle collides with the Overhead Dispenser.

If triggered the indicator light will turn RED and any ongoing charging session will stop. An error code will be relayed to the OCPP backend if connected.

⚠ WARNING

RISK OF FIRE AND/OR EQUIPMENT DAMAGE

- Ensure the appropriate circuit protection, and metering is in place at the installation site.
 - Ensure that a grounding conductor that complies with local codes is properly grounded to earth at the power distribution equipment.
 - Ensure that a correctly rated, dedicated breaker is installed for each Charging Station.
 - In the event of irregularities or disturbances in the operation of the device press the emergency charge stop button and unplug your car.
 - In France, if the maximum power delivered by the product is modified, it has to be indicated on the product by customer.
- Failure to follow these instructions can result in death, serious injury, or equipment damage.**

The electrical requirements for each type of Overhead Dispenser shall be followed according to this table:

Electrical Parameters	
DC output voltage	150 – 1000 Vdc
DC output current	380 A max with boost mode up to 500A
AC input voltage	220 – 240 Vac +/-10% 50/60Hz
Earthing system	- TT - TN-S, TN-C-S

Upstream Cables	
Suggested cable type	U1000 R2V Fine or Extra Fine Wire Strands

Cable Entry

Suggested copper conductor cross section:

From	To	Function	Suggested cable with copper conduct	
			Single-core cable (Refer to the notes below)	Multi-core cable (Refer to the notes below)
Power cabinet	Each overhead dispenser	Connector: DC+	1 x (0.6kV/1kV 1 x 240mm²)	Refer to the notes below.
		Connector: DC-	1 x (0.6kV/1kV 1 x 240mm²)	
		PE	1 x (0.6kV/1kV 1 x 25mm²)	
		230VAC power supply: L	Not applied	1 x (RVV 2 x 4mm²)
		230VAC power supply: N	Not applied	
		Ethernet connection between power cabinet and overhead dispenser	Not applied	1 x RJ45 CAT 6 shielded twisted pairs Ethernet cable

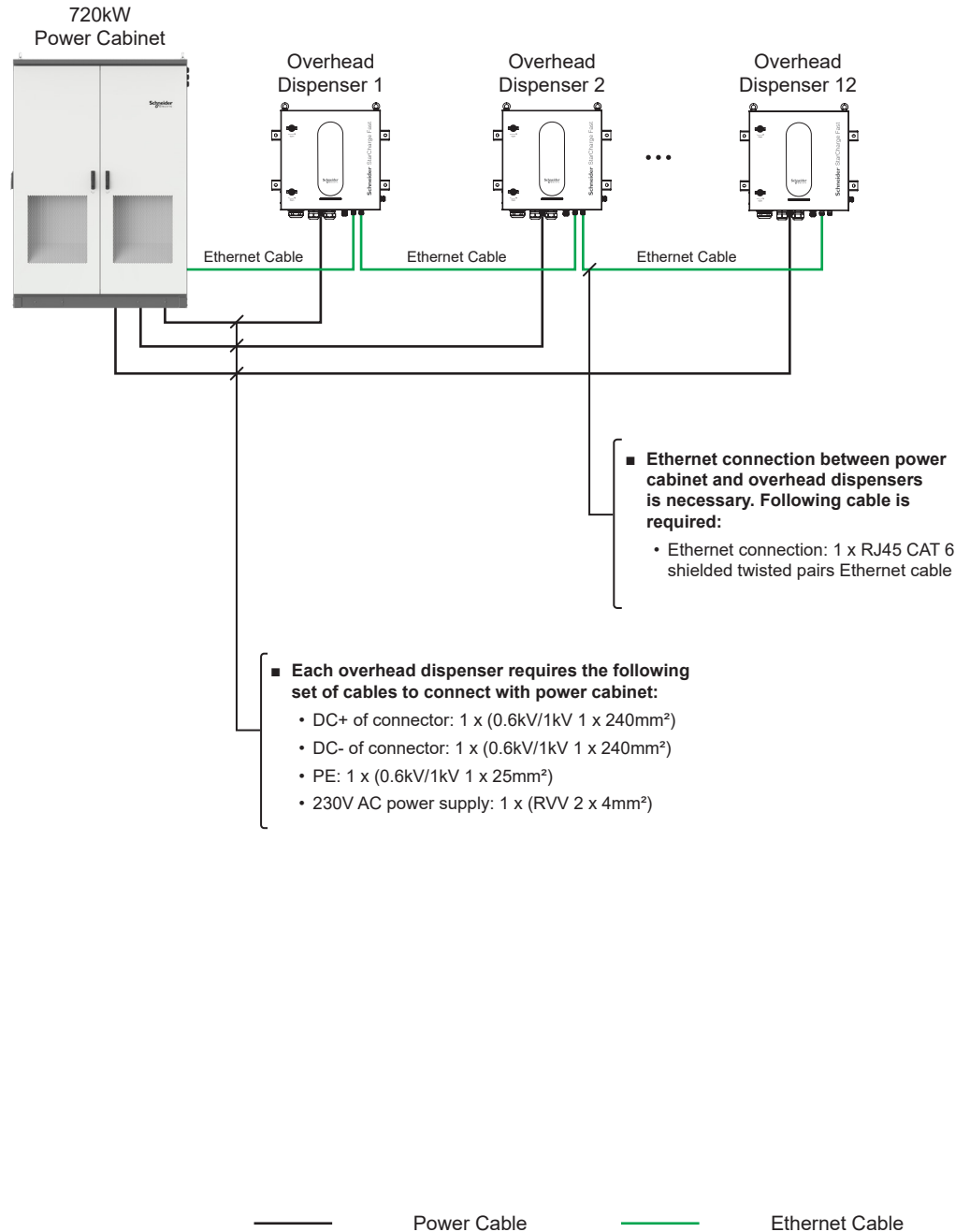
- NOTE:**
- The suggested cross-section above is based on the following specific conditions: single-core or multi-core XLPE insulation cables on unperforated tray (reference installation method C in IEC 60364-5-52), single-layer touching arrangement, 40°C ambient air temperature.
 - The cable size shall be calculated and verified in accordance with IEC 60364-5-52 and on-site conditions (ambient temperature, cable conductor type, cable insulation type, cable type, installation method, etc.).
 - The DC busbars DC+ and DC- of Overhead Dispenser support the connection of a maximum of 1 copper conductor cables with a cross-sectional area of 240mm².

Wiring diagram (taking 720kW Power Cabinet and copper conductor cable as an example):

Ethernet cable connections between Overhead Dispensers and Power Cabinet support star topology, daisy-chain topology, and mixed star and daisy-chain topology.

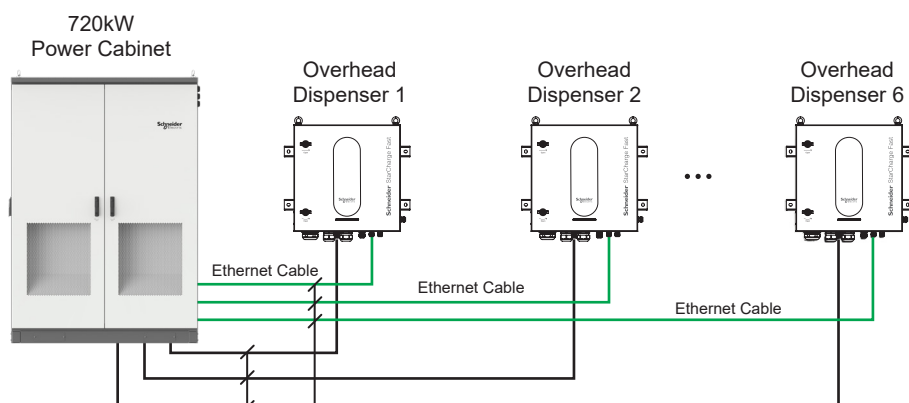
1. Star topology: Supports connection of up to 6 Overhead Dispensers.
2. Daisy-chain topology: Supports connection of up to 12 Overhead Dispensers.
3. Mixed star and daisy-chain topology: Supports connection of up to 12 Overhead Dispensers.

Ethernet cable connection method 1: Daisy chain topology



Note: The maximum distance between power cabinet and overhead dispenser and between overhead dispenser and overhead dispenser is 80m.

Ethernet cable connection method 2: Star topology



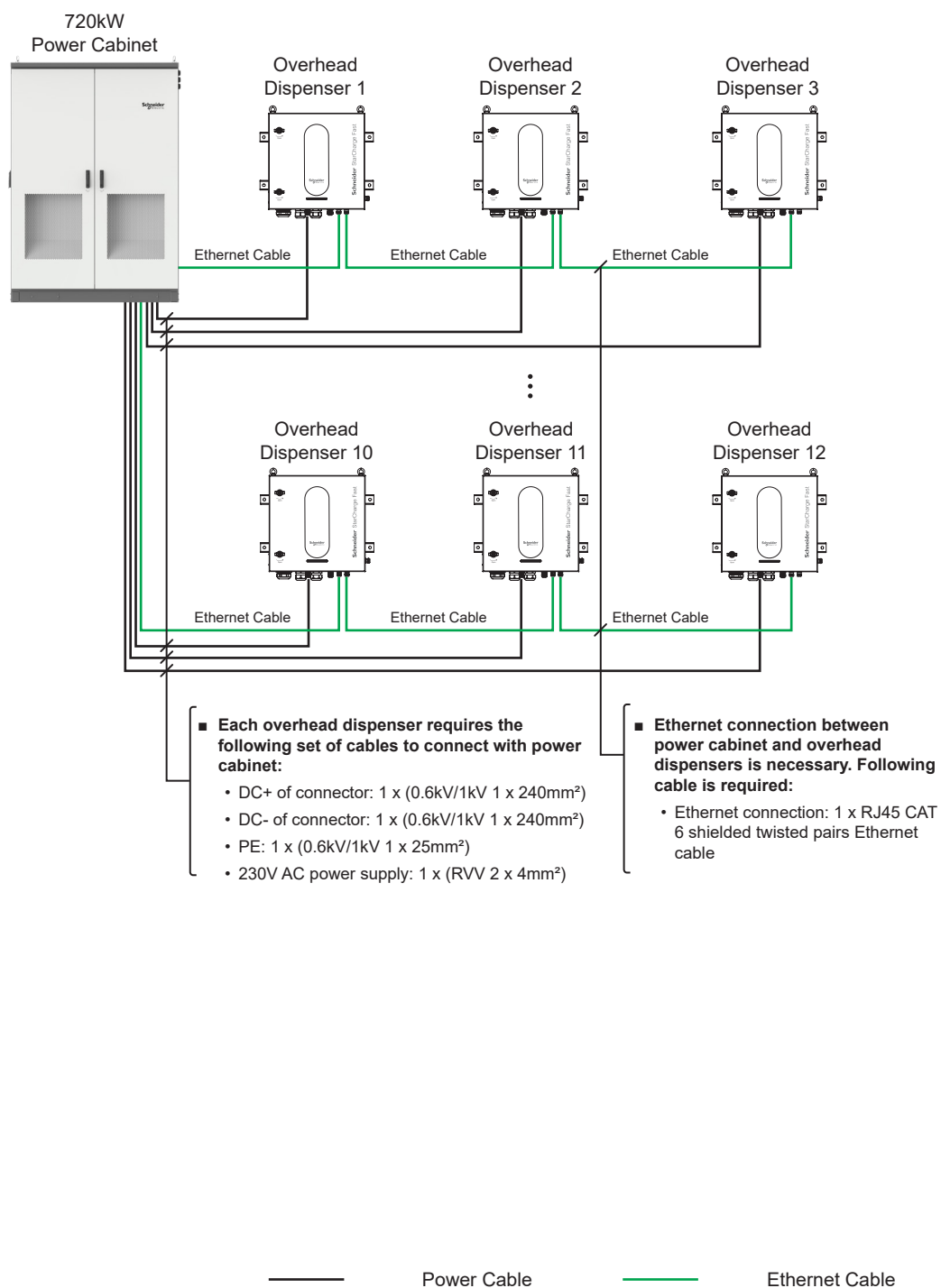
- Ethernet connection between power cabinet and overhead dispensers is necessary. Following cable is required:
 - Ethernet connection: 1 x RJ45 CAT 6 shielded twisted pairs Ethernet cable

