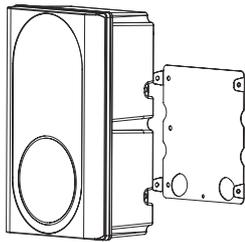


# INSTALLATION INSTRUCTIONS

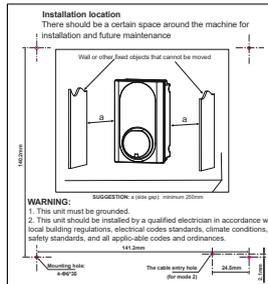
## UNPACKING

1. Take the charger out of the box.
2. Follow the **ATTACHMENT** on page 8 to check all items and to see if there are any missing.
3. Check the unit is correct and whether it matches with order model.
4. Check whether the unit has defects or is damaged due to defectiveness or transportation.
5. Make sure all packaging is disposed of responsibly and in accordance with the current regulations in your region.

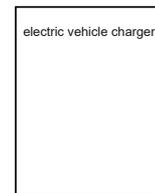
## ATTACHMENT



1 x EV Charger & 1 x Fixing bracket \*



1 x Installation template



1 x Manual



1 x Elbow wrench



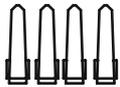
Wiring cap



1 x Sealing rubber



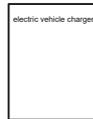
1 x Cable Gland



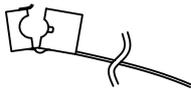
4 x Wall Plugs  
M6x30



4 x Screw  
ST4.2x32



1 x Warranty card



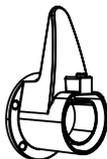
CT\*\*



CT wire terminal\*\*



1 x Sealing rubber



1 x Charger holder\*\*\*

NOTE: If you are missing any of these parts, contact the customer services 0161 249 6780.

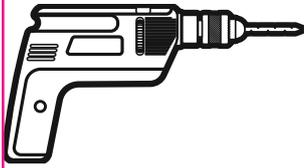
\* The bracket is already installed on the charger and needs to be removed for installation.

\*\* This is an optional extra.

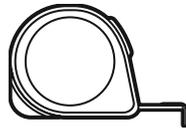
\*\*\* Just for the charger model with the cable.

# INSTALLATION INSTRUCTIONS

## TOOLS/MATERIALS REQUIRED (NOT INCLUDED)



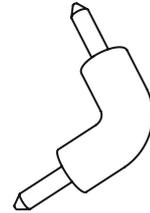
Electric drill



Measuring tape



Safety gloves



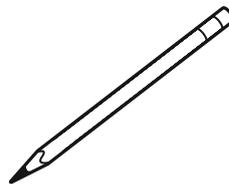
Electric elbow tool



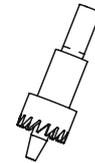
Phillips screwdriver



Slotted screwdriver



Pencil



Hole Saws

Mode 1:  $\Phi$ 24mm Bottom hole  
(for VEC01 and VEC03)  
 $\Phi$ 28mm Bottom hole  
(for VEC02 and VEC04)  
Mode 2:  $\Phi$ 18mm (Back hole for  
Sealing rubber)

## BEFORE INSTALLATION

1. Installer or end user must read and understand all the content covered in this manual before installing or using this unit.
2. Choose a suitable installation location to install.
3. Make sure that the installation location complies with current laws and regulations.
4. Confirm that there is a suitable input voltage power supply at the installation site (consistent with the nominal power supply of the product).
5. Make sure the supplied fixings are suitable for the mounting location. If not suitable, alternatives must be obtained locally before proceeding with the installation.

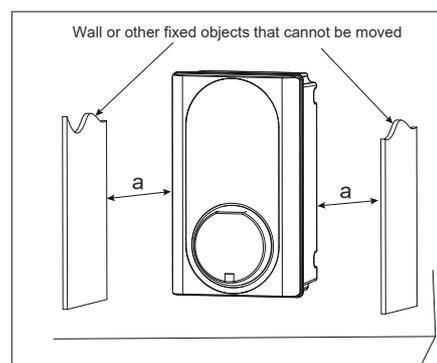
## INSTALLATION LOCATION

There should be a certain space around the unit for installation and future maintenance.

