



# 30kW Direct Current Fast Charging System Installation Manual

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## Safety and Liability

**Do not discard the following important safety instructions.** This manual contains important instructions that must be followed during the installation of an EverCharge 30kW Direct Current Fast Charging System (known throughout this document as the 30kW DCFC).

### Grounding Instructions

The EverCharge 30kW DCFC must either be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with circuit conductors and connected to the equipment grounding terminal / lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE shall comply with all applicable codes and ordinances.

### FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this document, may cause harmful interference with radio communications. Operation of this equipment in a residential area could cause interference, in which case, you will be required to correct the interference at your own expense.

 **Important:** Changes or modifications to this product not authorized by EverCharge Inc. could affect EMC compliance and revoke your authority to operate this product.

### Safety and Compliance

This document provides instructions to install the EverCharge 240kW DCFC and should not be used for any other product. Before installing the EverCharge 240kW DCFC, you should review this manual carefully and consult with a licensed contractor, licensed electrician, and trained installation expert to ensure compliance with local building practices, climate conditions, safety standards, and all applicable codes and ordinances. The EverCharge 240kW DCFC should be installed only by a licensed contractor and a licensed electrician and in accordance with all local and national codes and standards. The EverCharge 240kW DCFC should be inspected by a qualified installer prior to the initial use. Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-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 EverCharge, Inc. EverCharge, Inc. is not responsible for any damages that may occur resulting from custom installations that are not described in this document.

## Safety Requirements for Installation Personnel

-  **Warning:** You must comply with the installation site's established safety requirements.
-  **Warning:** Pay attention to warning and safety signs posted in and around the work site.
-  **Warning:** Wear proper head protection, closed toed shoes, and Personal Protective Equipment while installing the EverCharge 240kW DCFC.
-  **Warning:** When testing the EverCharge 240kW DCFC, wear proper Personal Protective Equipment and an Arc Suit, including an Arc-rated face shield, arc-rated coveralls, safety glasses, ear canal inserts, and rubber insulated gloves.
-  **Warning:** If working at an elevated height, wear proper fall protection, head protection, and closed-toed non-slip shoes.
-  **Warning:** If working at an elevated height, properly secure work tools.
-  **Warning:** If in the presence of heavy dust or paint fumes, wear a respirator.
-  **Warning:** Do not stand under a forklift, hoist zone, or other such area where personnel are working at height.
-  **Warning:** When possible, keep a safe distance from mechanical and electrical equipment to reduce potential exposure to mechanical or electrical hazards.
-  **Warning:** When possible, avoid unnecessary contact with mechanical and electrical equipment to prevent undue damage to said equipment.
-  **Warning:** Only properly trained personnel should use power tools.
-  **Warning:** When using power tools, wear protective shoes, gloves, and other equipment.
-  **Warning:** Ensure all power tools are properly grounded or connected to a neutral line.
-  **Warning:** Be sure to keep all electrical equipment and power supplies intact. If electrical components are damaged, they must be fixed before work can proceed.
-  **Warning:** Prevent falls: Pay attention when moving around open pits or elevated work zones.
-  **Warning:** Pay attention to ground conditions when walking to prevent injuries from contact with construction debris (nails, steel bars, etc.).

## Accuracy

Reasonable effort was made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

## Disclaimer

The EverCharge products are provided "AS IS," and EverCharge, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purpose, and non-infringement, to the maximum extent permitted by law.

### Limitation of Liability

In no event shall EverCharge, Inc. or its authorized distributors be liable for any indirect, incidental, special, punitive, or consequential damages, including without limitation, lost profits, lost data, loss of use, cost of cover, or loss or damage to the EverCharge Charging station, arising out of or relating to the use or inability to use this manual, even if EverCharge, Inc. or its authorized distributors have been advised of the possibility of such damages.

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## 1. General

### 1.1 Document Objective

The objective of this document is to guide the installer to complete the on-site installation of EverCharge 30kW DC EVSE.

### 1.2 Scope of Application

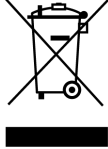
#### 1.2.1 TYPES OF EQUIPMENT APPLICABLE TO THIS MANUAL

EverCharge 30kW DC EVSE.

#### 1.2.2 PERSONNEL APPLICABLE TO THIS MANUAL

Installer of EverCharge 30kW DC EVSE.

### 1.3 Definition of Warning Symbols

| No. | Sign                                                                                | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   |   | <p>"Warning" indicates danger.</p> <p>Please pay attention to the operation sequence. Any incorrect operation or practice will lead to personal injury or death. Operations marked "Warning" symbol can only be performed if the indicated conditions are fully understood and met.</p>                                                                                                                                                                                                       |
| 2   |  | <p>"Attention" indicates danger.</p> <p>Please pay attention to the operation. Any incorrect operation or practice will lead to the product damaged. Operations marked "Attention" can only Be performed if the indicated conditions are fully understood and met.</p>                                                                                                                                                                                                                        |
| 3   |  | <p>"Notice" indicates useful operation skills or information.</p> <p>The operation will be marked "Notice" symbol if any useful skill and information is available. No warning or attention</p>                                                                                                                                                                                                                                                                                               |
| 4   |  | <p>"Garbage disposal" symbol indicates electrical and electronic waste.</p> <p>This symbol is located on the product, in the instruction manual, or on the packaging. It indicates that electrical and electronic equipment and its accessories should be separately disposed from ordinary household waste. Materials can be reused according to this symbol. You can make a huge contribution to environmental protection by reusing old equipment, materials, or other forms of reuse.</p> |

## 2. Preparation Before Installation

### 2.1 Conventional Construction Tools

| No. | Category                  | Name                                      | Use                                       | Picture                                                                               |
|-----|---------------------------|-------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------|
| 1   | Fabricating traverse tool | Electrician knife                         | Stripping of insulation sheath            |    |
| 2   | Installation tool         | Wire stripping pliers                     | The stripping of the insulating layer     |    |
| 3   | Installation tool         | Line pressing pliers                      | Terminal joint                            |    |
| 4   | Installation tool         | Percussion drill                          | Drill hole                                |    |
| 5   | Installation tool         | Cutting machine                           | Cut the pipe                              |    |
| 6   | Installation tool         | Heat gun                                  | Thermal shrinkage of insulating materials |    |
| 7   | Installation tool         | Allen wrench (full set)                   | Install and remove screws                 |   |
| 8   | Installation tool         | Open end wrenches (full set with size 13) | Install and remove nuts                   |  |
| 9   | Installation tool         | Angle grinder                             | Polishing of materials                    |  |
| 10  | Installation tool         | Cross screwdriver (full set)              | Install and remove screws                 |  |
| 11  | Measuring instrument      | Laser level                               | Level measurement                         |  |
| 12  | Measuring instrument      | Measuring tape                            | Distance measurement                      |  |
| 13  | Measuring instrument      | Spirit level                              | Level measurement                         |  |
| 14  | Measuring instrument      | Multimeter                                | Measure voltage, current, etc             |  |
| 15  | Measuring instrument      | Megger                                    | Measure resistance                        |  |
| 16  | Auxiliary appliance       | Insulation mat                            | Place the parts under disassembly         |  |

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

## 2.2 Construction Materials

### 2.2.1 CABLE CONNECTION TERMINALS

1. 6AWG wire corresponding terminals.
2. RJ45 connector (if Ethernet communication is required) .

### 2.2.2 CORRUGATED CONDUIT

1. Corrugated conduit for power cable: 1-1/4 inch.
2. Corrugated conduit for network cable: 1/2 inch. (If 4G or Wi-Fi is used to connect the network, the network cable is not needed.)

### 2.2.3 OTHER MATERIALS

Fireproof mood or polyurethane foam sealant (only for the column mounted type); Heat shrinkable tube, electric tape and other accessories.