- Each overhead dispenser requires the following set of cables to connect with power cabinet:
 - DC+ of connector: 1 x (0.6kV/1kV 1 x 240mm²)
 - DC- of connector: 1 x (0.6kV/1kV 1 x 240mm²)
 - PE: 1 x (0.6kV/1kV 1 x 25mm²)
 - 230V AC power supply: 1 x (RVV 2 x 4mm²)

— Power Cable — Ethernet Cable

Note: The maximum distance between power cabinet and overhead dispenser and between overhead dispenser and overhead dispenser is 80m.

Ethernet cable connection method 3: Grouped daisy chain topology

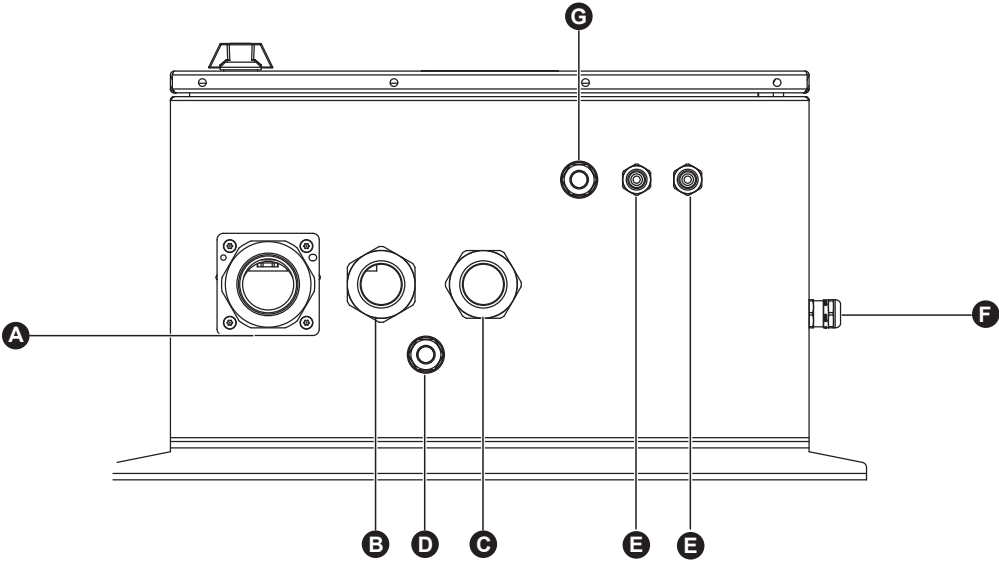


Note: The maximum distance between power cabinet and overhead dispenser and between overhead dispenser and overhead dispenser is 80m.

4

Electrical Requirements

Overhead Dispenser bottom cable openings Layout:



A	Charging Cable Outlet
B	DC- of connector
C	DC+ of connector
D	PE Cable
E	Ethernet Cable
F	Extra Emergency Charge Stop Cable
G	220-240VAC power supply

5

Required Materials and Tools

Before you go to the site, please prepare the following tools/equipment:

- Forklift/Crane
 - Step ladder
 - Personal Protective Equipment (PPE)
 - Cable cutter
 - Wire stripper
 - Wire presser/pliers
- Screw driver
 - Power drill
 - Spirit level
 - Toolbox
 - Multimeter
 - LOTO (Lock Out Tag Out) equipment

NOTE: The above tools should be selected according to the actual situation on-site.

6

Receiving, Handling

6.1 Receiving

⚠ DANGER

HAZARD OF HEAVY EQUIPMENT FALLING

Do not stand or move beneath the crate as it is being lifted or tilted.
Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

HAZARD OF EQUIPMENT FALLING

- When handled from the bottom, the Overhead Dispenser must be lifted with care and held in place during transport by properly strapping them onto the forklift or handling equipment.
 - Always transport and store the Overhead Dispenser in its original packaging.
 - Ensure the load rating of all lifting equipment (forklift, crane and lifting straps, etc) is adequate for the weight of the Overhead Dispenser as shown below.
- Failure to follow these instructions can result in death, serious injury, or equipment damage.**

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Do not install the Overhead Dispenser during harsh weather.
 - If you must complete the installation in rain or wind, you must use a weather-proof shelter that covers all boxes and components to avoid water entering inside the enclosure.
 - Ensure upstream protection breaker is locked in the Open (Off) position and a voltage absence test is performed before starting the installation.
 - Do not use power tools during installation or servicing. Over-torquing can damage the equipment.
- Failure to follow these instructions will result in death or serious injury.**

6.2 Contents

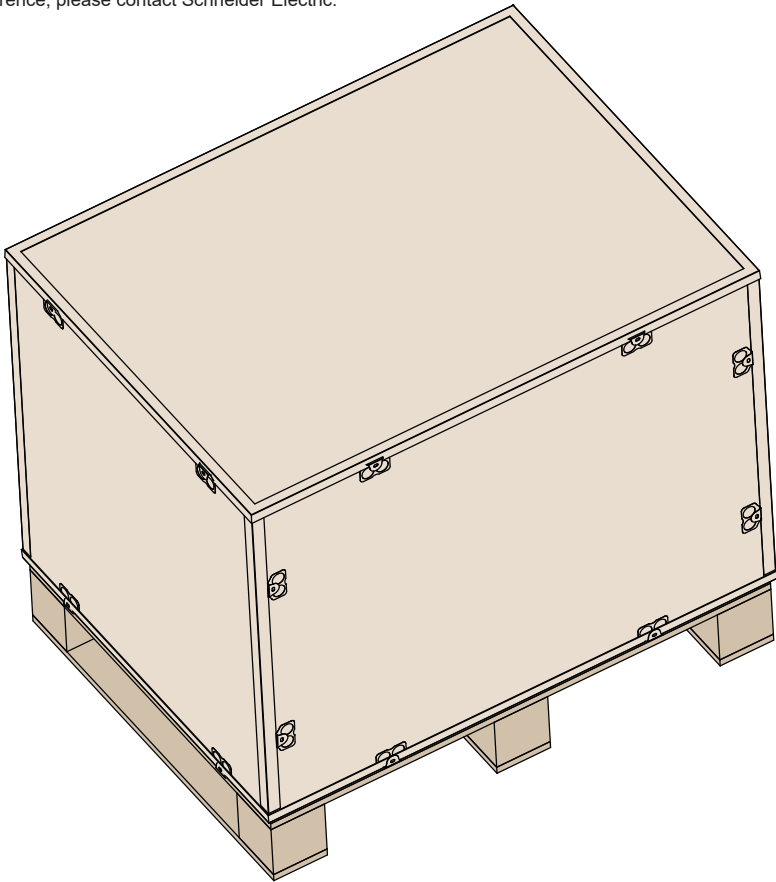
Inside the Schneider StarCharge Fast 720 Overhead Dispenser shipping box you should find the below mentioned items and documents.
If there are any missing items or documents, please contact Schneider Electric for the necessary replacements.
Keep all the items or documents carefully to avoid missing.

Item	Quantity
Mounting template	1
Schneider StarCharge Fast 720 Overhead Dispenser	1
Door keys	4
User guidance sticker	1
Wall mounting expansion bolts (M8x50)	5
Wall mounting bracket	1
Cable hook (hook x 1, M6x60 wall mounting expansion screws x 5)	1
Connector holder (metal enclosure x 1, plastic socket x 1, M6×20 screws x 4, M6x60 wall mounting expansion screws x 5), M6x20 metal plate mounting screws x 4	1
Emergency charge stop cover plate	1
Safety labels in multiple languages	22
Documents	
Installation Manual	1

Each Schneider StarCharge Fast 720 Overhead Dispenser ships in one crate. Ensure you have correct crate at the installation site.

Commercial Reference	Shipping dimensions (W*D*H)	Shipping weight (kg)
EVD1T720P0B	860*655*750mm	92.5

*For more customized commercial reference, please contact Schneider Electric.



⚠ CAUTION**HAZARD OF SHARP EDGES**

It is recommended to wear protection gloves when unpacking the Overhead Dispenser as there could be sharp edges.
Failure to follow these instructions can result in injury.

