



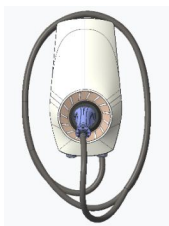
# Quick Installation

HC-EV-AC-07K/11K/22K

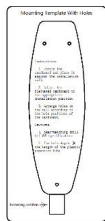
Smart Energy,  
Sustainable Solutions.

# 1 Wall-Mount Installation

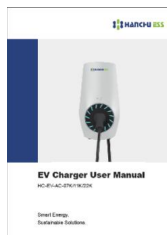
## 1.1 Unpack and inspect components



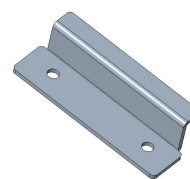
EV Charger\*1



Positioning Cardboard\*1



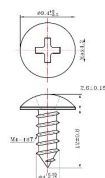
User Manual\*1



Wall-Mount Bracket\*1



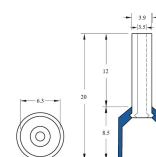
RFID Card\*2



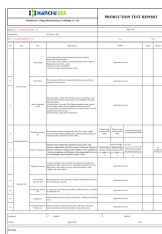
Phillips Pan Head Screw\*2



Expansion Bolt\*4



AC Incoming Line Crimping Terminal(7KW\*3;11/22kW\*5)



Production Test Report



Qualified Certificate



Quality Assurance Card

## 1.2 Installation tools

Impact drills,  $\phi 10$  impact drills, Phillips screwdrivers, marking pens, wire strippers, diagonal pliers, goggles, protective gloves.

## 1.3 Switch and cable recommendation

When installing 11/22kW charger, we recommend the use of  $5*6 \text{ mm}^2$  copper cables, and  $5*10 \text{ mm}^2$  should be used if it exceeds 80 meters, we recommend that the front stage of the 11kW Charger use an air switch that complies with IEC/EN68898-1, 4PC25 specifications, and the front stage of 22kW AC Charger use an air switch that complies with IEC/EN 68898-1, 4P C40 specifications.

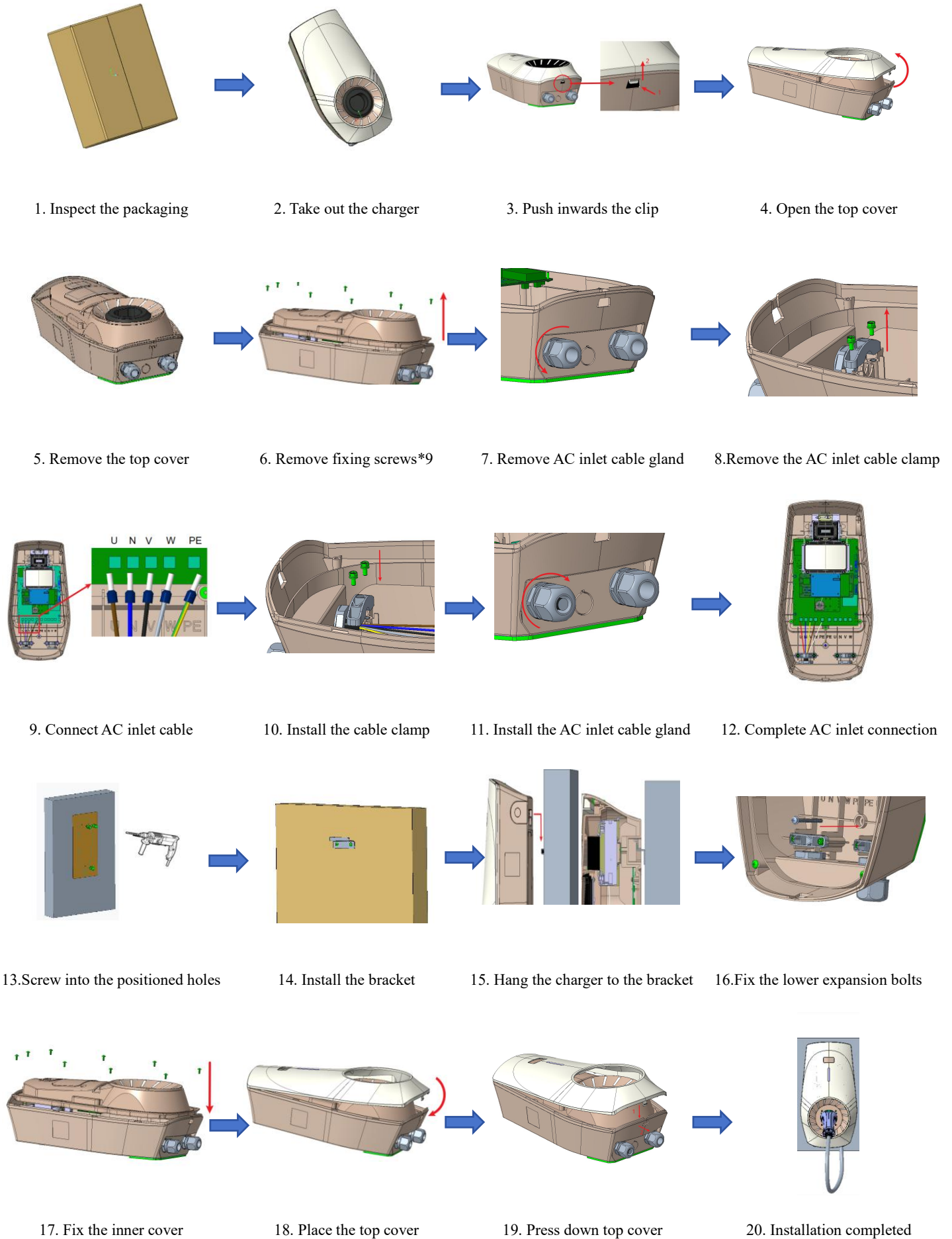
When installing a 7kW charger, we recommend the use of  $3*6 \text{ mm}^2$  copper cables, and a  $3*10 \text{ mm}^2$  cable should be used if it exceeds 80 meters, We recommend that the front stage of the 7kW Charger use an air switch that complies with IEC/EN 68898-1, 2P C25 specifications.