## 2.3 Installer Requirements

The safety, management, and regulations of the construction site shall be observed when entering the construction site.

## 2.4 Handover of Construction Drawings

After the installer arrives at the site, first ask the store staff for a drawing of the installation location of the equipment, and check that the cables and concrete foundation of each equipment meet the requirements.

## 2.5 Inspection of Power Cables

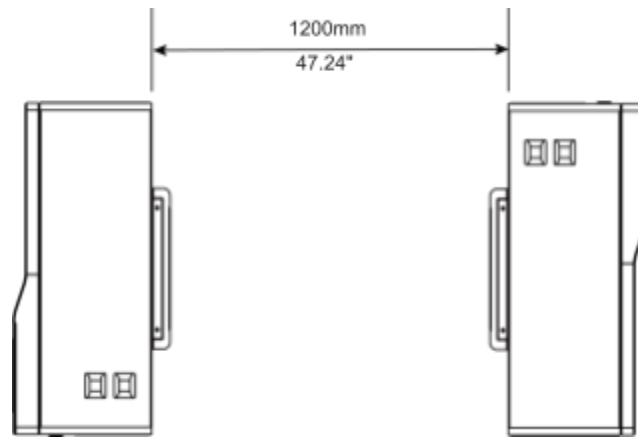
The recommended type of power cable to be laid in the 30kW wall box of UL standard is 6AWG, 5C, (90°C, copper wires), and the length over base surface is about 1.5m. Please check and verify the cable type before installation.

## 2.6 Requirements for Concrete Foundation (Column Mounted)

Before the charger is installed, the concrete foundation needs to be poured. The size of the concrete foundation is 430mm\*300mm\*600mm, the buried depth of the foundation is 600mm, and not above the ground. The top view is shown in figure 1. The design of concrete foundation can be adjusted according to the user's requirements and the actual situation on site.

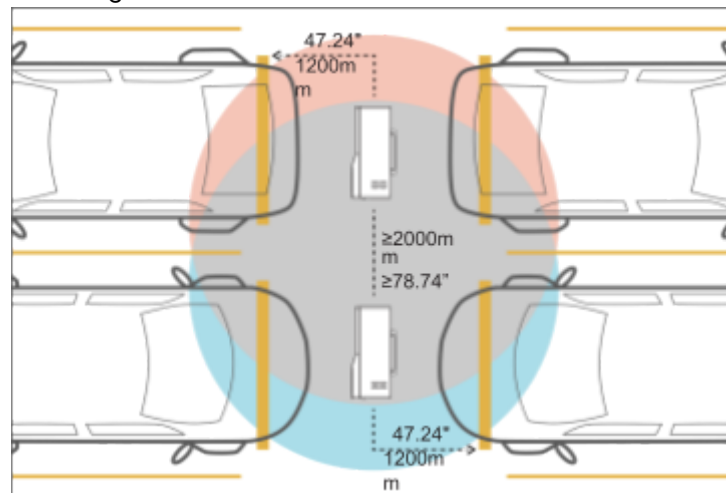


- Charger back to back installation distance requirements When chargers are installed back-to-back, it is recommended that the minimum distance between chargers back-to-back is 1200mm, as shown in FIG. 3.



**FIG 3: INSTALLATION DISTANCE DIAGRAM OF CHARGER BACK-TO-BACK**

- Single or back to back parking space installation distance When charger is installed in a single parking space or back-to-back parking space, it is recommended that the distance between the two chargers should not be less than 2000mm, and the distance between the wheels and the center of the charger should not be less than 1200mm, as shown in FIG. 4.



**FIG 3: 4 INSTALLATION DISTANCE OF SINGLE OR BACK-TO-BACK PARKING SPACES**

## 2.8 Current and Distribution Capacity Requirements

If the charger runs at full power, the power grid capacity shall  $\geq 35\text{KVA}$ . It is recommended that the power supply MCCB:  $U_e=480\text{V}$ ,  $I_e \geq 50\text{A}$ , thermo-magnetic,  $I_{cu} \geq I_{cs} \geq 25\text{kA}$ , 3P.

## 2.9 Ground/Insulation Resistance Requirements

- Check grounding resistance test report, ensure the resistance of the grounding grid produced on site must be  $\leq 4\Omega$ .
- Check construction insulation resistance test report, ensure the insulation resistance of cable  $\geq 10\text{M}\Omega$ .

## 2.10 Storage and Handling Requirements

### HANDLING INSTRUCTIONS

- In the process of unloading and handling, the forklift should be selected reasonably according to size and weight of the goods in order to avoid the packaging containers from being dropped.
- In order to prevent the safety of placing and unpacking products affected by tilt and uneven ground, please choose a flat ground when unloading.
- If the containers need to be temporarily stored after unloading, it is recommended to keep sufficient space between each pallet to avoid damages to the packagings or pallets during the second transfer.

### STORAGE INSTRUCTIONS

- Due to the complexity of the environment and climate of project sites, it is required to store and stack the goods with a single layer after unloading in order to ensure the safe storage of the goods on site.
- The goods should be stored in a complete outer packaging.
- The storage area should be protected, keeping the pallets and packaging containers from damp, direct sunlight, rain (waterproof) measures, and all other environmental hazards.
- The indoor storage temperature should be -40°F to 185°F (-40°C to +85°C).
- The grounds of the storage areas should be kept dry and leveled.
- Do not stack other items on the containers.

### IMPORTANT NOTES

Title and risk of loss for the product transfer to you upon delivery. You are responsible for any damage to the product occurring after delivery.

 **Caution:** The above requirements are the minimum requirements of the equipment.

 **Caution:** The specific standards are subject to the local laws and regulations.

## 3. Installation Procedure

### 3.1 Unpacking And Unpacking Inspection

#### 3.1.1 EQUIPMENT UNPACKING LIST

| Name                              | Package    | Configuration | Package Size (mm) | Weight (With Package) | Attached Paper                                                                      | Accessories List                                                                            |
|-----------------------------------|------------|---------------|-------------------|-----------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Charger                           | Wooden Box | Standard      | 770*680*646       | 30kg                  | 1. Certification approval *1<br>2. User manual*1<br>3. Delivery inspection report*1 | 1. Charging socket*1<br>2. Charger*1<br>3. M6- expansion screw*8<br>4. IC card*2<br>5.Key*2 |
| Module                            | Carton     | Standard      | 540*405*200       | 15 kg                 | N/A                                                                                 | M4-Screw*4                                                                                  |
| Column (only for column mounting) | Carton     | Optional      | 1327*292*250      | 29kg                  | N/A                                                                                 | M6-Screw*7                                                                                  |

#### 3.1.2 INSPECTION OF UNPACKING

1. Check the packing list number and equipment quantity.
2. Check the device nameplate information.
3. Check that the attachment papers are complete.
4. Check whether the spare parts and accessories are complete.
5. Check the factory inspection report and certificate.
6. Check the appearance of the equipment is good, whether there is deformation, bump, stains and other conditions.

#### 3.1.3 NOTES FOR UNPACKING

1. The installer should unpack the container in the presence of the owner and fill in the unpacking record in detail. See appendix 1 for the unpacking record.
2. After unpacking, please ask the owner's representative to confirm and sign on the equipment unpacking record sheet.
3. If any problem is found in the process of unpacking and acceptance of the equipment, it shall not only record the accident, but also wait for the negotiation between the owner and the supplier.