⚠ CAUTION**HAZARD OF POTENTIAL LOOSE COMPONENTS INSIDE BOX**

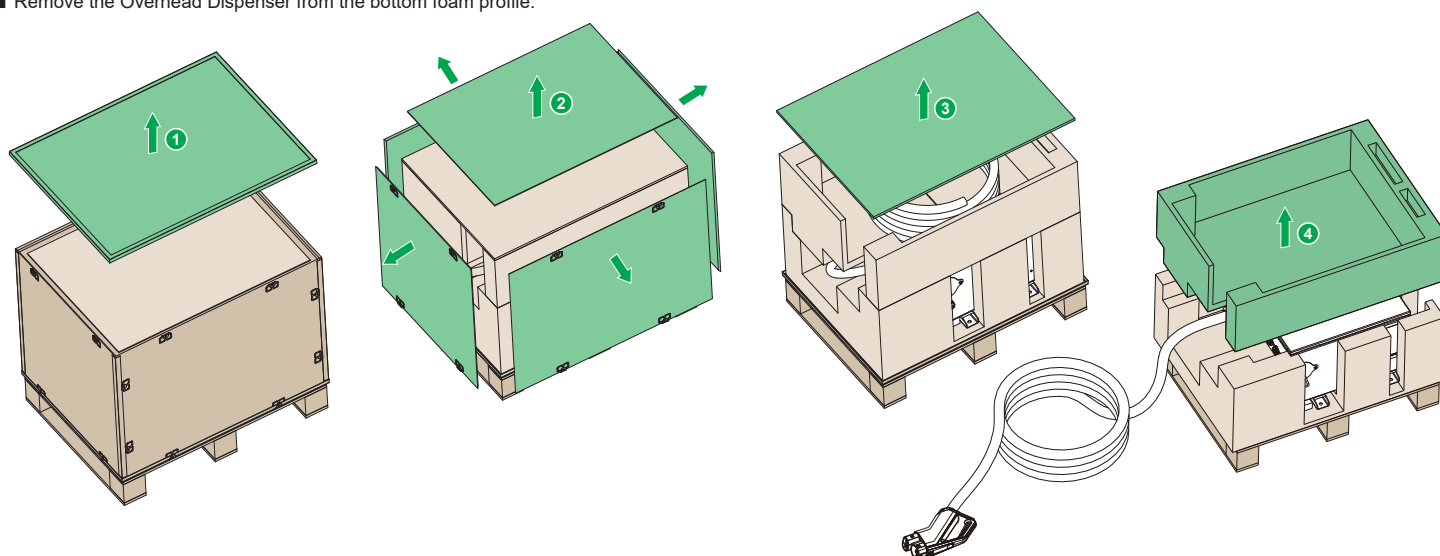
- At receiving always inspect the Tilt and Shock sensors on the crate for potential damage or mishandling.
 - If the sensors are triggered do not attempt to unpack, inform the transport agent and refuse reception.
- Failure to follow these instructions can result in injury or equipment damage.**

**⚠ WARNING****RISK OF EQUIPMENT DAMAGE**

- 2 operators are required to safely unbox the Schneider StarCharge Fast 720 Overhead Dispenser.
- Failure to follow these instructions can result in death, serious injury, or equipment damage.**

7.1 Unpacking**Unpacking steps:**

- Place the unpacked Overhead Dispenser shipping box close to the area where it will be installed.
- Remove the top cover of the wooden crate.
- Remove and keep the installation template.
- Remove the side panels of the crate.
- Carefully remove the charging connector and keep the charging cable straight to avoid being bend during handing.
- Carefully remove the inner foam protection profiles
- Keep the Overhead Dispenser on the provided pallet after removing all the side panels.
- Remove the Overhead Dispenser from the bottom foam profile.

**7.2 Inspection****After unpacking the Schneider StarCharge Fast 720 Overhead Dispenser, the installer should check all the items below:**

- Appearance: check whether the appearance of the Overhead Dispenser is damaged, whether there is any damage such as paint loss, scratch, deformation, and whether the structure of Overhead Dispenser is damaged during transportation.
- Labels: check whether the nameplate of Overhead Dispenser is correct, clear and complete, and whether the safety warning signs are posted in place.
- Contents: check whether the documents and accessories are complete according to the list of contents above.
- After inspection ensure the Overhead Dispenser is covered/protected from the weather.

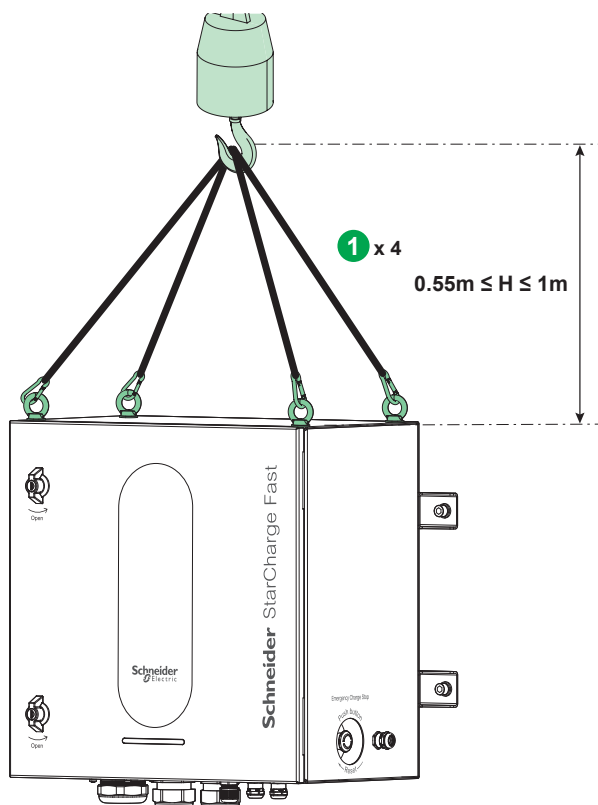
8.1 Hoisting

⚠ WARNING**HAZARD OF HEAVY EQUIPMENT FALLING**

- The Schneider StarCharge Fast 720 Overhead Dispenser weighs about 70kg, ensure appropriate hoisting ropes and machinery.
- Extreme caution must be exercised while handling, lifting, or hoisting the Overhead Dispenser. Especially avoid bending charging cable.
- Personal Protective Equipment required, hard hat, safety shoes, gloves.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

1. Hoisting

**Before Hoisting:**

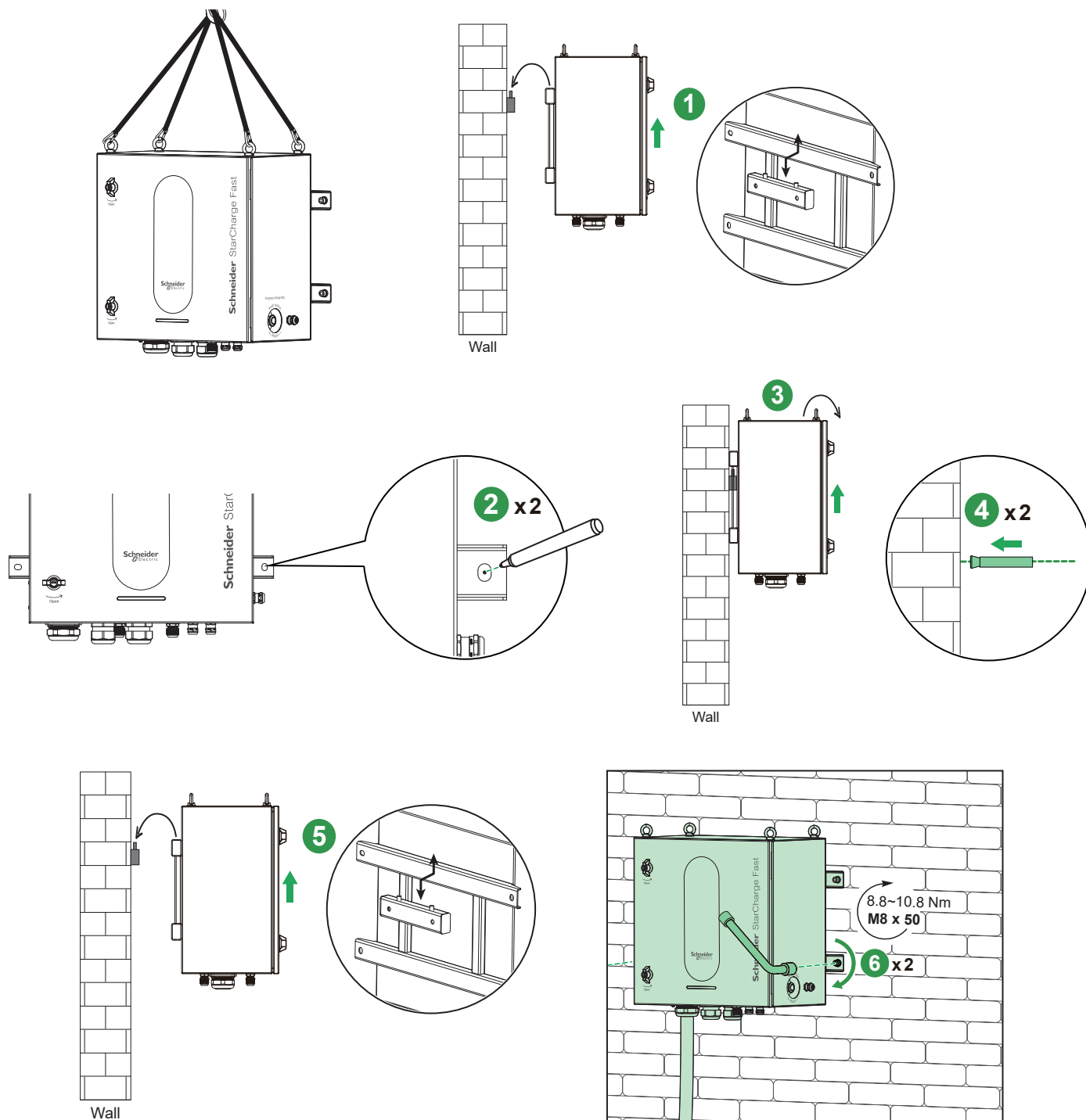
- Move the Overhead Dispenser Pallet close to the installation site.
- Attach firmly the hoisting ropes to the Overhead Dispenser Lugs while still on the Bottom Pallet.
- Prepare and secure in place the manual hoist.
- Ensure the Wall Bracket or Gantry is prepared correctly.
- Prepare to hoist the Overhead Dispenser.