## 1.4 Installation steps

1. Inspect the packaging for any damage. Proceed to the next steps if it is confirmed to be intact.
2. Place the charger on a flat area and cushion the back with foam.
3. Push inwards against the clip in the direction shown by the arrow and then push upwards to open the top cover clip.

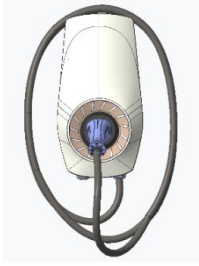
4. Lift the top cover from the open slit in the direction of the arrow with force.
5. Remove the top cover and place it in a safe location to avoid damage.
6. Use a Phillips screwdriver to remove 9 Phillips pan head screws on the inner cover of the charger and open the inner cover.
7. Loosen the cable gland of the AC inlet cable.
8. Use a Phillips screwdriver to loosen the AC inlet cable clamp.
9. Thread the AC wire from the inlet into the charger, and use a screwdriver to fix the corresponding phase and earth wires.
10. Use a Phillips screwdriver to lock the inlet clamp tightly.
11. Tighten the cable gland to fix the cable.
12. Check if the AC power cable is securely connected to complete the wiring.
13. Reasonably plan the installation area, use positioning cardboard to confirm position on the selected concrete wall and mark with a marker pen. Use impact drills and  $\phi 10$  drills to make holes at the marked position with a depth of  $\geq 80$ mm.
14. Install the expansion bolts inside the holes, and the expansion bolt jaws shall not fall into the holes. Use the expansion bolts to fix the bracket in the two expansion bolt holes at the top, tighten it with a Phillips screwdriver.
15. Pick up the charger and hang it on the bracket, and make the back of the charger snap fasten with the bracket.
16. Use a Phillips screwdriver to thread the lower expansion bolt from the inside of the charger, and fix and lock it with the reserved expansion bolt hole.
17. Install the inner cover and use a Phillips screwdriver to tighten the 9 Phillips pan head screws.
18. Place the top cover in the corresponding position on the charger.
19. Press down firmly on the latches of the top cover to secure it.
20. Shake the charger from side to side to check if the installation is secure to complete the installation.