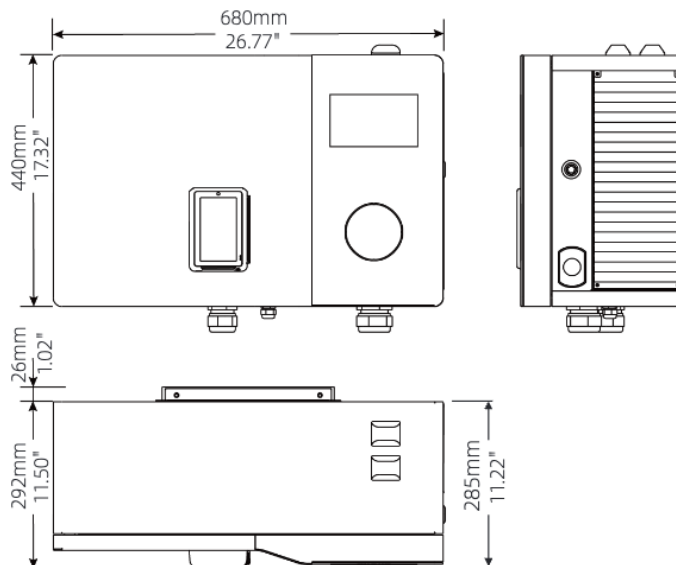
#### 3.1.4 CHECK BEFORE INSTALLATION

The installer needs to complete the pre-installation confirmation check before installation, see Appendix 2.

## 3.2 Equipment Installation And Wire Connection

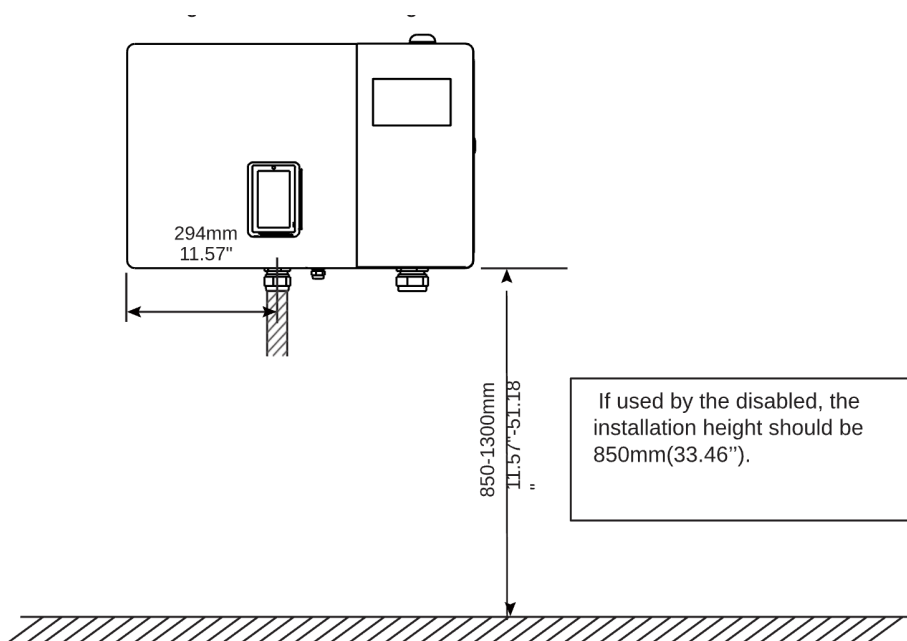
### 3.2.1 WALL MOUNTED INSTALLATION

The dimensions of the wall-mounted installation are shown in FIG.5.



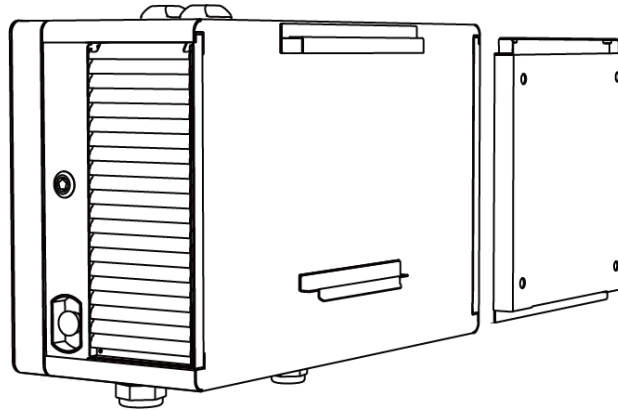
**FIG 5: 5 WALL-MOUNTED MOUNTING DIMENSIONS**

The dimensions of the wall-mounted installation are shown in FIG.5.



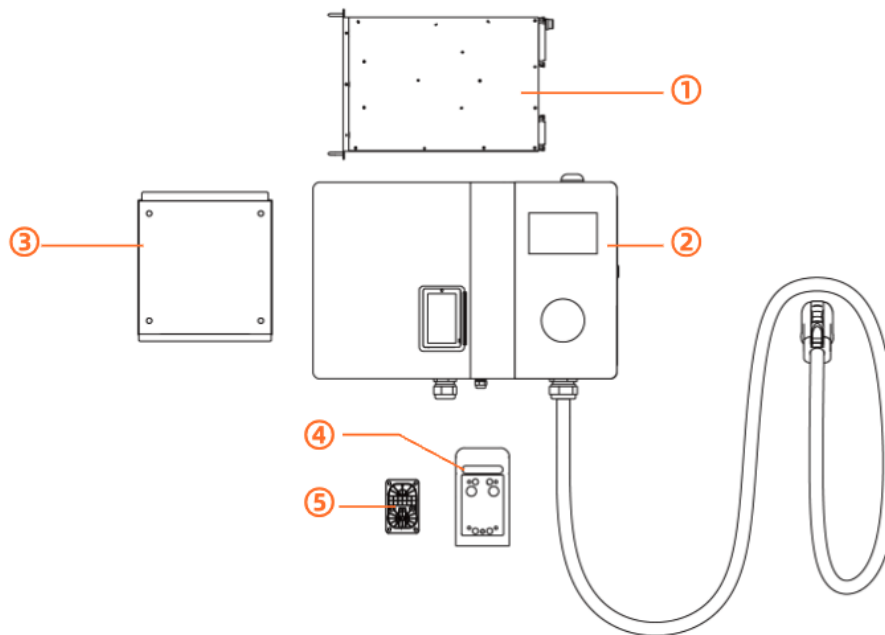
**FIG 6: WALL MOUNTED INSTALLATION HEIGHT**

The dimensions of the wall-mounted installation are shown in FIG.5.



**FIG 7: WALL MOUNTING PANEL DIAGRAM**

Wall mounted mounting accessories are shown in FIG. 8.

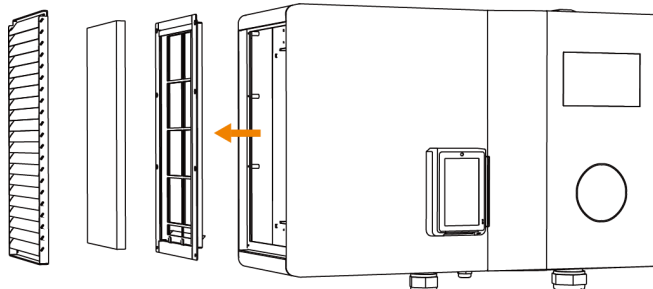


**FIG. 8 wall mounted installation accessories**

- ① 30kW charging module
- ② Charging box
- ③ Wall mounting panel
- ④ Charging connector placement assembly 1
- ⑤ Charging connector placement assembly 2

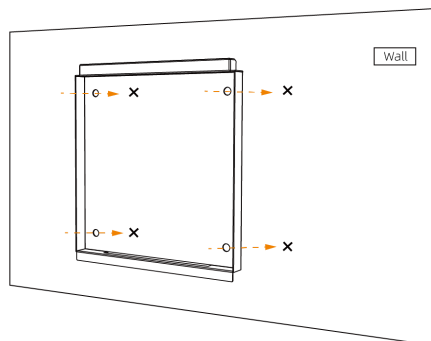
## INSTALLATION STEPS

**Step 1:** Open the front door of the charging box, remove the left shutter and dust proof cotton, as shown in FIG. 9.



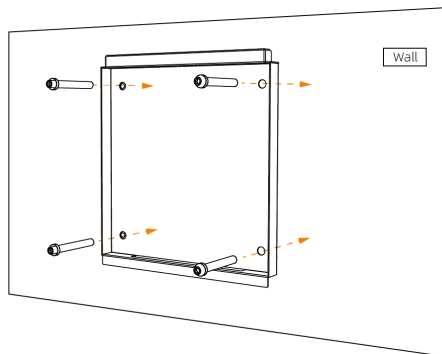
**FIG 9: REMOVAL OF LOUVER AND DUSTPROOF COTTON**

**Step 2:** Locate the wall where the charger is to be installed, locate the four holes in the wall mounting panel (it is recommended that the lower edge of the mounting plate is 1250mm from the ground, the screen is about 1500mm from the ground, which is convenient for use), and mark the holes with a pencil, as shown in FIG. 10.