8.2 Fixing

1. Wall Mounted

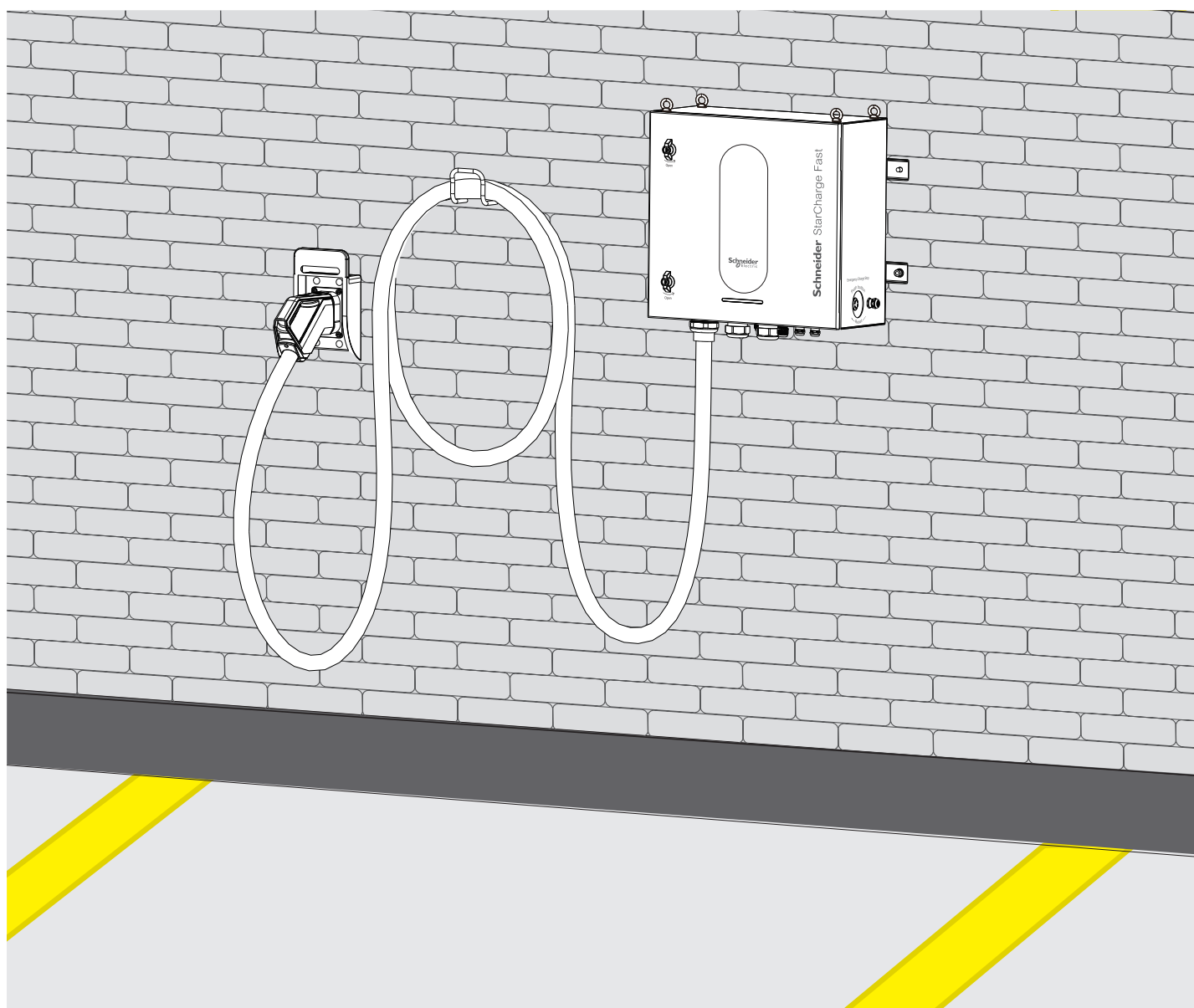
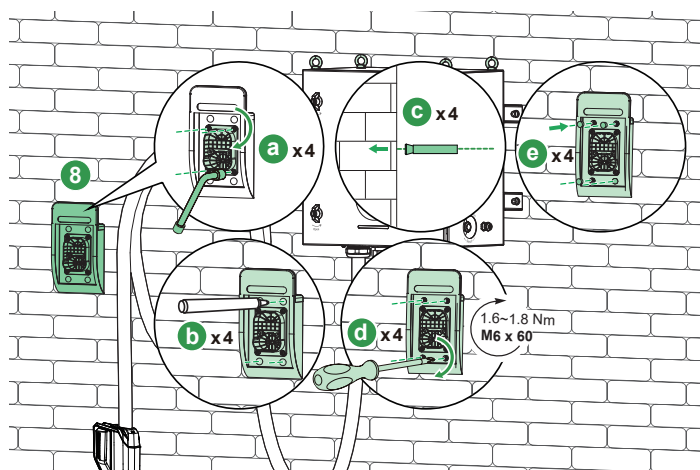
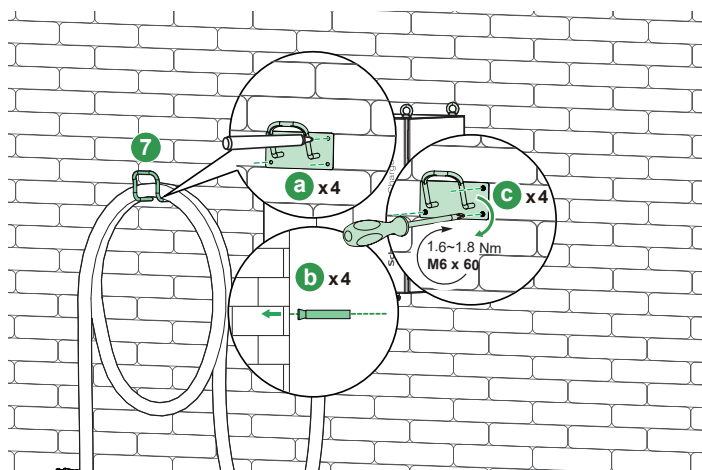
Steps:

- Hoist the Overhead Dispenser with the manual hoist slightly higher than the level of the mounting bracket.
- Carefully move the Overhead Dispenser to the wall mounting bracket for mounting bracket refer to 3.2 Wall installation Preparation steps.
- Maneuver the bracket pins into the Overhead Dispenser mounting holes on the back and ensure it is secured.
- Slightly lower the manual hoist rope to test that the Overhead Dispenser is correctly mounted on 2 bracket pins.
- Mark the location of the two holes at the bottom.
- Take Overhead Dispenser away.
- Using a $\Phi 10$ drill bit and hand drill to make holes with the diameter of 8mm at the marked positions (Note: the drilling depth is about 60mm).
- Maneuver the bracket pins into the Overhead Dispenser mounting holes on the back and ensure it is secured again.
- Mount the lower part of the Overhead Dispenser using the provided M8×50 expansion bolts on the wall mounting holes.



8.2 Fixing

1. Wall Mounted

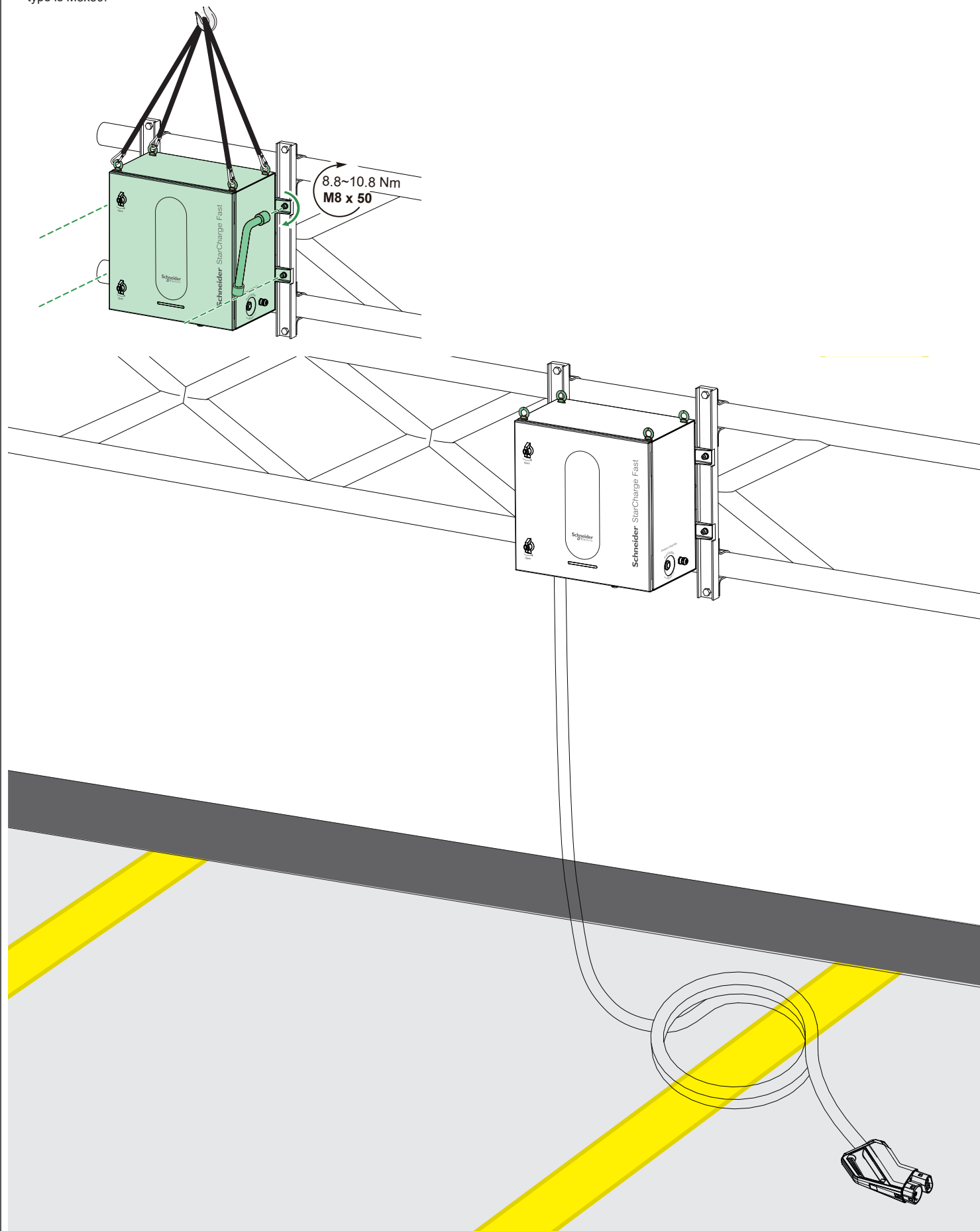


8.2 Fixing

2. Gantry Mounted

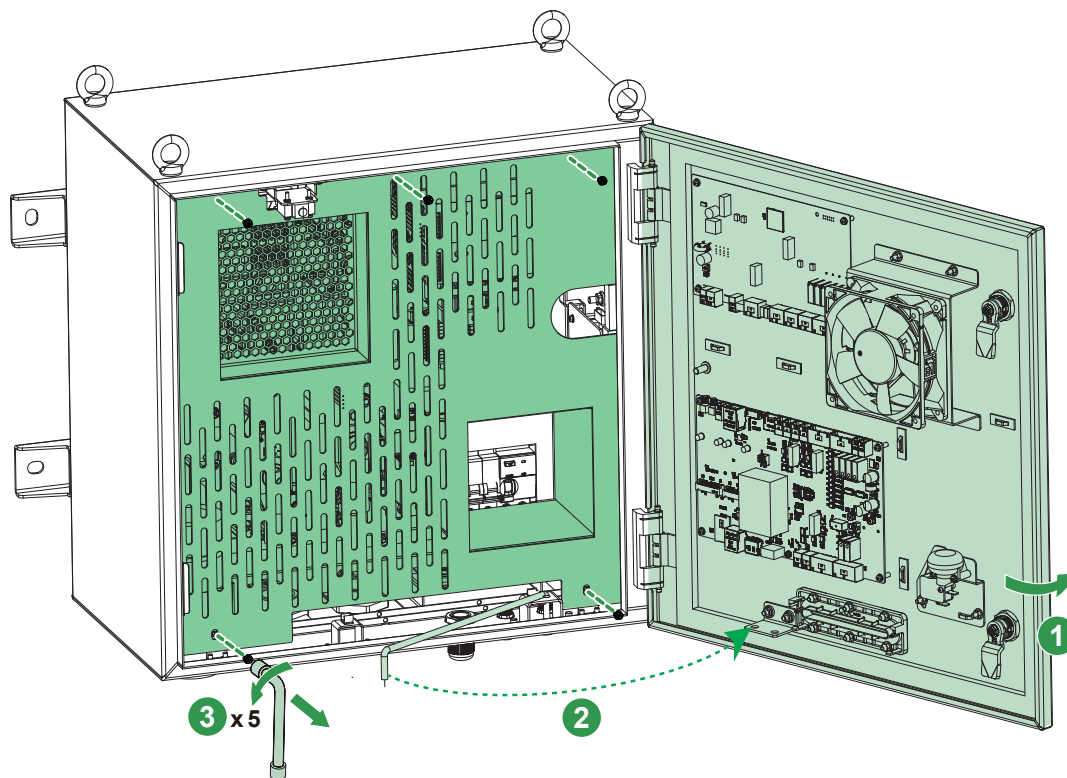
Steps:

- Hoist the Overhead Dispenser with the manual hoist slightly near to gantry.
- Mount the Overhead Dispenser on the holes of the gantry. The bolts shall be provided by the customer or installer based on the actual size of the gantry. The recommended type is M8x50.