## 1.5 Installation Diagram

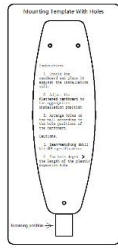


## 2. Pillar-Mount Installation (Optional)

### 2.1 Unpack and inspect components



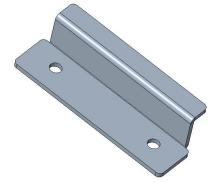
EV Charger\*1



Positioning Cardboard\*1



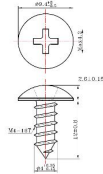
User Manual\*1



Wall-Mount Bracket\*1



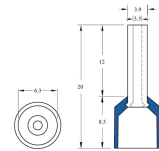
RFID Card\*2



Phillips Pan Head Screw\*2



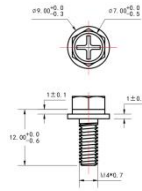
Expansion Bolt\*4



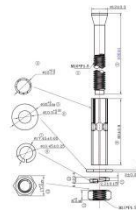
AC Incoming Line Crimping Terminal(7KW\*3;11/22Kw\*5)



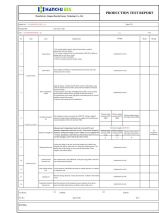
Back to back Pillar \*1



Fixed screw M4X12\*6  
(pre-tightened on the pillar)



M10X100 expansion bolt\*4



Production test report



Qualified Certificate



Quality Assurance Card

### 2.2 Installation tools

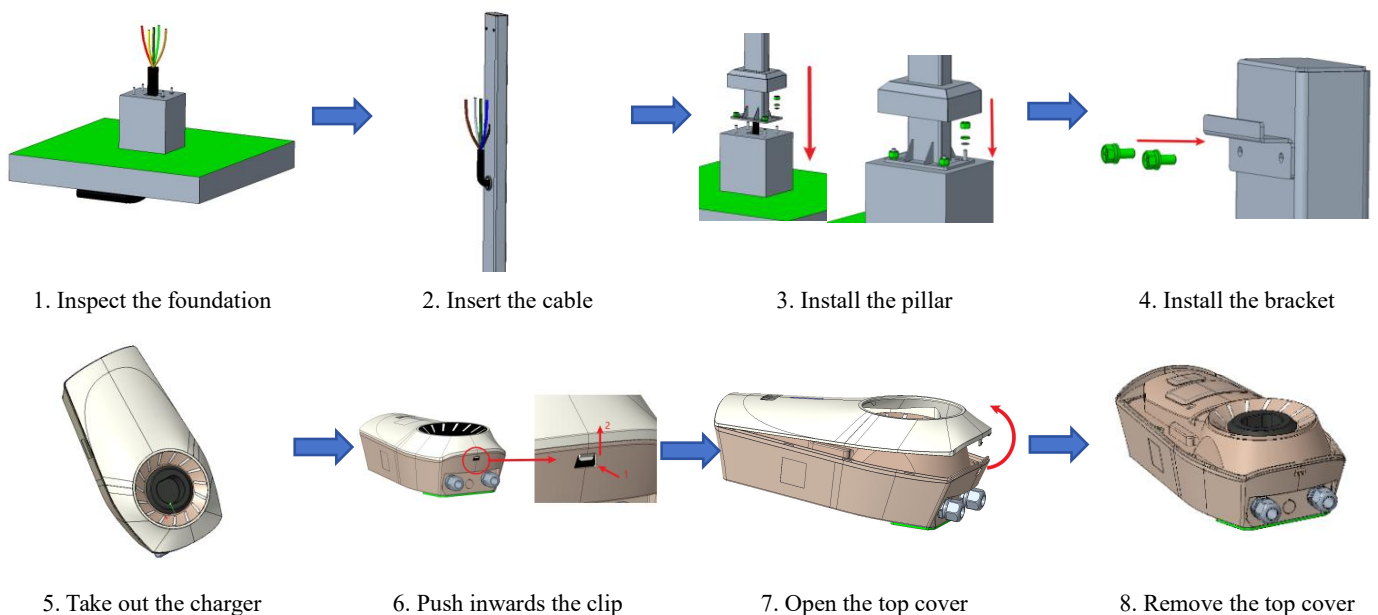
Phillips screwdriver, wire stripper, diagonal pliers, protective gloves, M8 socket spanner.