### **SUGGESTION:**

a (side gap): minimum 250mm.

\*A charging cable holder position needs to be reserved.  
(Just for VEC03/VEC04)



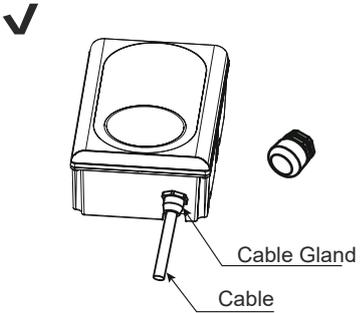
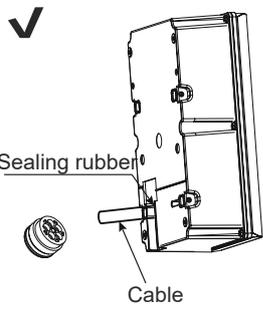
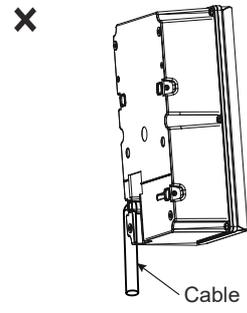
# INSTALLATION INSTRUCTIONS

## WARNING

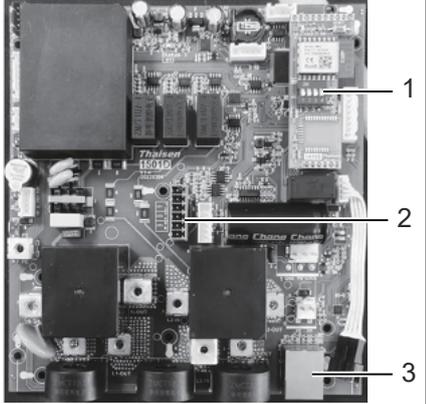
- ▲ Make sure that the power source is turned off before installing the unit.
- ▲ Manufacturers and distributors are not responsible for any loss or related responsibilities caused by any incorrect installation.
- ▲ The installer shall not be responsible for the loss and damage of the product, system or property caused by improper installation.

### Important:

Before installing the unit, it is necessary to confirm the way of the product's power cable entry. Mode 3 power cable entry is strictly not allowed.

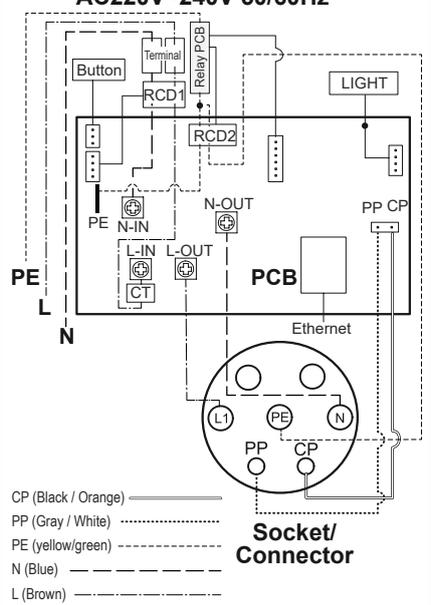
Mode 1	Mode 2	Mode 3
Bottom entry (Best choice)	Back entry	It is strictly forbidden to pass the bottom line through the back.
		

## CONNECT ELECTRICAL WIRING



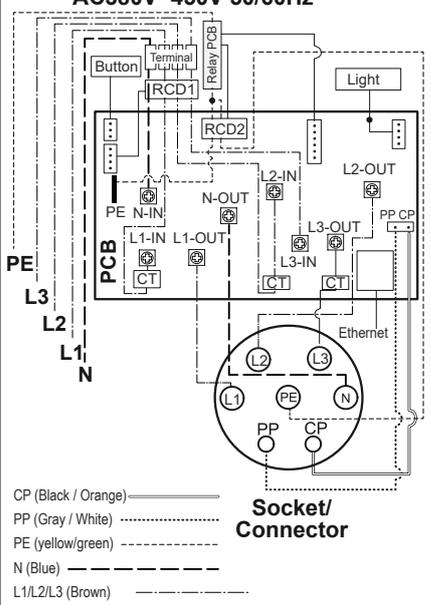
1. DIP switch
2. CT socket
3. Ethernet socket

**AC220V~240V 50/60Hz**



**Socket/  
Connector**

**AC380V~450V 50/60Hz**



**Socket/  
Connector**

**Note:** The charger must be electrically protected by installing externally a Miniature Circuit Breaker (MCB) and any other protection devices according to the wiring regulations at the time.