9.1 Before connecting

- Open the front door, use the provided support to fix the front door, as shown below.
- From the front of the Overhead Dispenser, unscrew the protective cover and set aside. It will be installed again after.

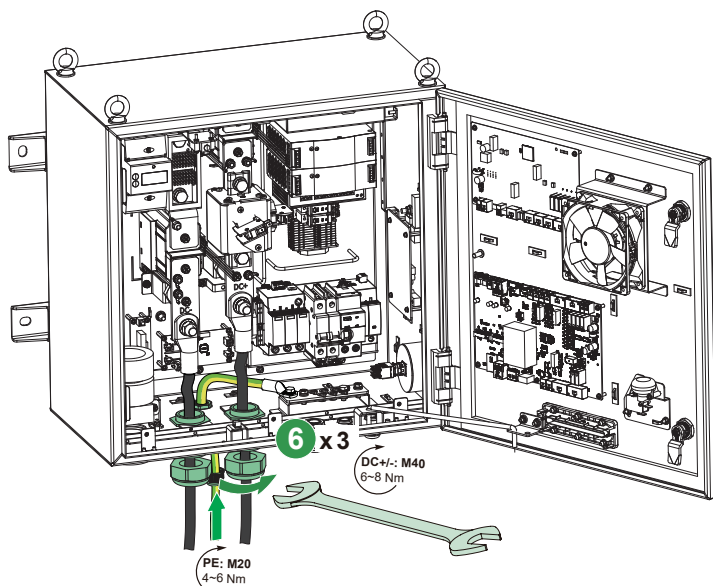
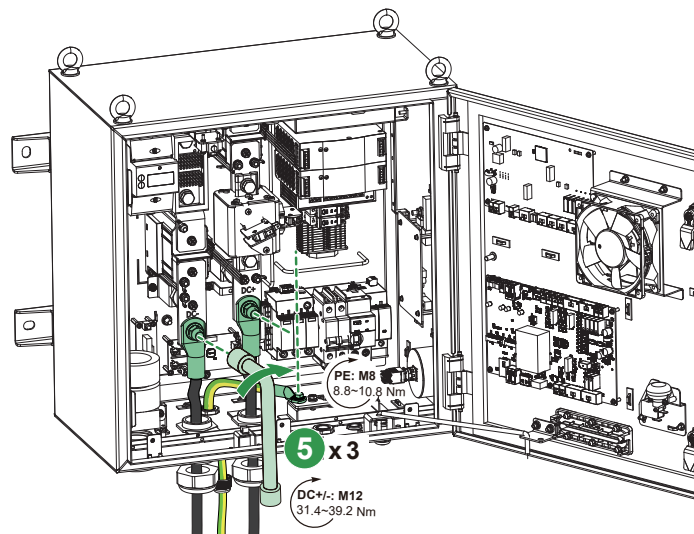
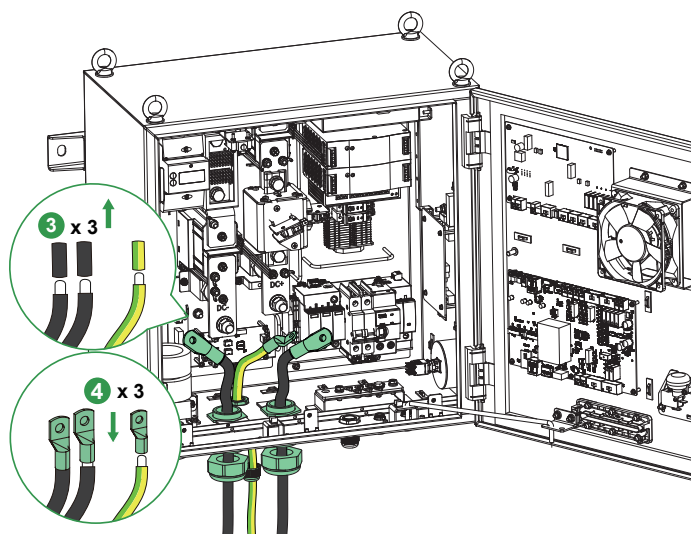
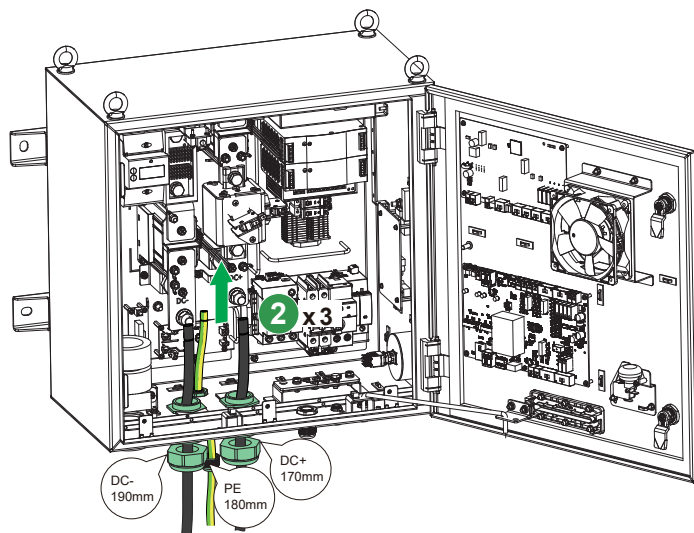
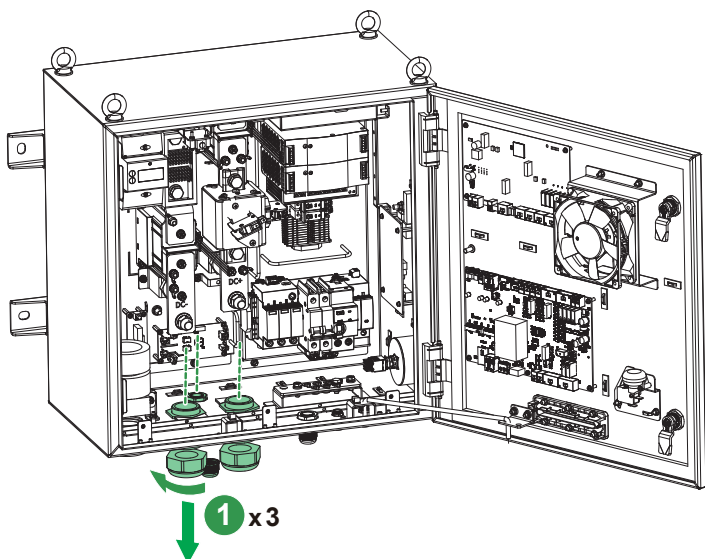