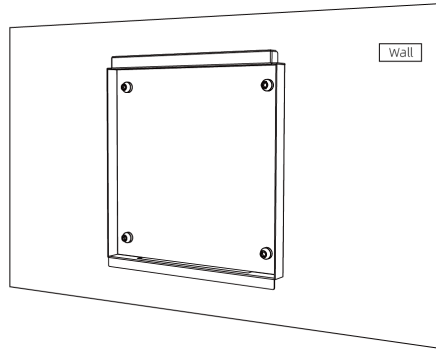
**FIG 10: HOLE MARKING DIAGRAM**

**Step 3:** Use an electric hand drill to make holes with the diameter of 10mm at the marked position. (note: the drilling depth is more than the length of bolts), and then put the M6 \* 100 of bolts to hole, as shown in FIG. 11.



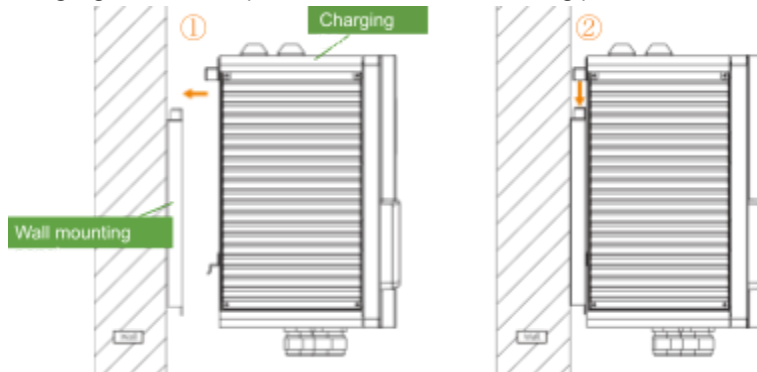
**FIG 11: PUNCHING DIAGRAM**

**Step 4:** Align the four holes of the wall mounting panel with the four screws on the wall and tighten them, as shown in FIG. 12.



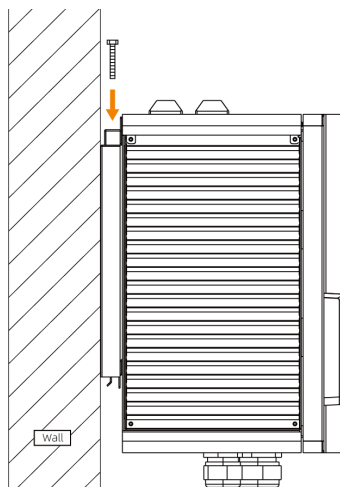
**FIG 12: WALL MOUNTING PANEL FIXING DIAGRAM**

**Step 5:** Mount the charging box on the wall mounting panel, and fix the charging box, shown as FIG. 13 : The rear of the charging box is slightly higher than the wall mounting panel, and moves towards the wall until the wall mounting panel is in contact with the rear of the charging box; Move the charging box down until the charging box is clamped with the wall mounting plate.



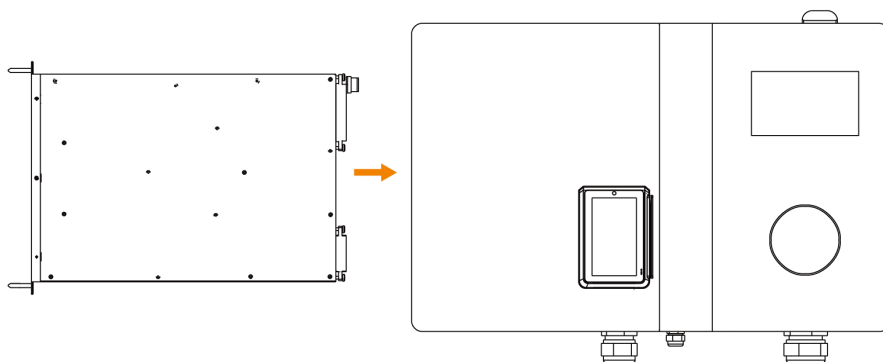
**FIG 13: DIAGRAM OF WALL-MOUNTED CHARGING BOX FIXING**

**Step 6:** Screw on the top of the mounting panel, and the mounting panel is completely fixed with the charging box, as shown in FIG. 14.

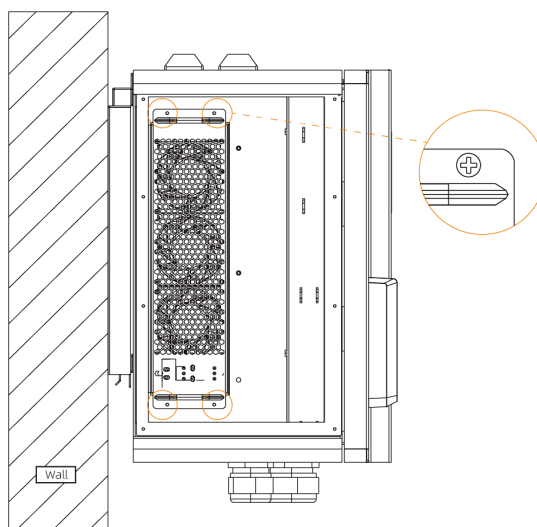


**FIG 14: WALL MOUNTED TOP SCREW FIXATION**

**Step 7:** Put the charging module into the charging box (remove the louver from the left side), and then tighten the four screws fixing the module and the charging box, as shown in FIG. 15 and FIG. 16.

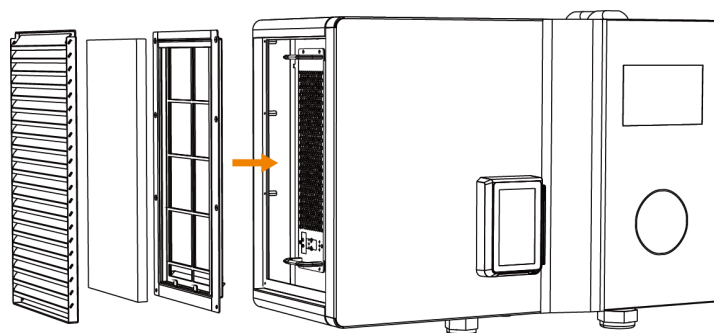


**FIG 15: MODULE INSTALLATION DIAGRAM**



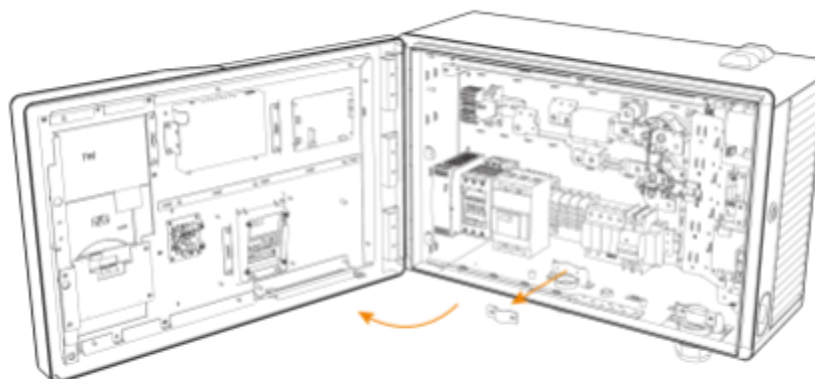
**FIG 16: MODULE SCREW FIXING DIAGRAM**

**Step 8:** Install each part of the louver in turn, tighten the corresponding screws and fix the louver, as shown in FIG. 17.