# INSTALLATION INSTRUCTIONS

## INSTALLATION

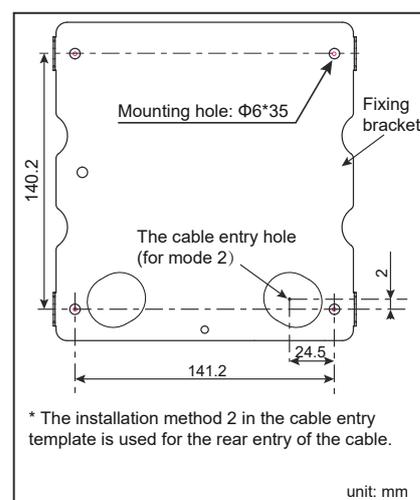
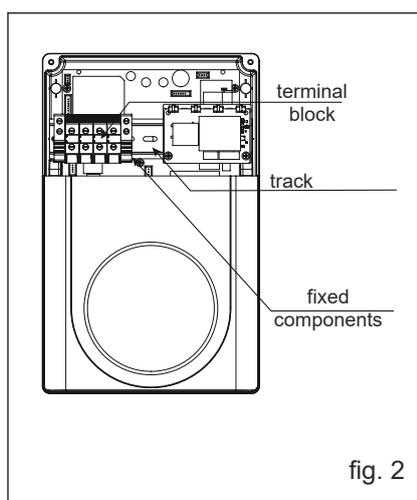
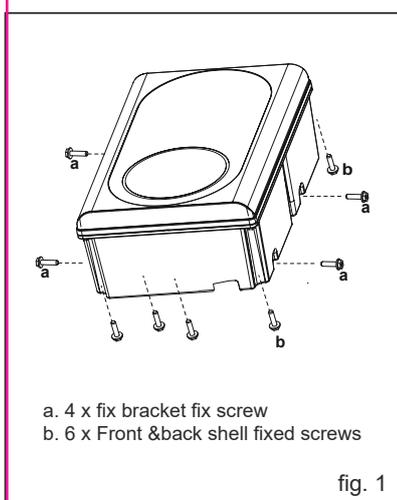
1. Take the unit and remove the 4 screws on its fixing bracket (The unit is integrated with the fixing bracket and needs to be disassembled first). Keep the screws and fixing bracket for subsequent use;

2. Remove the 6 fixing screws on the front shell and the rear shell, save the screws for subsequent use;

**Note:** Reference fig.1 for steps 1 and 2.

3. Open the front shell carefully. The front shell is connected to the unit body through a cable. Be careful not to damage or break the cable.

**Caution:** After opening the front shell, visually inspect the inside. If the wiring terminal block or the fixed component falls off the track, it can be installed back to the track by itself (reference fig. 2)



4. **Inlet wire mode 1:** Use the installation template to mark the fixed bracket installation hole position.

**Inlet wire mode 2:** Use the installation template to mark the position of the fixing bracket installation hole and the cable entry hole.

**Note 1:** Inlet wire mode 2 which need to pay attention to the correct direction of the installation template.

**Note 2:** Make sure that the installation template itself is level when the position is marked.

**Note 3:** Refer to Installation template.

5. Drill holes according to the information prompted by the installation template, and ensure that the hole positions are accurate.

(1). Fixed bracket mounting hole has a diameter of 6mm and a depth of about 35mm.

(2). Inlet wire mode 2, diameter of the cable entry hole needs to be defined according to the actual cable selection, However, it is recommended that the maximum opening diameter should not be bigger than 24mm.

**Caution:** The edge of the wall opening needs to be repaired, and it must not be a sharp edge to prevent the incoming wire from being damaged.