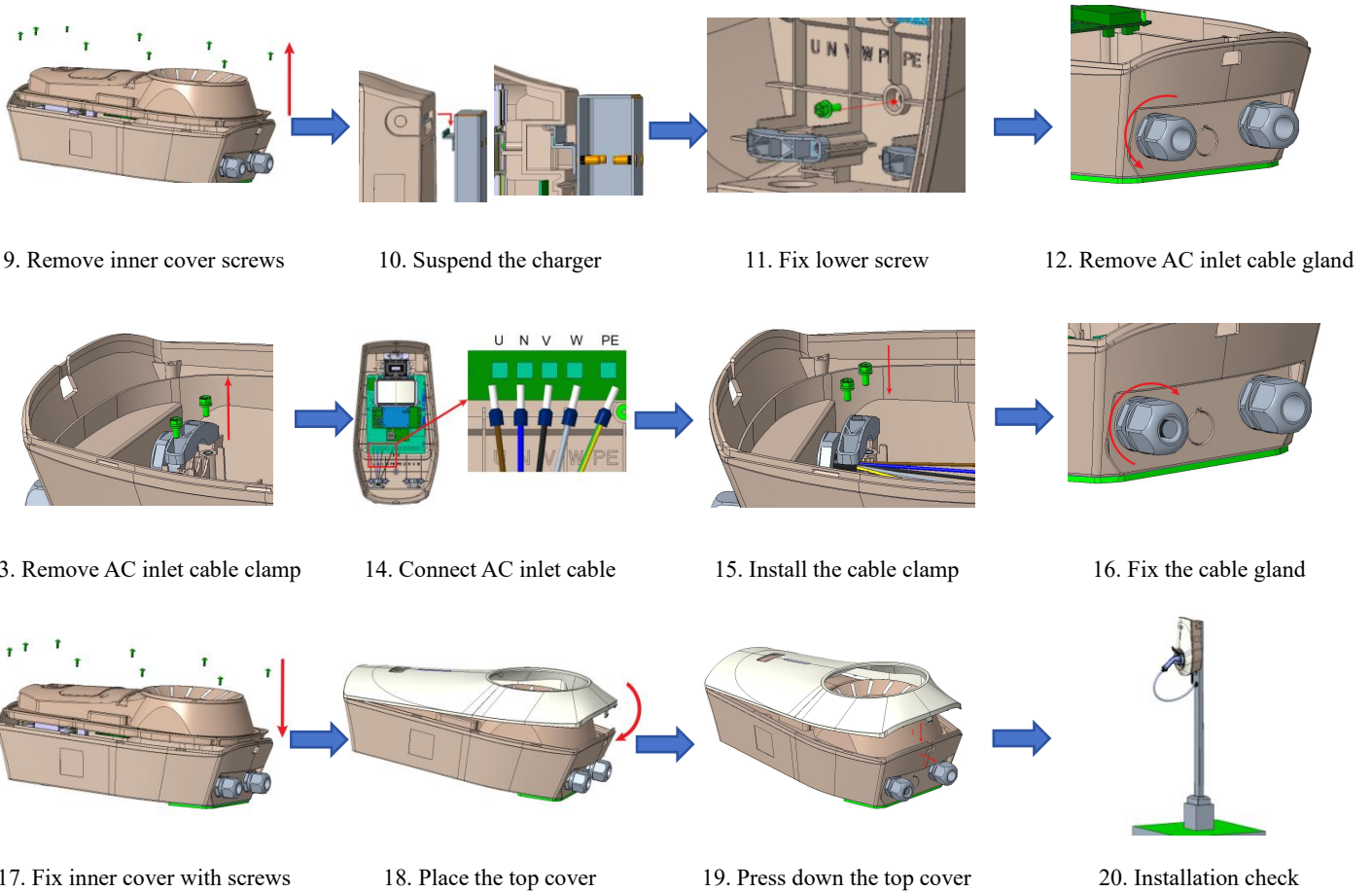
### 2.3 Installation steps

1. Inspect if the foundation for the pillar-mount installation is made according to the construction drawings.
2. Open the pillar package, take out the pillar, move the bottom box cover of the pillar upwards, and leak out the installation holes at the bottom of the pillar. Pass the pre-buried cable from the bottom upwards inside the pillar, and wear it out from the middle wire protection ring position.
3. Put the pillar on the pre-embedded bolt of foundation from top to bottom, pre-tighten the nut, and tighten it with a spanner. Move the pillar box cover downwards and place it on the ground to cover the internal fixing bolts.
4. Use a Phillips screwdriver to fix the bracket into the two nut holes at the top of the pillar and tighten with a Phillips screwdriver.
5. Place the charger on a flat area and cushion the back with foam.

6. Push inwards against the clip in the direction shown by the arrow and then push upwards to open the top cover clip.
7. Lift the top cover from the open slit in the direction of the arrow with force to complete the removal of the top cover of the charger.
8. Remove the top cover and place it in a safe location to avoid damage.
9. Use a Phillips screwdriver to remove the 9 Phillips pan head screws on the inner cover of the charger and open the inner cover.
10. Pick up the charger and hang it on the bracket, so that the clips on the back of the charger and the bracket are tightly clamped.
11. Use a Phillips screwdriver to tighten the middle and lower fixing screws of the charger, so that the charger is firmly fixed with the pillar.
12. Loosen the cable gland of the AC inlet cable.
13. Use a Phillips screwdriver to loosen the AC inlet cable clamp.
14. Thread the AC wire from the inlet into the charger, and use a screwdriver to fix the corresponding phase wire and grounding wire.
15. Use a Phillips screwdriver to lock the inlet clamp tightly.
16. Tighten the cable gland to fix the AC inlet cable.
17. Install the inner cover and use a Phillips screwdriver to tighten the 9 Phillips pan head screws.
18. Place the top cover in the corresponding position on the charger.