9.2 Connecting the DC and PE cables

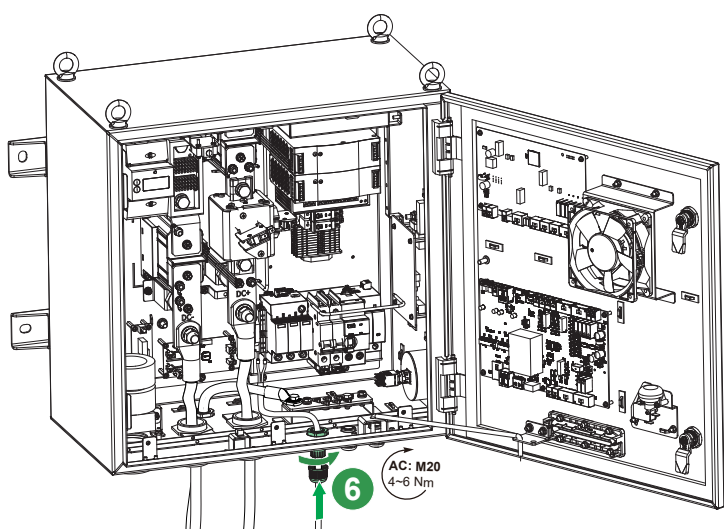
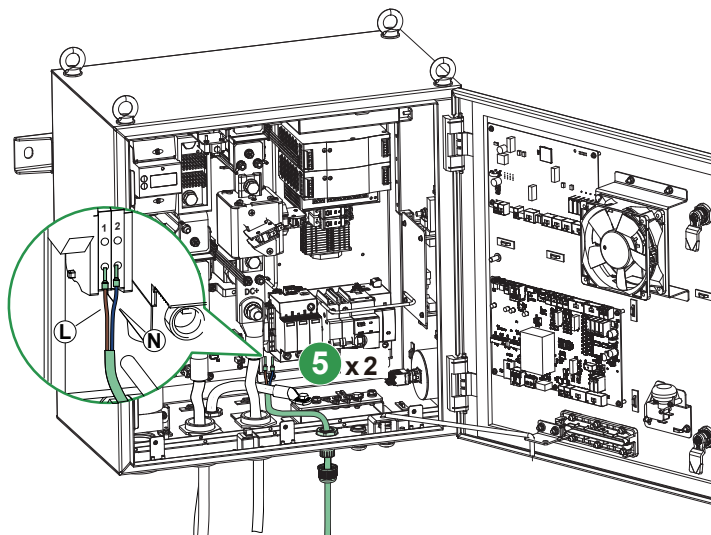
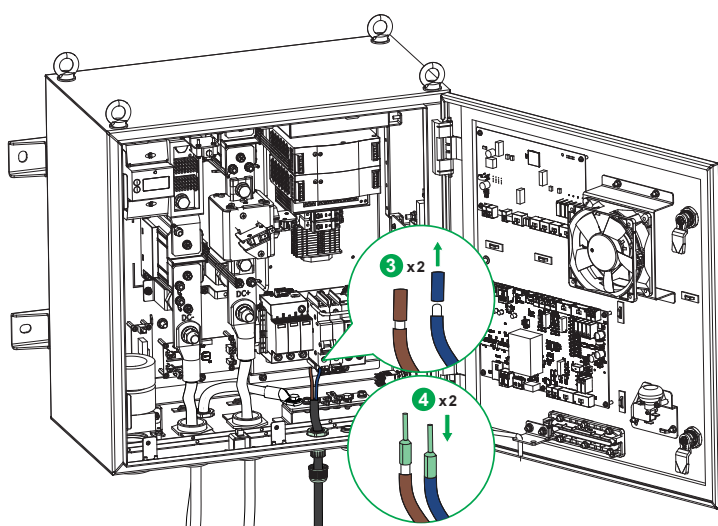
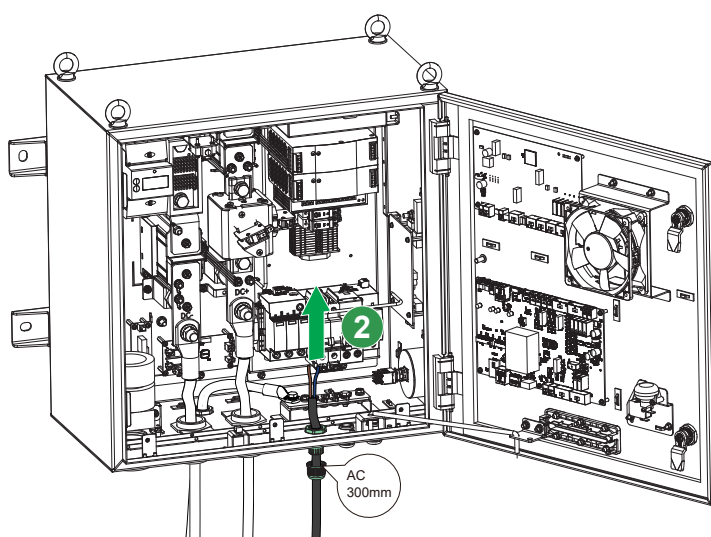
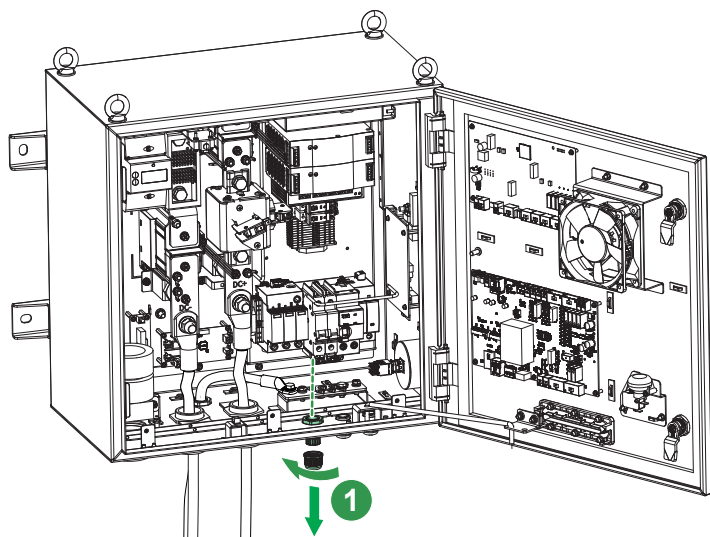
▲ ▲ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

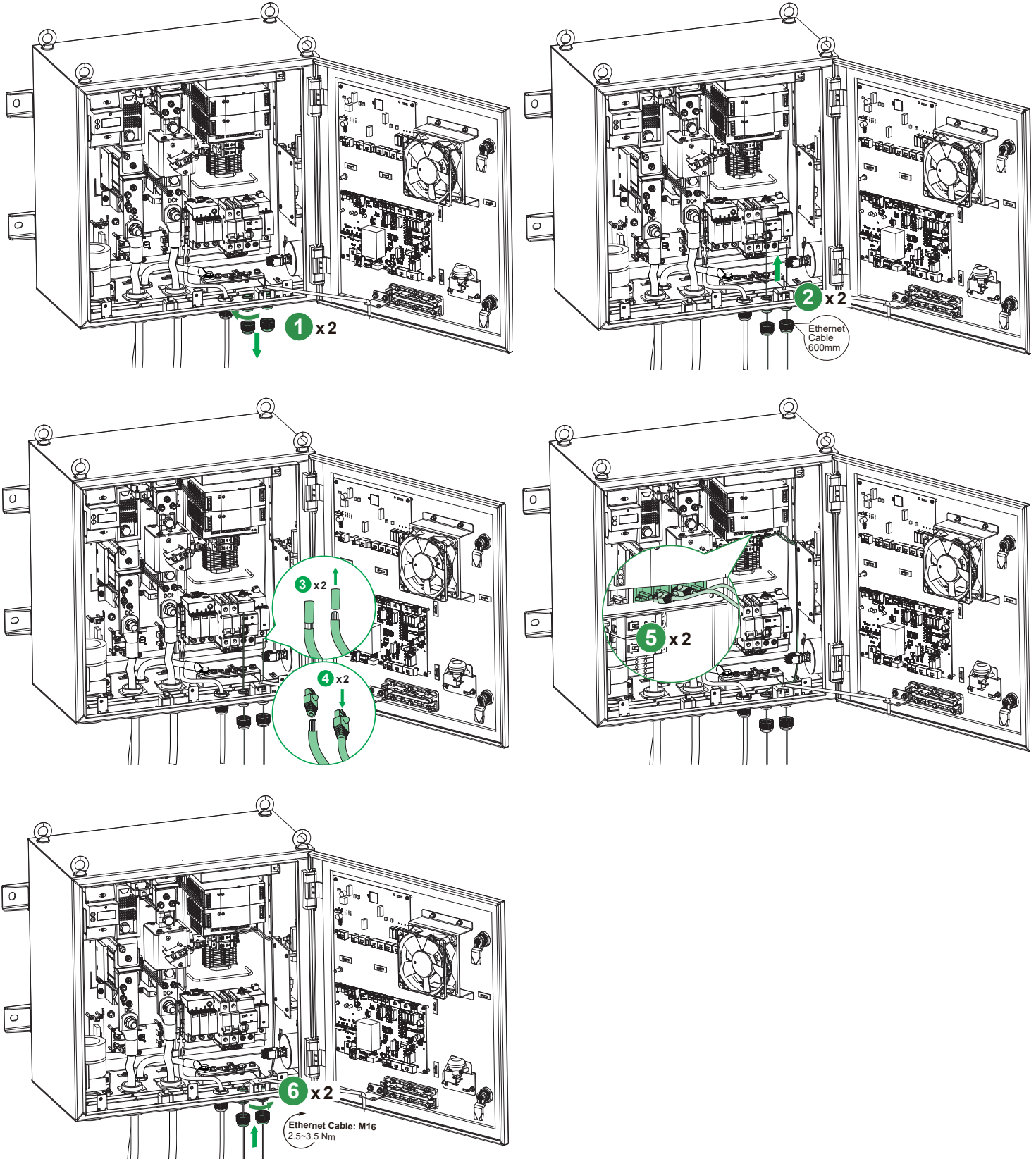
- It is recommended to make the PE wire longer than the phase wires to ensure that the PE wire stays connected the longest if the Dispenser is moved by an accident/collision.
 - Always connect the protective earth first, before connecting the N and phase wiring.
- Failure to follow these instructions will result in death or serious injury.



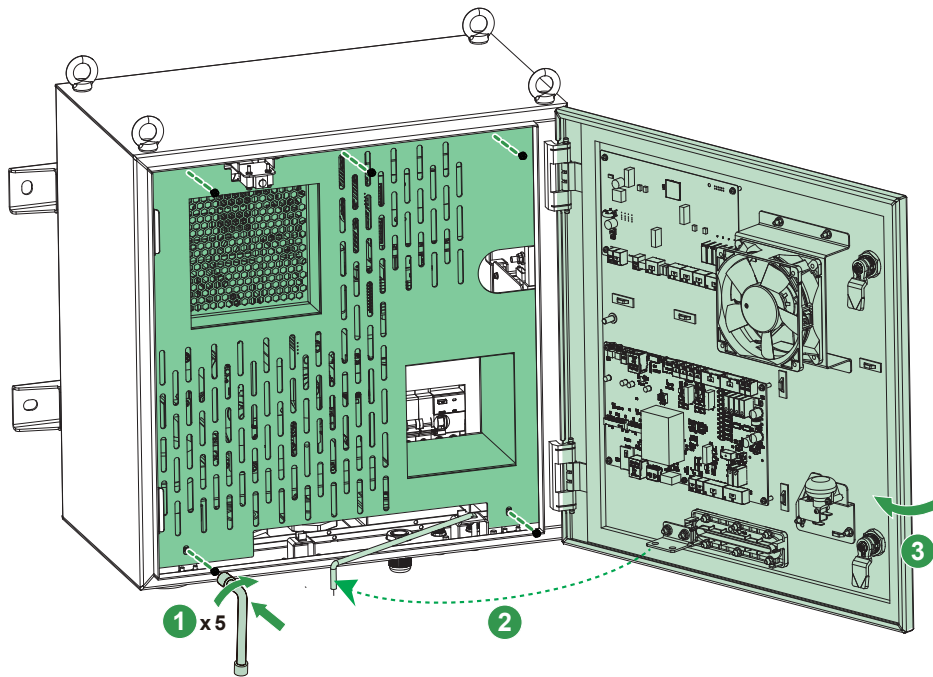
9.3 Connecting the 220-240V AC cables



9.4 Connecting the Ethernet cables



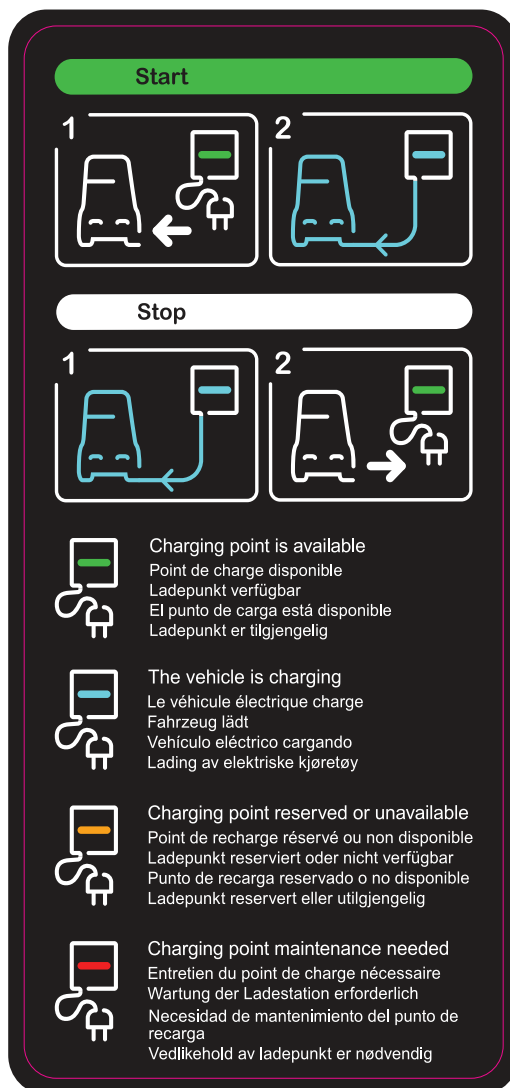
9.5 Install the protection cover plates, and lock the doors