6. Fixing bracket installation hole inner - insert wall plugs, and use attachment screws(ST4.2\*32) fixing fixed bracket to the mounting surface and ensure the screws are fastened well.

**Note:** If the screws are not fastened well, the fixing bracket may become loose and may interfere with the installation of the housing.

# INSTALLATION INSTRUCTIONS

7. According to the size and position below, drill the power cable hole on the shell.

**NOTE 1:** Inlet wire mode 1, open hole size must be accurate, and the hole diameter is 24mm for VEC01 and VEC03, 28mm for VEC02 and VEC04.

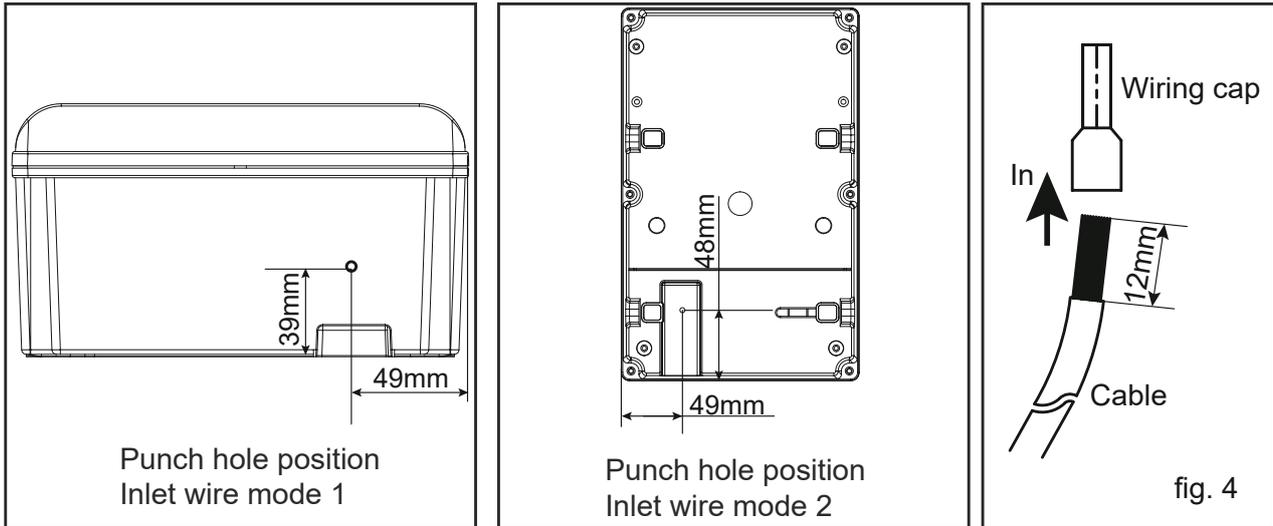
**NOTE 2:** Inlet wire mode 2, open hole size must be accurate, and the hole diameter is 18mm.

**WARNING:** Remove burrs around the hole to prevent affecting the seal level.

**WARNING:** Do not damage internal components, especially internal wiring, when drilling the hole.

8. Clean and remove all the debris that has fallen into the shell due to the punching.

9. Inlet wire.



\* **NOTE:** Product installation details with OCPP1.6J service agreement. Refer to “Network Connection guide”.

\*\* **NOTE:** Product installation details with power management. Refer to “Power management function installation guide”.

## Network Connection guide

1. Drill holes according to fig. 1\*.

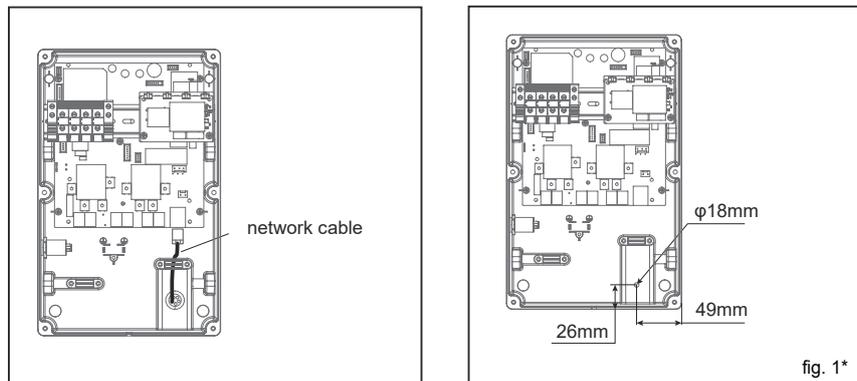
2. Use the accessory sealing rubber to fix the network cable.