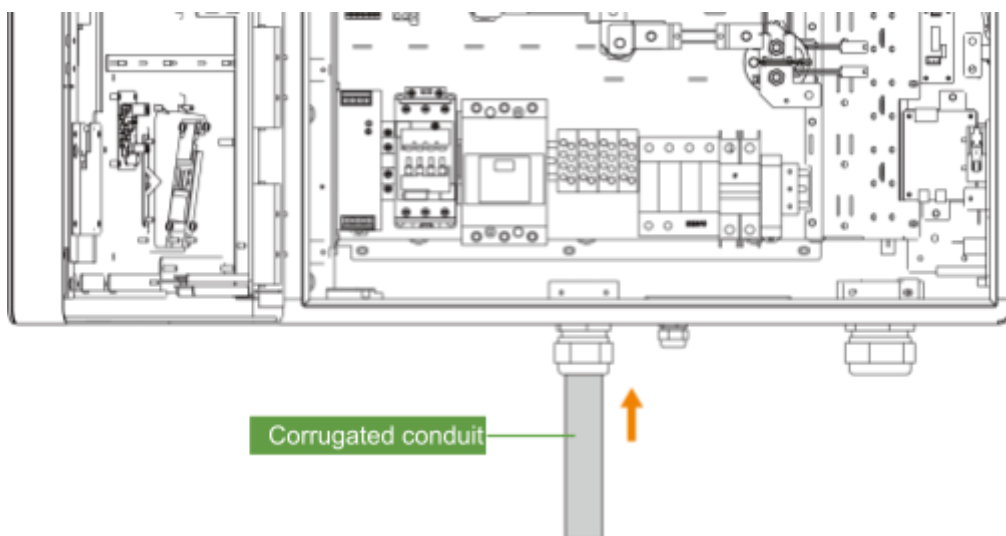
**FIG 17: INSTALLATION DIAGRAM OF EACH COMPONENT OF LOUVER**

**Step 9:** Open the front door, remove the cable clamp and PC cover plate as shown in FIG. 18.

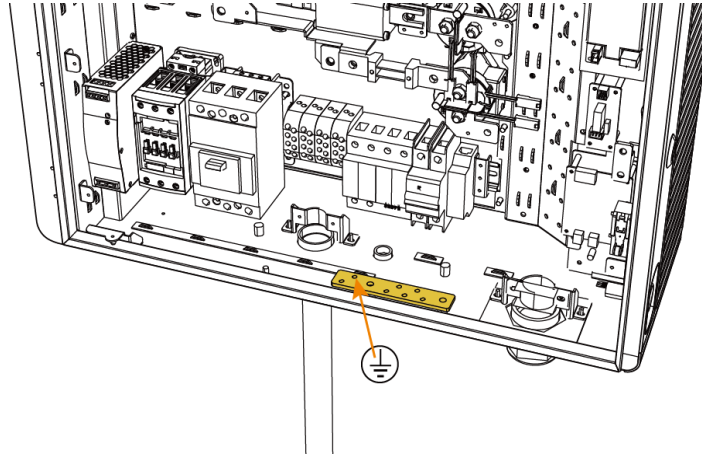


**FIG 18: REMOVE THE CABLE CLAMP AND PC COVER PLATE**

**Step 10:** For wiring, thread the power cable into the corrugated conduit (1-1 / 4 inch), then introduce the cable into the charging box through the inlet gland at bottom of the charging box, and then fix the corrugated conduit on the inlet gland, refer to FIG. 19. Connect the ground wire to the ground copper bus, refer to FIG. 20. Then connect the three phases of L1, L2, L3 and the N line to the corresponding terminals from left to right. The phase sequence cannot be connected wrong, as shown in FIG. 21. After the completion of wiring, fix the cable with removed cable clamp via removed screws.

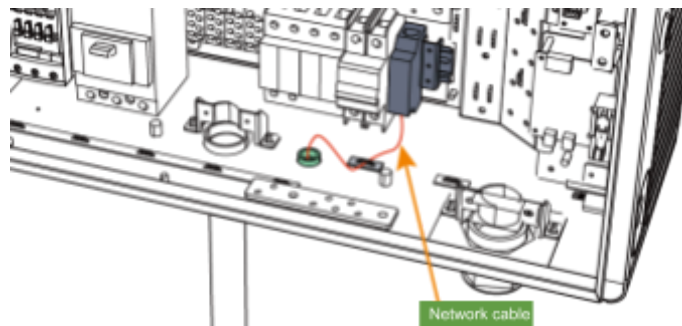


**FIG 19: CABLE INSTALLATION DIAGRAM**



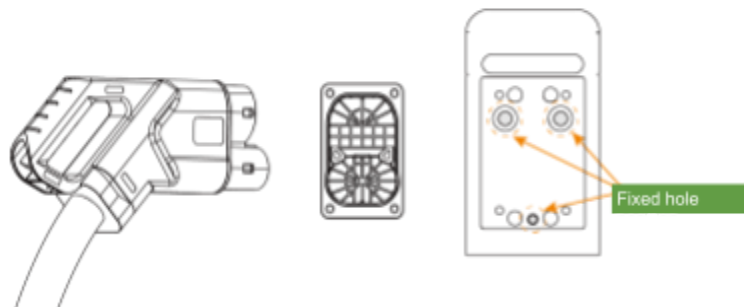
**FIG 21: SCHEMATIC DIAGRAM OF TERMINALS**

**Step 11:** If Ethernet communication is required, thread the network cable into the corrugated conduit (1 / 4 inch), then introduce the network cable into the charging box through the inlet gland at bottom of the charging box and connect the network cable in the Ethernet port. The Ethernet port refer to figure 22. If Ethernet communication is not required, use plugging materials such as fireproof mud or polyurethane foam to block the inlet gland.



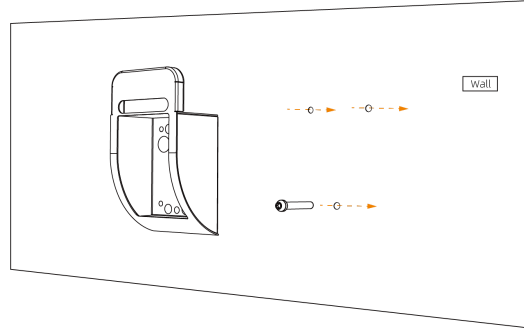
**FIG 22: SCHEMATIC DIAGRAM OF ETHERNET PORT**

**Step 12:** Install the charging connector placement after installing the charging box. Select the appropriate position on the wall (It is recommended that the lower edge be 900mm away from the ground to facilitate the use of the charging connector), and mark the punching position according to the three holes on the charging connector placement assembly1, as shown in FIG. 21.