19. Press down firmly on the latches of the top cover to secure it.
20. Shake the charger from side to side to check if the installation is secure to complete the installation.

## 2.4 Installation Diagram





### 3 DLB Meter and Transformer Installation Guide

#### 3.1 Pre-installation preparation

1. Ensure that all required materials and installation tools are complete, including current transformers, three-phase meters, cables, terminal blocks, screwdrivers, and insulated gloves.
2. Verify that the selected meter and current transformer models meet the design specifications, ensuring that the voltage level, rated current, and other parameters comply with the usage conditions.

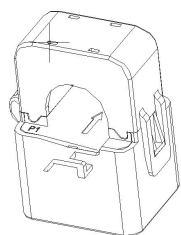
#### 3.2 Select installation location

1. The current transformer and electric meter should be installed near the current or voltage measurement point to ensure the accuracy of the measurement results. Additionally, select a location with good ventilation, dryness, and minimal exposure to mechanical impacts and electromagnetic interference.
2. Current transformers generate heat during operation. Poor ventilation can cause the equipment to overheat, affecting its lifespan. Furthermore, a humid environment can reduce insulation performance and potentially cause leakage accidents.
3. Stay Away from Interference Sources, Avoid high-power motors, transformers, and other sources of electromagnetic interference to ensure measurement accuracy.

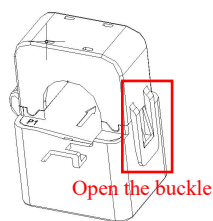


### 3.3 Installation steps

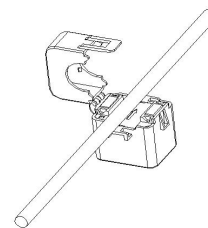
#### 1. Installation CT



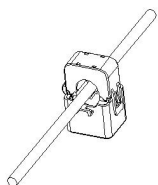
1) Open the package and disassemble the current transformer



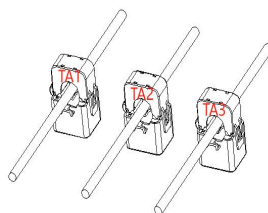
2) Open the buckle along the position



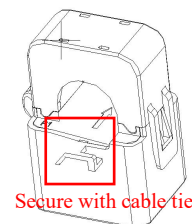
3) The cable is inserted along the direction of the arrow



4) Buckle up



5) Insert the three-phase cable into the current transformer in sequence



6) Secure with cable ties along the front and back

2. Complete the wiring of the meter and cable as shown in Figure A. The dimensions of the energy meter wiring holes are shown in Figure B below.