3. One hole of the sealing rubber be cut open with knife, insert the network cable into the sealing rubber, then insert them into the housing, as fig.8, Reserve enough length of the network cable to ensure that it can be well connected with the Ethernet interface;

**NOTE:** During installation, if the network cable line and the plug is separate, you don't have to cut the sealing rubber.

**Warning:** Seal the opening on the back to achieve the unit's IP rating. Sealing is very important. This involves the safety of the product and must be paid attention.

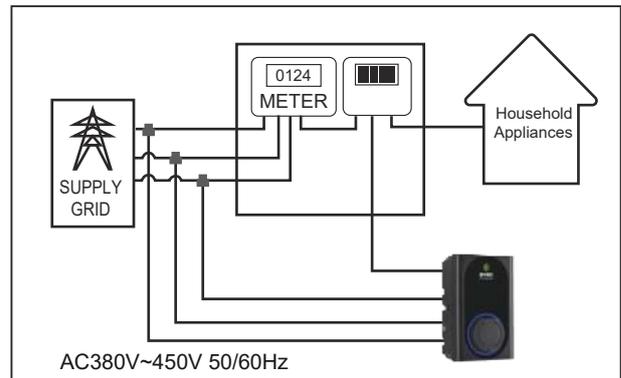
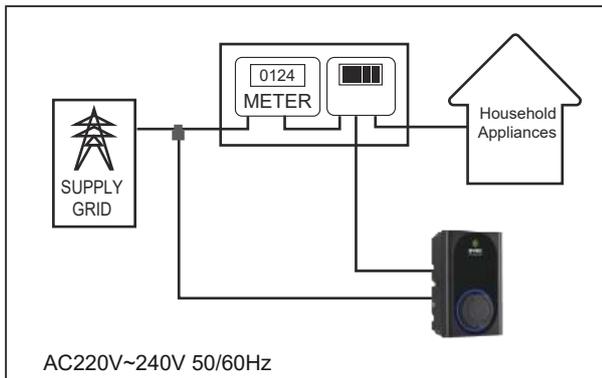
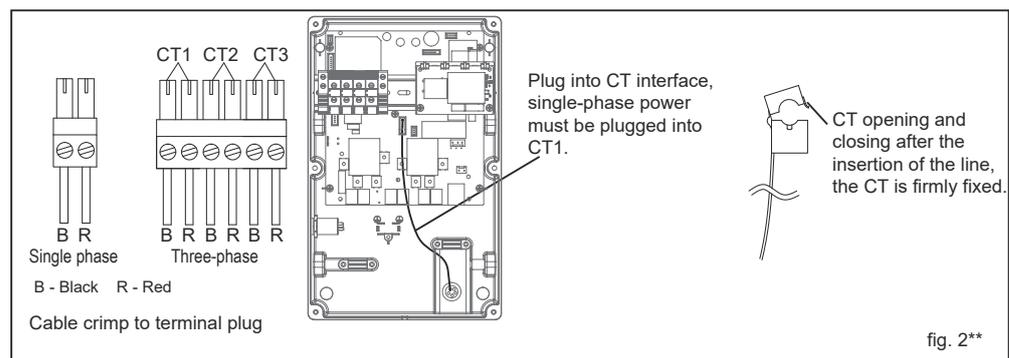
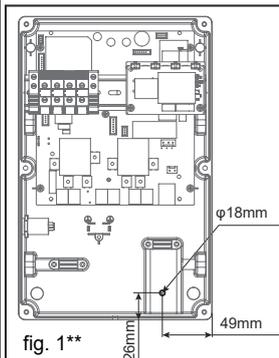
4. Network cable plug is docked to Ethernet interface.