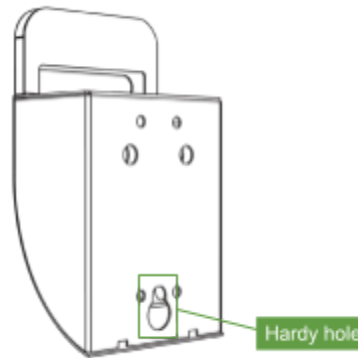
**FIG 23: SCHEMATIC DIAGRAM OF HOLE LOCATION OF CHARGING CONNECTOR PLACEMENT ASSEMBLY**

**Step 13:** Select a drill bit with the diameter of 10mm, mark the position in the previous step with a hand drill to drill a hole with a depth of about 110mm, and then insert an M6\*100 expansion screw (note: the expansion screw should not be completely inserted into the hole) into the lower hole, as shown in FIG. 24.

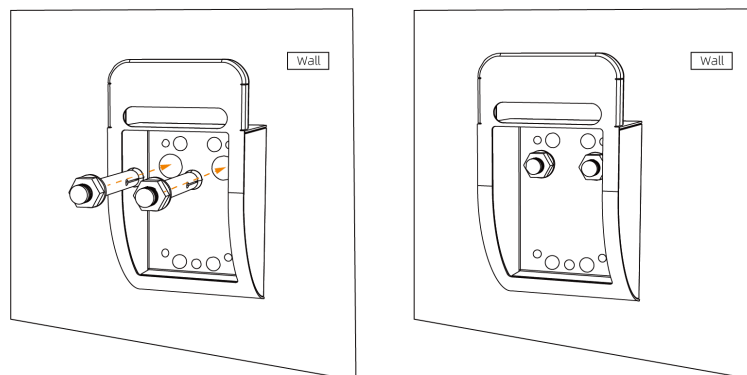


**FIG 24: SCHEMATIC DIAGRAM OF EXPANSION SCREW INSERTION**

**Step 14:** Attach the charging connector placement assembly1 to the expansion screw inserted into the wall hole in the previous step through the hardy hole at the back of the charging connector placement assembly1 (see FIG. 26), then insert the other two holes into the corresponding expansion screws, and tighten the three expansion screws completely, as shown in FIG. 25.

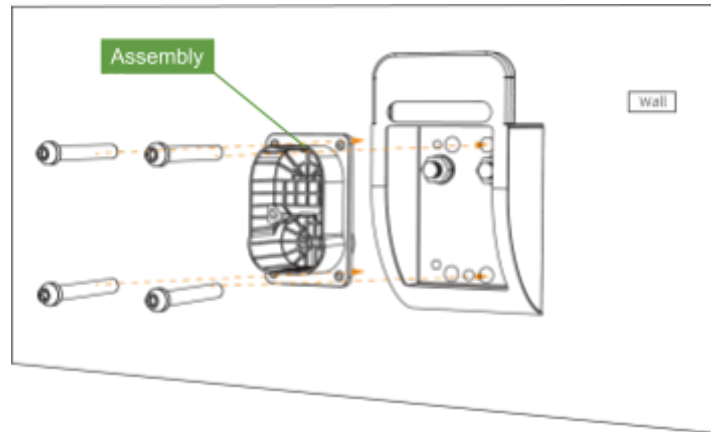


**FIG 25: SCHEMATIC DIAGRAM OF HOIST HOLE AT THE REAR OF CHARGING CONNECTOR PLACEMENT ASSEMBLY**

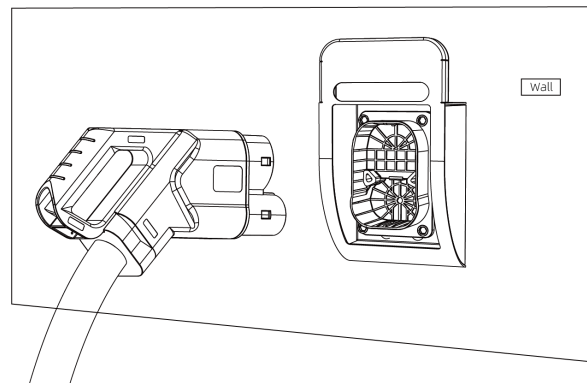


**FIG 26: MOUNTING DIAGRAM OF EXPANSION SCREW OF CHARGING CONNECTOR PLACEMENT ASSEMBLY**

**Step 15:** Install the charging connector placement assembly2, fix the charging connector placement assembly2 on the charging connector placement assembly1 via the fixing hole with M6\*16 screws, as shown in FIG. 27 and 28.



**FIG 27: SCHEMATIC DIAGRAM OF CORRESPONDING HOLE OF CHARGING CONNECTOR PLACEMENT ASSEMBLY**

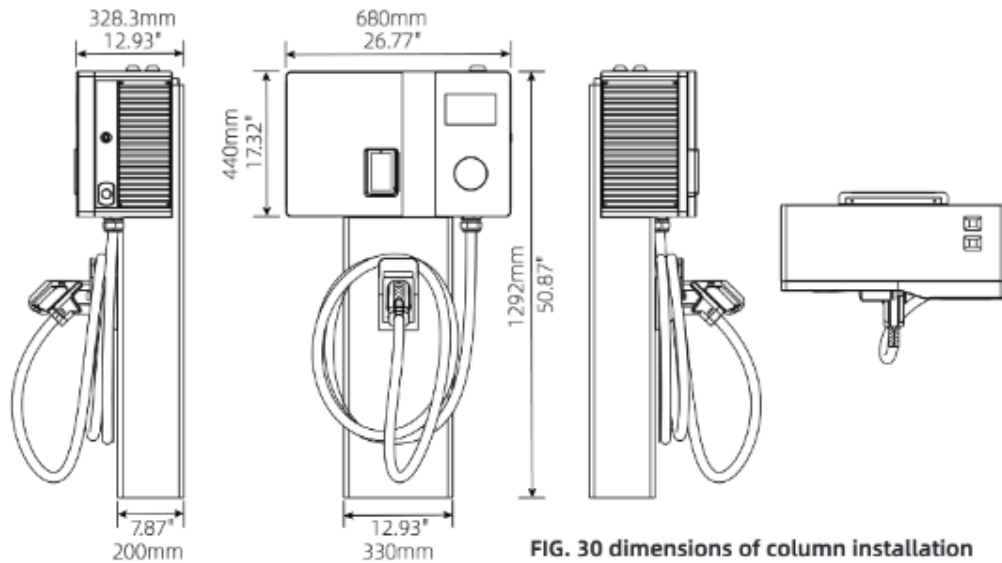


**FIG 28: INSTALLATION DIAGRAM OF CHARGING CONNECTOR PLACEMENT ASSEMBLY**

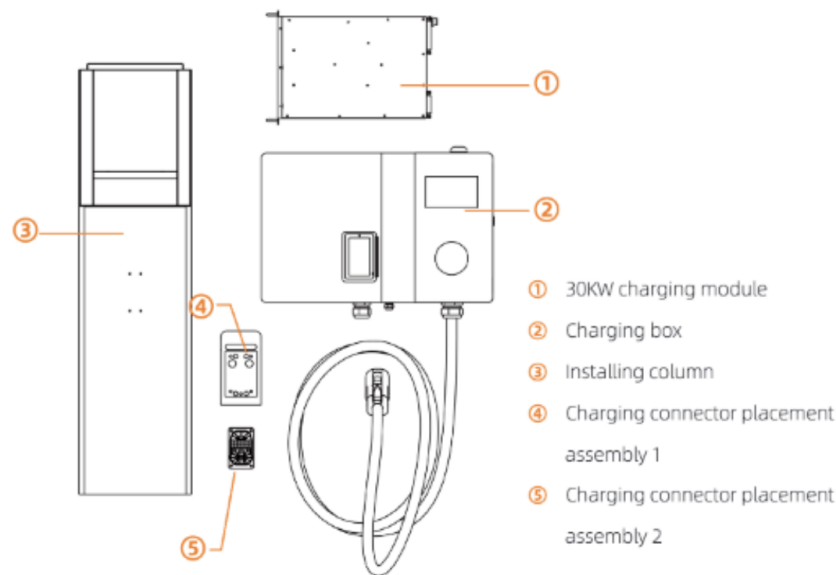
**Step 16:** Installation of the wall mounted charging box is done

### 3.1.3 COLUMN MOUNTED INSTALLATION

Column installation size is 680mm\*328.3mm\*1292mm, the appearance size is shown in figure 30, the installation figure is shown in figure 31, and the installation parts are shown in figure 32.