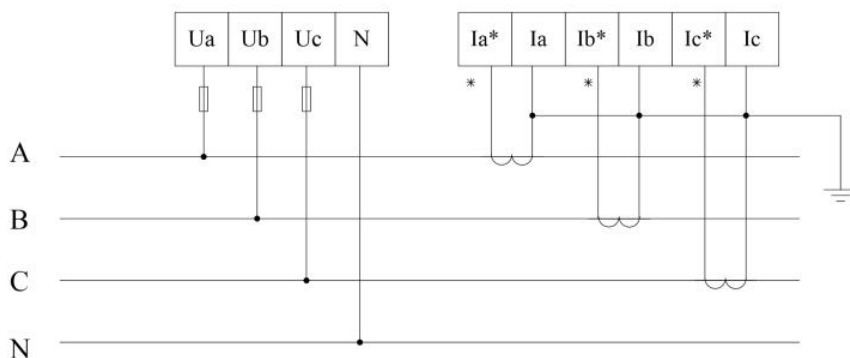


Figure A- Schematic diagram of voltage and current wiring (three-phase and four-wire connections via transformer)

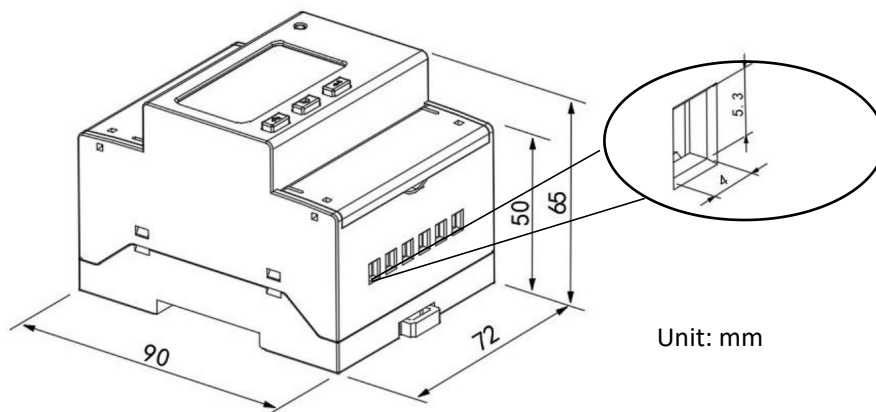
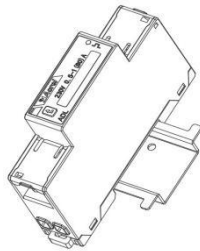


Figure B- Three-phase meter dimensional drawing

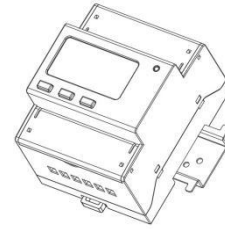


3. Connect the 485 port of the DLB meter to the J11-485 port of the EV Charger (J11 terminal is at the top right corner of the EV Charger board, refer to the wiring diagram below).

4. Snap the meter into the rail as shown. The rail-mounted meter is designed to slide into place, ensuring that the meter is firmly fixed to the rail.