# INSTALLATION INSTRUCTIONS

## Power management function installation guide

1. Drill holes according to fig. 1\*\*.
2. Use the accessory sealing rubber to fix the CT wire.
3. Insert the sealing part into the housing body, as fig. 8, thread the CT wire into the sealing part, one hole corresponds to one CT wire (if the product is single-phase, just need to use a sealed wire hole, and the other two do not need to be pierced broken), after the CT cable is inserted, reserve enough length to connect to the CT interface;
4. Crimp the CT wire to the CT wire terminal and then insert it into the CT interface, as following fig. 2\*\*
5. Open the CT and fixed it to the main incoming line (one CT is only allowed to pass through one line, and three CT for three-phase power are allowed to pass through three lines).



### NOTE:

If there is a need to extend the CT cable, **twisted-pair cable like CAT5 must be used**. DO NOT use mains cable, bell wire or speaker cable.

It is important to use only twisted-pair cable to maintain signal integrity. Up to four CT cables can be extended using the separate twisted pairs in a CAT5 Ethernet cable. The cable can be extended up to 40m.

• **Remember to a separated twisted pair for each CT.**

• When joining CT wires make sure that the ends of the wires are twisted tightly together and joined using crimps, screw terminals or solder.

• Avoid using lever clamp type terminals as these do not provide a reliable connection at very low currents.

# INSTALLATION INSTRUCTIONS

## MODE 1

a1. Check the cable gland parts as shown in fig. 5.

a2. Pass the gasket and the main body through the opening hole of the shell and lock it with a nut, as shown in Fig. 6.

a3. Insert the pressing head into the cable, and then thread the cable into the main body that cannot be pulled off, as shown in Fig. 7.

a4. Trim and cut the cable to the proper length, lock the pressing head to secure the cable.

a5. Refer to this article connect electrical wiring to connect the cable to the terminal block.

**NOTE:** connecting wiring reference fig. 4

**WARNING:** To ensure the rated IP protection level of the product, must use the cable gland in the accessories.

a6. Confirm and remove the debris inside the housing caused by punching and wiring.

a7. Ensure that all cables are connected correctly and securely, and are not loose or damaged.

a8. Screws lock the front and rear shells tightly.

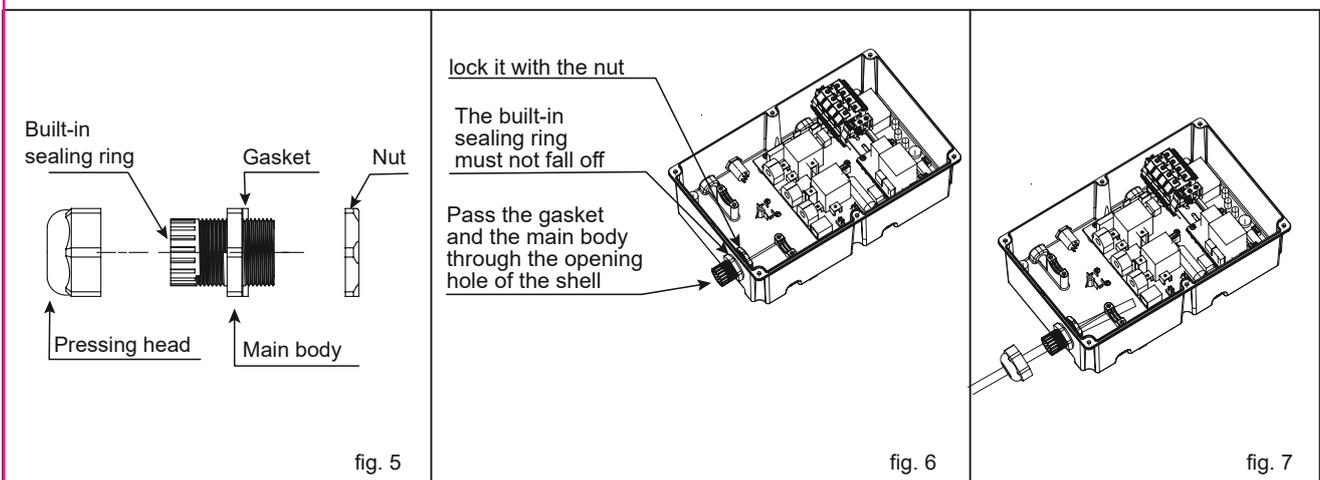
**Caution:** Need to use the screws removed from the original position.