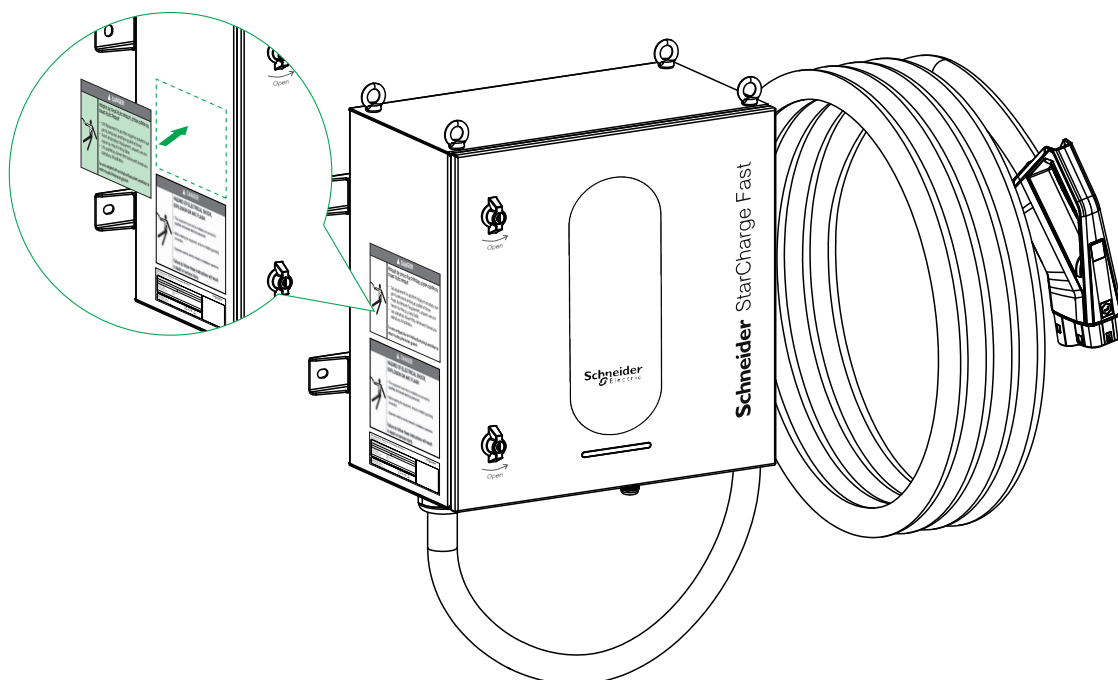
After closing the front door, the 2 locks on the door shall be tightened and locked.

10 Finalization

- Complete the installation checklist (Appendix 1) and ensure any open points are closed for verification prior to commissioning.
- Place the provided user guidance sticker on a suitable/visible location on the Overhead Dispenser. (Optional).



- Place the provided safety label in the local language on the Overhead Dispenser, above the existing English safety label.



⚠ ⚠ DANGER**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

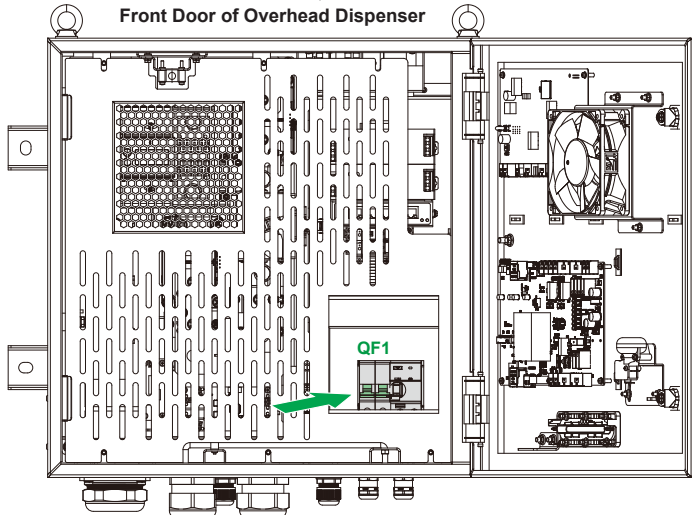
- When the system is in an open or dangerous condition, do not allow unqualified persons to go near it. Instruct/warn people about the potential harmful high voltages.
 - Make sure that the main upstream protection switch of the power supply for the product is set to the OFF position. Follow standard Lock-Out/Tag-Out procedures before proceeding.
 - Always perform a voltage absence test to confirm that electrical power is disconnected from the system.
- Failure to follow these instructions will result in death or serious injury.**

11.1 Startup

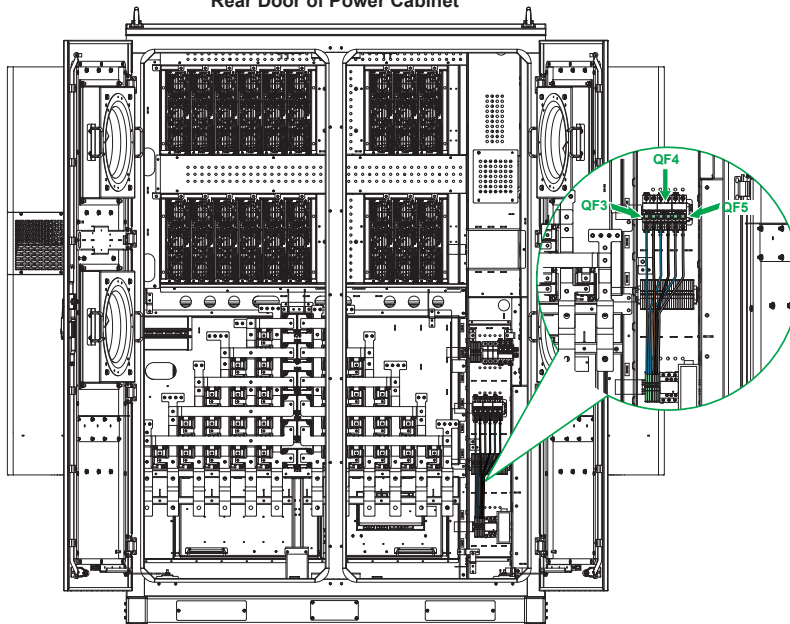
After completing the installation inspection checklist, you can proceed to Startup the Overhead Dispenser to test the Power system:

- A** • Keep the upstream circuit breaker in the open (OFF) position in the Power Cabinet and proceed to close (ON) the QF1 breaker in the Overhead Dispenser.
- B** • Close and secure all the Overhead Dispenser doors.
- C** • Proceed to close the upstream circuit breaker QF3, QF4 and QF5 (ON) in the Power Cabinet.
- D** • Wait for 1 minute for the indicator lights to come online. Verify that the indicator light is stable green.

**Location of QF1
Front Door of Overhead Dispenser**



**Location of QF3, QF4, QF5
Rear Door of Power Cabinet**



Upstream circuit breakers (QF3, QF4, QF5) in the Power Cabinet for the AC power supplies of Overhead Dispensers.

11.2 Shutdown**⚠ ⚠ DANGER****HAZARD OF ELECTRIC SHOCK**

It is mandatory to wait 5 minutes after the equipment is disconnected to allow capacitors to discharge before touching any internal parts. Always follow mandatory lock out tag out procedures and perform a voltage absence test using a reliable calibrated instrument.

Failure to follow these instructions will result in death or serious injury.

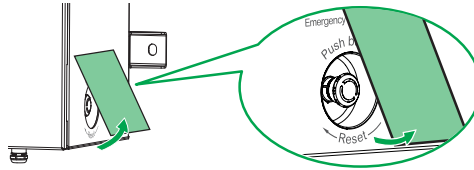
Switch off the Power Cabinet and Overhead Dispenser and wait 5 minutes before you proceed to commissioning.

To shutdown the system:

- A** • Open the Overhead Dispenser QF1 breaker(OFF).
- B** • Proceed to open the upstream circuit breaker (OFF) in the Power Cabinet.

12 Hide Emergency charge stop button (Optional)

If the emergency charge stop function is not required, peel off the protective film from the adhesive back of the emergency charge stop cover plate, attach it over the emergency charge stop button and its markings. Before attachment, clean the surface with alcohol or an appropriate solvent to remove any oil or dust. Press evenly during attachment to ensure a secure bond.



13 Recycle



Product Disposal

To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union.

Enquire with local authorities regarding proper disposal.

Product and packaging materials are recyclable as marked.