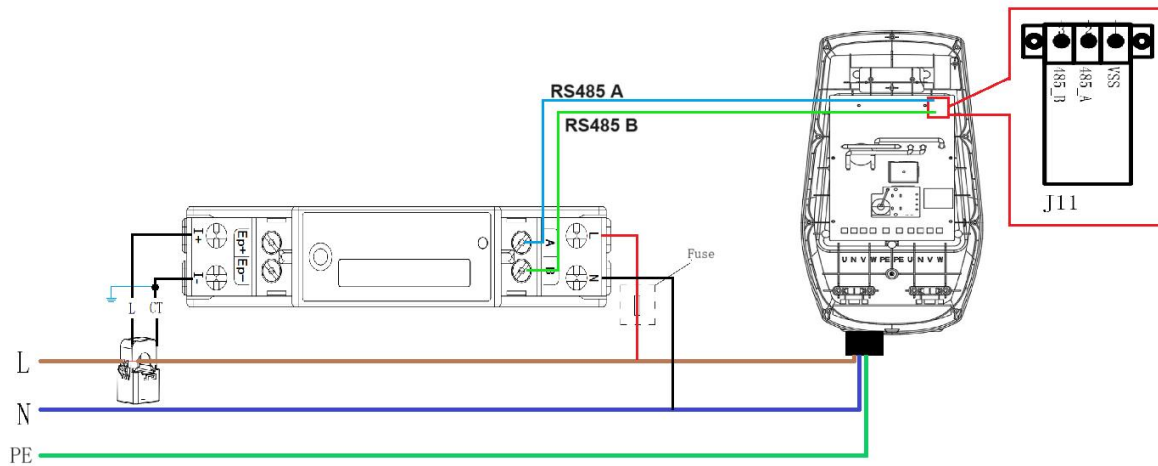


Single-Phase Meter

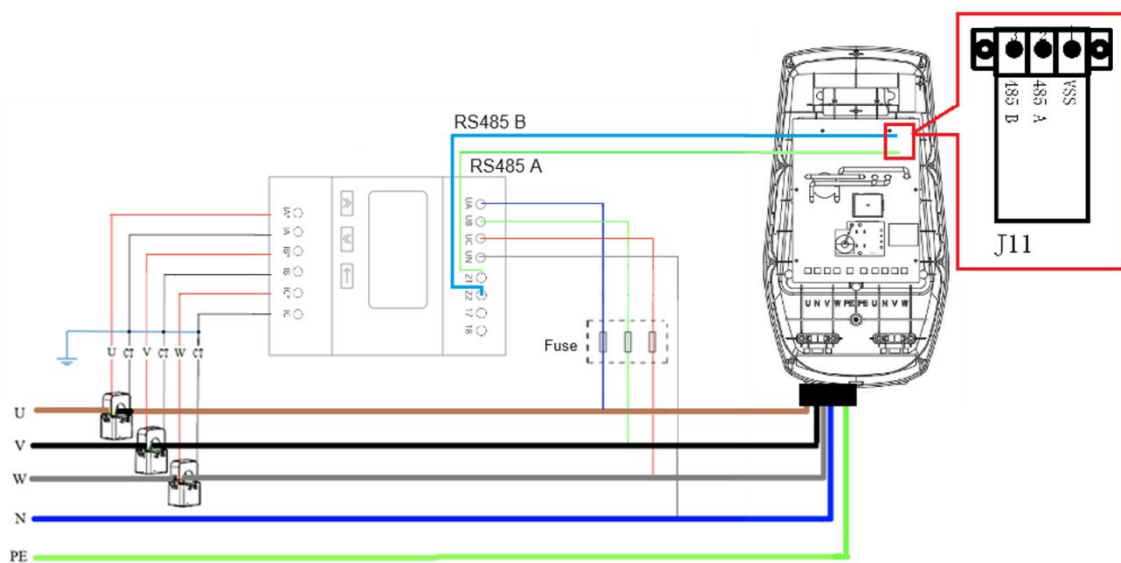


Three-phase Meter

The wiring diagram of the optional electric meter and transformer is as follows:



Single-phase Meter Wiring Diagram



Three-phase Meter Wiring Diagram

### 3.4 Precautions

1. It should be installed and powered on by a professional.
2. Throughout the installation process, be sure to comply with local electrical codes and standards.
3. Use the correct wire size and select the appropriate wire cross-section according to the current size.
4. Keep all joints clean, tight, and free from oxidation and corrosion.
5. The transformer and power system must be effectively grounded, and the secondary side of the current transformer must not be open, otherwise it will easily lead to high voltage and pose a safety hazard.
6. Double-check that all wiring is correct and that there are no exposed wires or loose connections.
7. Before reconnecting the power supply, check the safety of all the wiring. Then, gradually restore the power supply and use a test pen to check for exposed current.
8. Make sure the meter is functioning properly, displays readings, and records the data.