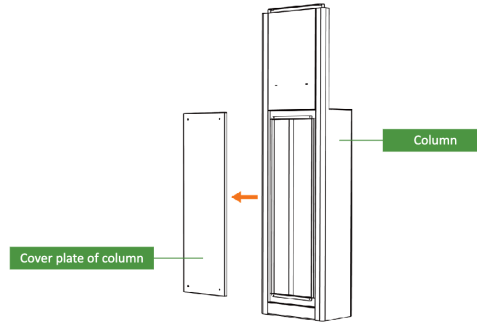


**FIG 30: DIMENSIONS OF COLUMN INSTALLATION**



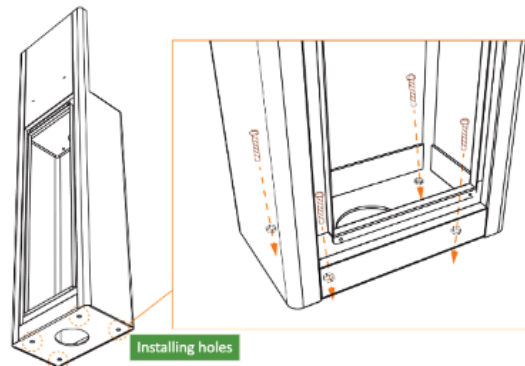
## INSTALLATION STEPS

**Step 1:** Refer to the wall mounting steps to remove the shutter and dust proof cotton. Then remove the cover plate of the column, as shown in figure 33.



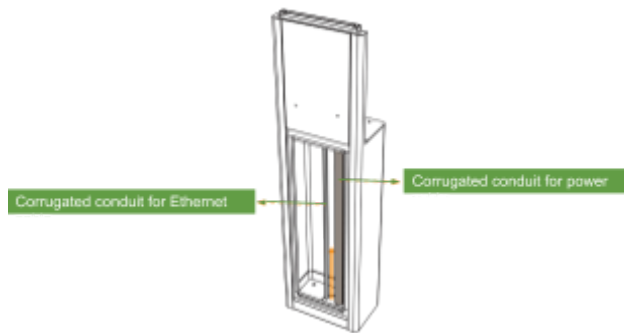
**FIG 33: SCHEMATIC DIAGRAM OF COVER PLATE OF COLUMN**

**Step 2:** Four M10 anchor bolts are used to fix the column to the concrete foundation through four holes at the bottom, as shown in FIG. 34.



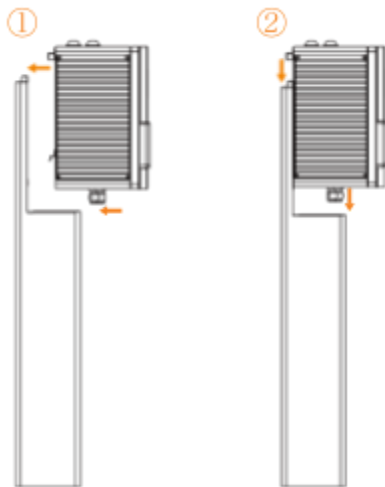
**FIG 34: INSTALLING HOLES OF COLUMN BOTTOM**

**Step 3:** Insert the cables into the column through the hole at the bottom of the column, and then the cable passes through the column into the charging box, as shown in FIG. 35. Cables can only be introduced into the column through the existing hole at the bottom of the column, do not make new holes on the column as the cable inlet holes.



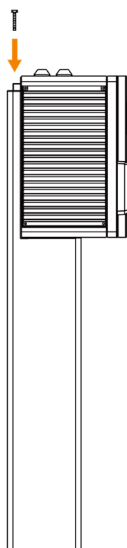
**FIG 35: CABLE ROUTING IN COLUMN**

**Step 4:** Fix the charging box with the column. Pay attention to align the cable inlet hole of the charging box with the corresponding hole on the column. The steps of fixing refer to the wall mounted installation, as shown in FIG. 36.



**FIG 36: FIXING DIAGRAM OF COLUMN MOUNTED CHARGING BOX**

**Step 5:** Tighten the screws on the top of the installing column, and fix the upper part of the installing column and charging box, as shown in FIG. 37.



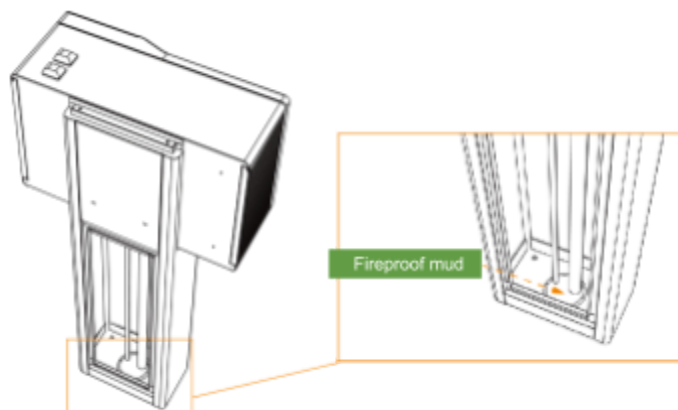
**FIG 37: FIXING DIAGRAM OF COLUMN AND CHARGING BOX UPPER PART**

**Step 6:** The bottom of the charging box is fixed with the column, and the M6\*16 screws are punched into the two mounting holes respectively inside of the column, as shown in FIG. 38.



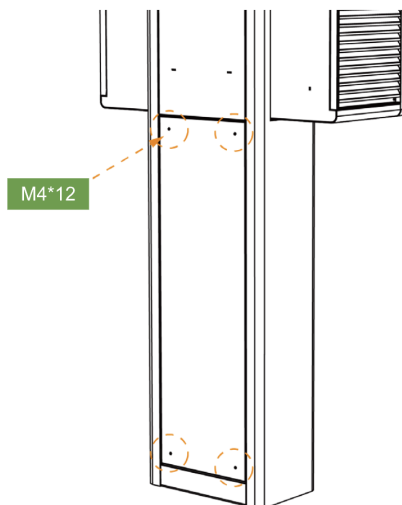
**FIG 38: SCHEMATIC DIAGRAM OF MOUNTING HOLE AT THE BOTTOM OF CHARGING BOX**

**Step 7:** Use materials such as fireproof mud or polyurethane foam in the entry hole to prevent moisture or insects entering the equipment, as shown in FIG. 39.



**FIG 39: FIREPROOF MUD SEALING EFFECT DIAGRAM**

**Step 8:** Reinstall the cover plate on the column, as shown in FIG. 40.

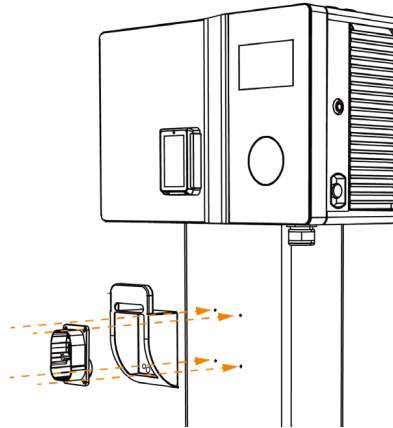


**FIG 40: INSTALLATION DIAGRAM OF COVER PLATE OF COLUMN**

**Step 9:** Module installation steps refer to wall mounted charger.

**Step 10:** Wiring refers to the connection of the wall-mounted charging box.

**Step 11:** Fix the charging connector placement on the column, and fix the charging connector placement assembly1 on the column with M6\*16 screws, as shown in FIG. 41.