Before installing the front shell, it must be ensured that the sealing strip in the front shell groove has not fallen off and is in the right position. Ensure that all seals performed on the unit can reach the IP rating.

a9. Screw the unit to the fixed bracket.

**Caution:** Use the screws removed from the original position.

**Note:** a8, a9 refer to fig. 1, reverse operation.



# INSTALLATION INSTRUCTIONS

## MODE 2

b1. Insert the sealing rubber into the housing, as shown in Fig 8, insert the bare wire into the sealing rubber, one hole corresponds to one bare wire, after all the wires are inserted, leave enough length of the cable to connect to the terminal block.

**NOTE1:** To ensure the rated IP protection level of the product, must use the sealing rubber in the accessories.

**NOTE2:** Poke the middle position of the sealing rubber before installing this item.

b2. Screw fastening the entire rear shell to the fixing bracket.

**Caution:** Use the screws removed from the original position.

b3. Refer to this article connect electrical wiring to connect the cables to the terminal block.

**NOTE:** connecting wiring refer to fig. 4

b4. Seal the opening on the back to achieve the unit's IP rating.

**Warning:** sealing is very important. This involves the safety of the product and must be paid attention.

b5. Screws lock the front and rear shells tightly.

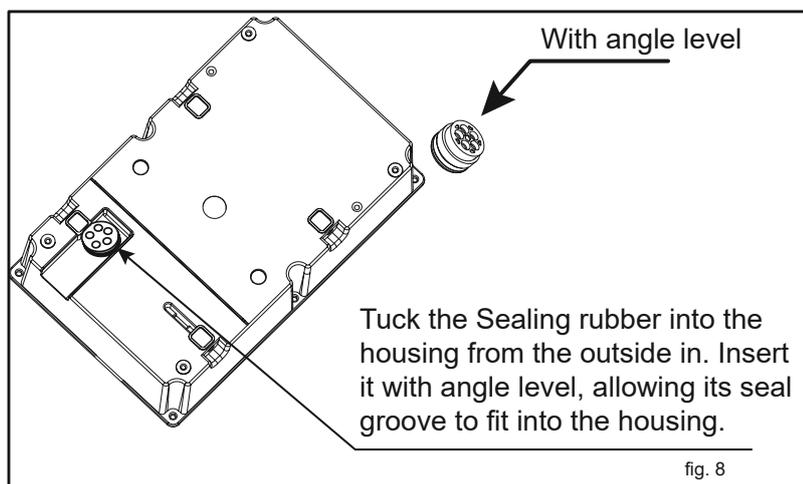
**Caution:** Use the screws removed from the original position.

Before installing the front shell, it must be ensured that the sealing strip in the front shell groove has not fallen off and is in the right position.

Make sure that all seals performed on the unit can reach the IP rating.

**Note:** if there is no suitable electric tool, the elbow wrench provided in the accessories can be used to tighten the screws of the front and rear shells.

**IMPORTANT NOTE:** It is the responsibility of the installing engineer to satisfy themselves, that all cable terminations throughout this product are secure and tight and have not become loose, strained, or disconnected during transit and/or installation.