Please find below link and enter the product reference number for files: Product Environmental Profile and Product End of Life Instructions

checkaproduct.se.com

Appendix 1: Installation Check List

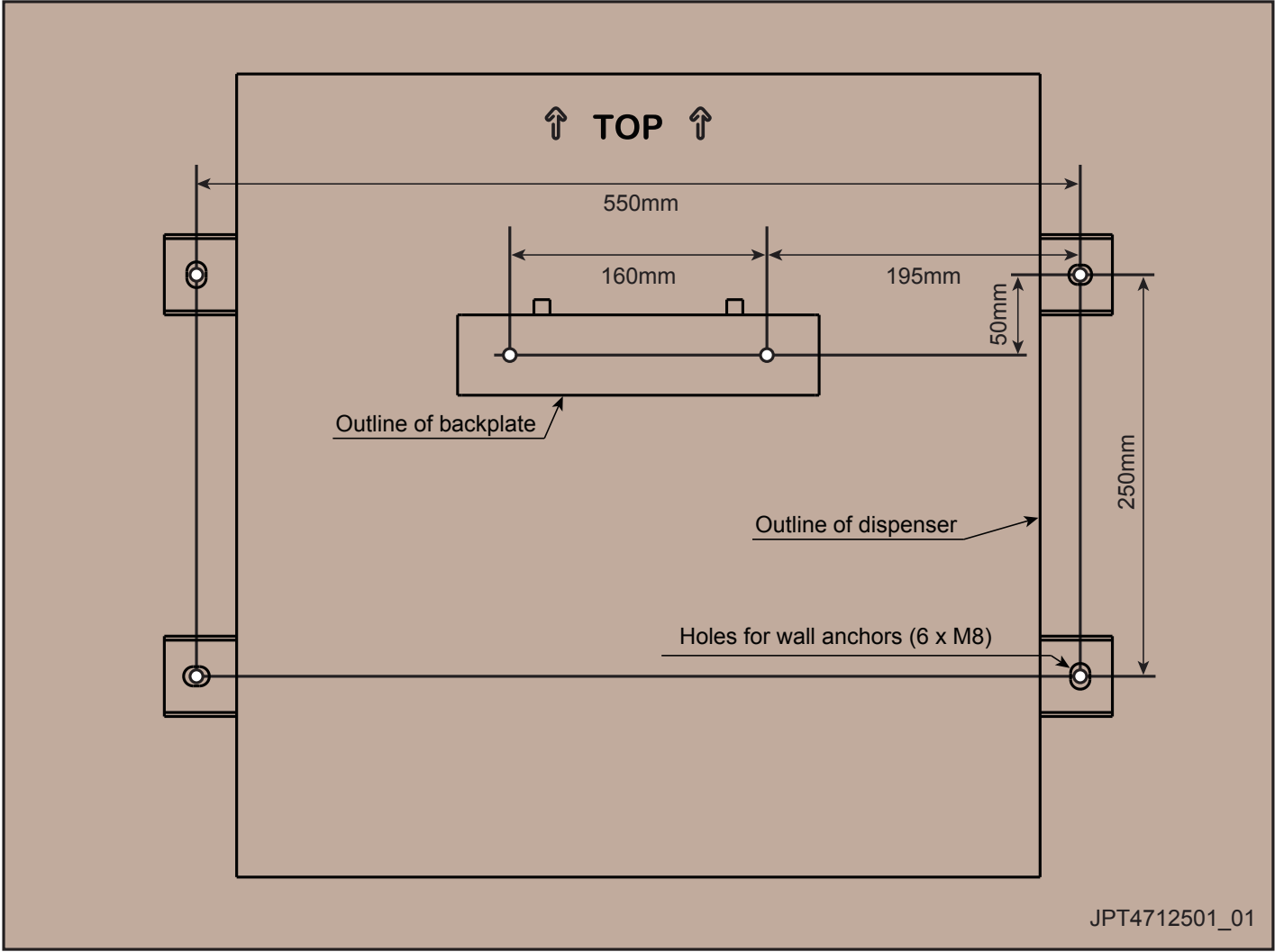
	Inspection or Verification	Characteristics	Remarks
Electrical installation	Check the electrical installation	- Check the line voltage value is 380 – 400 Vac +/-10% - Neutral (N), Line (L), and protective earth (PE) lines are all connected correctly - All cables are connected in the correct sequence between the power cabinet and dispenser units.	
	Check the appearance the power cabinet and the overhead dispenser	The enclosure of the Power cabinet and the overhead dispenser is clean. The charging cable is not broken. The overhead dispenser is not tilted. The QR code is clear.	
Visual check	Check the nameplates and check the safety symbol are not missing.	Depends on the station commercial reference.	
	Check the charger station components.	The overhead dispenser is matching with the required type. The accessories are complete, including the LED Sticker, sealing plate and hoisting ring.	
	Check the charger station sealing and check the IPxx is maintained.	The sealant is blocked in place. All protection covers are hold correctly in place.	
Environmental condition	Check the environmental conditions are respecting the charger station specification data.	Operating Temperature is between -30 °C to 55 °C	
		Humidity is not exceeding the range of 5% to 95%	
		The altitude of installation site is ≤ 2000 m	
Internal wiring check	Check the internal wiring of the power cabinet	Inside the power cabinet: verify the open circuit between phases (L), neutral (N) and PE - L1 & L2, L1 & L3, L1 & N, L1 & PE, L1 and DC+/DC- - L2 & L3, L2 & N, L2 & PE, L2 and DC+/DC- - L3 & N, L3 & PE, L3 and DC+/DC- - N & PE, N and DC+/DC- - PE and DC+/DC-	
	Check the internal wiring of the overhead dispenser	Inside the overhead dispenser: verify the close circuit between charging cable pins and their related output copper bar - DC+ of charging cable and DC+ of output copper bar - DC- of charging cable and DC- of output copper bar	
Screw and connector check	Check the screws and connectors inside power cabinet	Power cabinet: - All screws of input copper bar are fastened without loosening or missing - All screws of the main braker are fastened without loosening or missing - All screws of the AC contactor are fastened without loosening or missing - All screws of the input and output of power modules are fastened without loosening or missing - All screws on the PDU are fastened without loosening or missing - All screws on DC+ and DC- copper bars - Each plug on the main control board - All screws on grounding are fastened without loosening or missing.	
	Check the screws and connectors inside the overhead dispenser	Overhead dispenser: - All screws on DC+ and DC- of the connector cables are fastened to their relative DC+ and DC- copper bar - Power meters are fastened without loosening or missing. - Each connector cable is firmly installed without loosening. - Each plug is fastened correctly on the main control board - All screws on grounding are fastened without loosening or missing.	

Appendix 1: Installation Check List

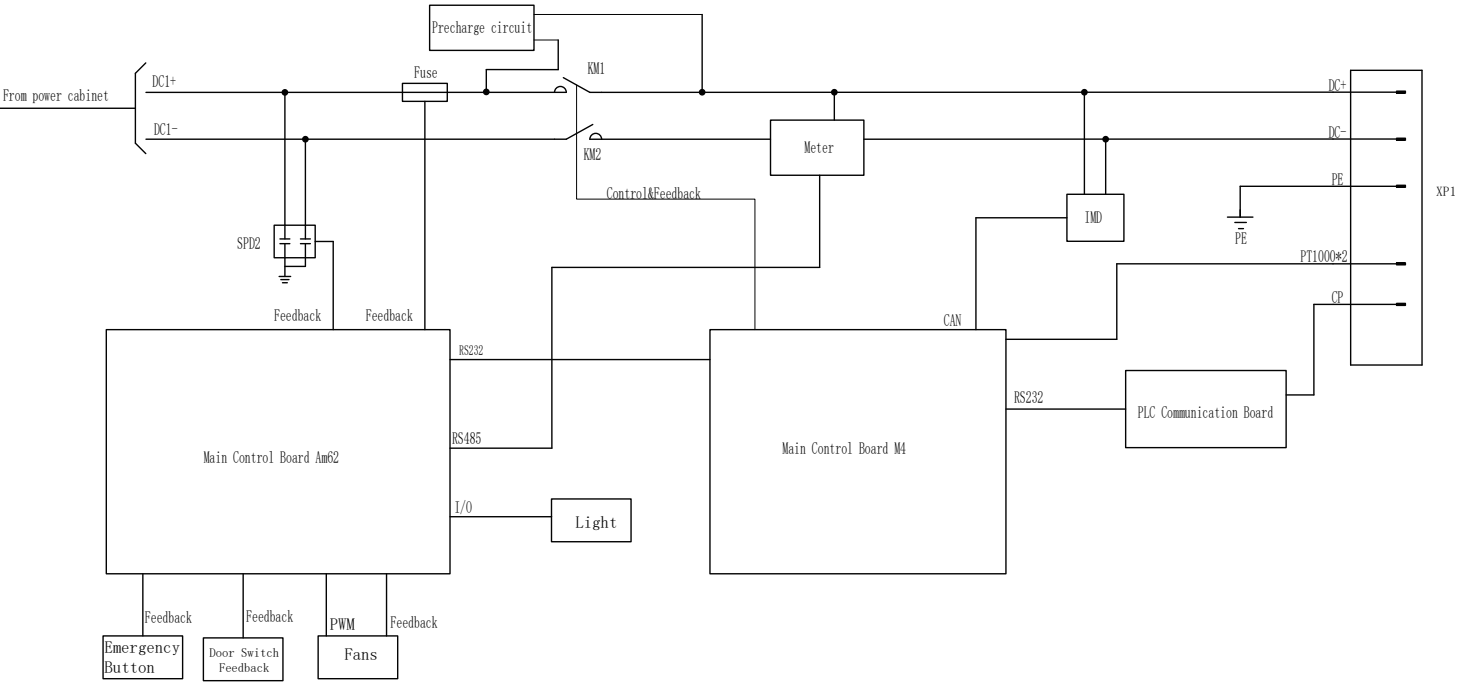
	Inspection or Verification	Characteristics	Remarks
Insulation resistance check	Check the Input voltage of the main breaker before power on	Voltage check inside the power cabinet: • 380 – 400 Vac +/-10% • 220 – 240 Vac +/-10%	
	Check the Insulation resistance	Inside the EVSE (dispenser) the insulation resistance is $\geq 1\text{M}\Omega$, between: • DC+ and PE • DC+ and PE • DC+ and DC-	
Basic check after power on	Check the output voltage of main breaker after power on	Voltage check, inside the power cabinet: • 380 – 400 Vac +/-10% • 220 – 240 Vac +/-10%	
	Check the indicator lights and LEDs	The indicator lights work normally and are green	
	Check the Auxiliary Power Supply	The switch mode power supply can provide 12V/24V normally and stably	
Parameter configuration check	Check the charger station configuration	Configure according to the user requirements: • User can access the charger station webserver • Both power cabinet and dispense firmware are updated • IP configuration of the charger station is matching the requirements • Power configuration is matching the expectation	
	Check the backend Connection	Charge station can successfully connect to the backend: • Backend URL is provided and correctly configured • Backend connection is correctly configured in terms of security profile • Charge Box ID is matching the backend requirements • Backend connectivity	
Parameter configuration check	Check the door sensor status	Check the door sensor status is enabled on the charger station webserver	
	Check the tilt sensor status	Check the tilt sensor status is enabled on the charger station webserver	
	Functional test, emergency button	Press the emergency stop on the side of the spencer or on the front of the power cabinet, and check the overhead dispenser stops charging.	
	Verify the ventilator of the power cabinet and power module fans	Check the fan inside of power cabinet and overhead dispenser and fan of power module during charging and verify the cooling air flow direction is correct.	
	Check charging cables	Check that the charging cable has no burrs, sharp edges, or signs of ignition or burning. The insulation cap on the easy-touch surface of the charging cable should be securely fastened. The charging cable should not be too tight or too loose when inserting and pulling out the charging connector.	
	Check the DC relays	Check that the DC relays are open or closed normally.	

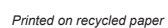
Verified by:

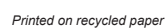
NOTE: Complete the installation checklist and ensure any open points are closed for verification prior to commissioning.

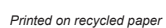


Appendix 3: Schematic Diagram









NOTE