**FIG 41: DIAGRAM OF COLUMN MOUNTED CHARGING CONNECTOR PLACEMENT INSTALLATION**

**Step 12:** Install the gun mounted assembly2, refer to the wall mounted installation.

**Step 13:** Column mounted charger is installed.

**⚠ Warning:** Installation must be carried out according to the standard operating procedures. Improper execution may result in personal injury or death.

## 4. Post-Installation Inspection

Live parts shall be operated by local qualified engineer)

### 4.1 Installation Wiring Inspection

#### 4.1.1 EQUIPMENT AND EQUIPMENT FIXATION INSPECTION

1. The charger is clean in appearance, free from knock damage, consistent with the position of the base and secure without looseness.
2. Equipment orientation meets installation standards.
3. No missing installation of equipment accessories.
4. Measure the levelness of equipment by spirit level, ensure it meets the requirements.

#### 4.1.2 CABLE LAYING AND CONNECTION INSPECTION

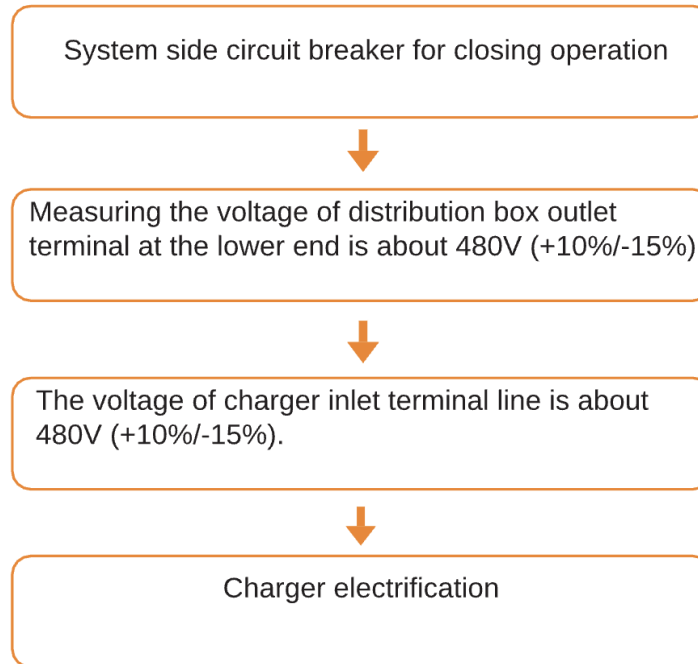
1. Check whether the cable insulation is damaged.
2. Check whether the wire terminals of power cable is in compliance with requirements and whether the wiring is reliable.
3. Check the connection terminals of communication cable are correct and not loose.
4. Check for hanging cable tags.
5. Check whether the bending radius of cable meets the requirements.
6. Check whether each box leads the ground wire into the ground grid.

### 4.2 Check Before Power On

1. Check the power supply line of the low voltage distribution cabinet connected to the charger, and check whether there is a short circuit between the three-phase hot wire, neutral wire and ground wire.
2. Power supply voltage before power on: before power on of equipment, please check whether the power supply voltage on upper end of MCCB in low-voltage distribution cabinet is normal, ensure there are no lack-phase, over voltage, under voltage, phase-sequence anomaly and other abnormalities.

### 4.3 Check On Power-On

1. After confirming that the wiring of the equipment is complete and correct, power the equipment. The power operation is as follows:



2. Complete the overall installation.

## 5. Installation Environment

The environmental conditions listed in the table below should be considered when selecting the installation site of the charger.

### Installation Environment

| Environmental Conditions         | Recommended Range                                            |
|----------------------------------|--------------------------------------------------------------|
| Ambient Temperature              | -35°C ~ + 50°C                                               |
| Altitude                         | ≤ 2500m                                                      |
| Humidity                         | 5% ~ 95%RH, no condensation inside the product               |
| Degree of Dust                   | ≤ 1mg/m <sup>3</sup>                                         |
| Corrosive substance              | No pollutants, such as salt, acid, smoke, etc.               |
| Vibration                        | ≤ 1.5mm/s <sup>2</sup>                                       |
| Insects, pests, vermin, termites | No                                                           |
| Mold                             | No                                                           |
| Damp                             | Rainproof                                                    |
| Fireproof                        | No inflammable material at the top and bottom of the cabinet |

## 6. Completion Information

The environmental conditions listed.

| Number | Name                       | Number of Pages | Document Necessity |
|--------|----------------------------|-----------------|--------------------|
| 1      | Unpacking record sheet     | 1               | Yes                |
| 2      | Pre-installation checklist | 1               | Yes                |

APPENDIX 1

Unpacking Record Sheet

|                     |                       |                   |                  |                     |        |
|---------------------|-----------------------|-------------------|------------------|---------------------|--------|
| Name of Dealership: |                       |                   | Unpacking Date:  |                     |        |
| No.                 | Name of the Equipment | Quantity          | Qualified Number | Equipment Situation | Remark |
| 1                   |                       |                   |                  |                     |        |
| 2                   |                       |                   |                  |                     |        |
| 3                   |                       |                   |                  |                     |        |
| 4                   |                       |                   |                  |                     |        |
| 5                   |                       |                   |                  |                     |        |
| 6                   |                       |                   |                  |                     |        |
| 7                   |                       |                   |                  |                     |        |
| 8                   |                       |                   |                  |                     |        |
| 9                   |                       |                   |                  |                     |        |
| 10                  |                       |                   |                  |                     |        |
| 11                  |                       |                   |                  |                     |        |
|                     | Unpacking Conclusion  |                   |                  |                     |        |
|                     | Signature Block       | Installation Unit | Owner Unit       |                     |        |

## APPENDIX 2

### Pre-Installation Checklist

| Project Name:                         |     |                                                                                                |                   |                    |
|---------------------------------------|-----|------------------------------------------------------------------------------------------------|-------------------|--------------------|
| Civil construction unit :             |     | Equipment installation unit :                                                                  |                   |                    |
| Sub-project                           | No. | Main Acceptance Items                                                                          | Acceptance Record | Treatment Measures |
| Installation Plan                     | 1   | Whether the on-site equipment installation complies with the construction plan design drawings |                   |                    |
| Distribution Box                      | 1   | Meet the equipment installation requirements in section 2.8                                    |                   |                    |
| Circuit Breaker                       | 1   | 6AWG,5C, (90°C, copper wires)                                                                  |                   |                    |
| Cable Type                            | 2   | Network cable cat6a (if Ethernet communication is required)                                    |                   |                    |
| Concrete Foundation (Column- Mounted) | 1   | Dimensions meet requirements refer to section 2.6                                              |                   |                    |
|                                       | 2   | Foundation bolts meet the requirements in section 2.6                                          |                   |                    |
| Maintenance Distance                  | 1   | The maintenance distance meets the equipment spacing requirements in section 2.7               |                   |                    |
| Conclusion                            |     |                                                                                                |                   |                    |

 **Note:** In the acceptance record, fill in "√" or "x" according to the on-site situation;

 **Note:** At the conclusion, fill in "qualified" or "need to rectify" according to the on-site situation.

Signature of person in charge of inspection: \_\_\_\_\_