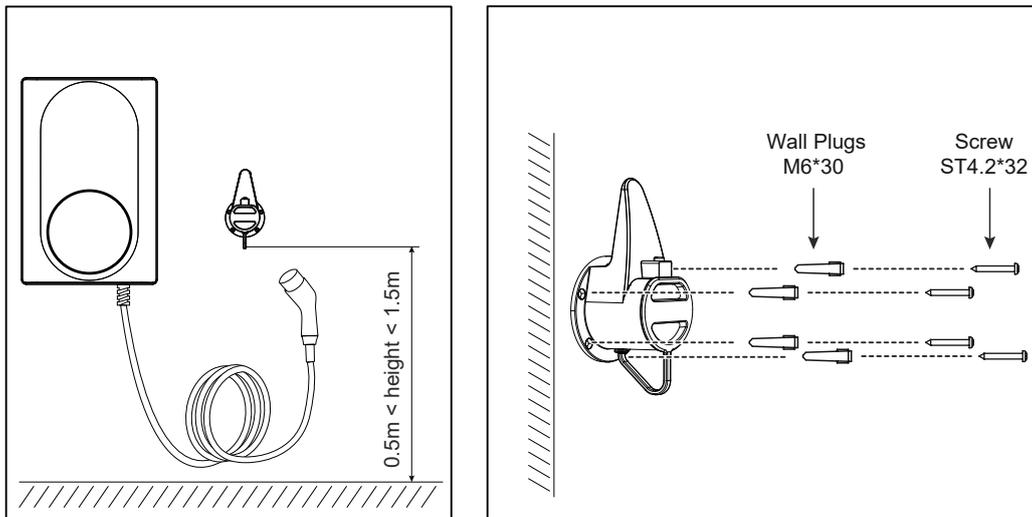


After the front and rear shells are installed, check whether there is a loose gap between the front and rear shells. Make sure that there is no loose gap.

# INSTALLATION INSTRUCTIONS

## INSTALLATION OF THE CABLE HOLDER

1. Take out the charger holder.
2. Find a suitable location near the EV charger box, which must be more than 0.5m above the bottom surface and not higher than 1.5m.
3. Align the charger holder in position and mark the four mounting holes.
4. Drill the 4 holes as the marks at dia 6mm, 35mm deep.
5. Insert the wall expansion plug.
6. Screw the charger holder to the wall.
7. Installation is complete.



## THE INSTRUCTION OF THE CABLE HOLDER

1. There is a clicking sound when the tip is inserted.
2. When pulling out the charger, you must first press the lock button and pull out the charger at the same time.

# INSTALLATION INSTRUCTIONS

## SET THE DIP SWITCH

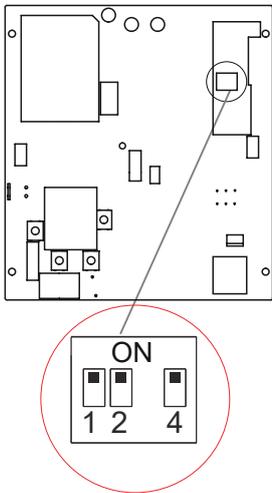
You need to set the corresponding position of the current DIP switch according to the min. wire size shown in the chart and the rated current of the Circuit breaker (factory setting 32A). refer to the steps below.

**Caution 1:** The following operations must be powered off.

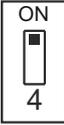
**Caution 2:** Incorrect setting DIP may cause hazards such as overheating or fire of the incoming wire.

1. Locate the position of the two-position DIP switch on the power supply board, like picture.
2. Setting the switch to the desired position:

**WARNING:** Electrical Power Switches must only be set by a qualified electrical installer. Incorrect setting may lead to equipment damage and / or personal injury. The current rating must not exceed the supply rating.



DIP switch position				
Current(A)	32	16	13	10
Min. wire size (copper)	6mm <sup>2</sup> or 10AWG	2.5mm <sup>2</sup> or 13AWG	2mm <sup>2</sup> or 14AWG	1.5mm <sup>2</sup> or 15AWG
Circuit breaker (Amps)	40	20	20	16

DIP switch position		
CONTROL	APP and OCPP	Only OCPP

**NOTE:**

1. when you set the DIP4 switch position to on, both APP and OCPP can control the charger;
2. when you set the DIP4 switch position to off, only OCPP can control the charger, and the function button can adjust the randomised delay off or on by pressing 5.

## INSPECTION

1. Check that this unit must be grounded (Earthed).
2. Make sure you are satisfied that the installation is complete and is in a safe condition.
3. Switch ON the power, which it will cycle the red, blue and green lights to self-check and then enter the corresponding light indication. The unit and test in accordance with the current Electrical Wiring Regulations.

**NOTE:** Make sure this product has been installed in compliance with the current Electrical Wiring Regulations.