Installation Manual

22kW Single Socket

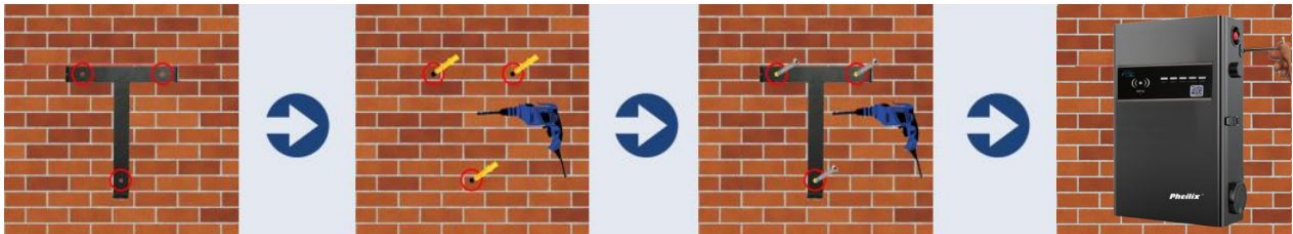# Page Legend

Installation

1. **Installation**

    ### 1.1 Wall Mounting:

• Please ensure the unit bracket is fixed to an exterior brick wall or suitable wooden frame

• Choose a suitable location for the unit by checking the signal on a mobile phone to ensure a Wi-Fi connection can be established. Should the signal strength not be sufficient, the system may require a Wi-Fi booster or hard-wired RJ45 （*Recommend using Ethernet connection for commercial devices*）

• Put the bracket on the wall, mark the wall where the holes are indicated

• Drill holes into the wall on the marked position, place the wall plugs provided into the drilled holes

• Place the bracket back to the wall and insert the CS screws into the wall plug

• Fix the EV charge point onto the bracket and ensure the holes on the enclosure body match the holes on the bracket (The enclosure and bracket have 3 holes, 2 on each side and 1 on the bottom)

    ### 1.2 Ground Mount Pole:
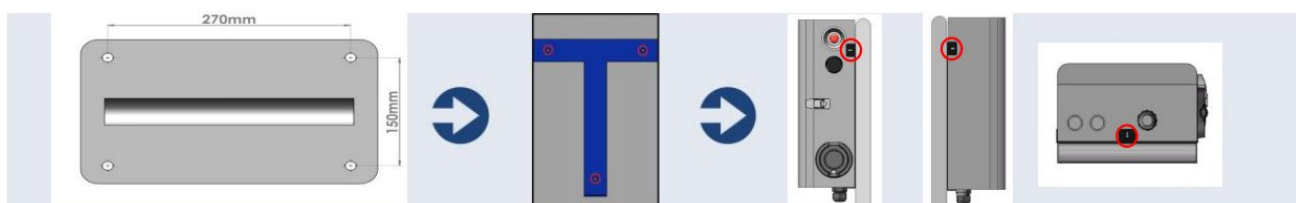
• Drill 4 holes in the ground using a 14mm diameter percussion drill (Position according to the image below). The depth of the hole should be 130mm.

• After the input cable pass through the pole, install expansion bolts (M10*150) to fix the pole

• Using M5*14 screws, fix the bracket on the pole

• Using M5*10 security screws, fix the box on the bracket (On the sides and the bottom of the unit)

2. **Connecting the Power Cables (Live, Neutral & Earth)**

Input Power Cables

The unit 2x32A dual Sockets/Guns connect to power with 5*16mm² cable.

L1 supply = Brown

L2 supply = Black

L3 supply = Grey

Neutral cable = Blue

PE cable = Green/Yellow

• The unit requires an 80amp three phase MCB for main circuit switching and protection from sub-distribution board.

• Ensure the power source sub-distribution board is OFF.

• Open the enclosure box, connect the power cables via the cable gland to the indicated input position below

• Connect the cables to marked 'L1', 'L2', 'L3', 'N' and 'PE' terminals (See image below)

• Tighten the Live, Neutral and PE cables firmly into the corresponding terminal Connectors

Torque Value for L1/L2/L3/N/PE Cables: 3NM
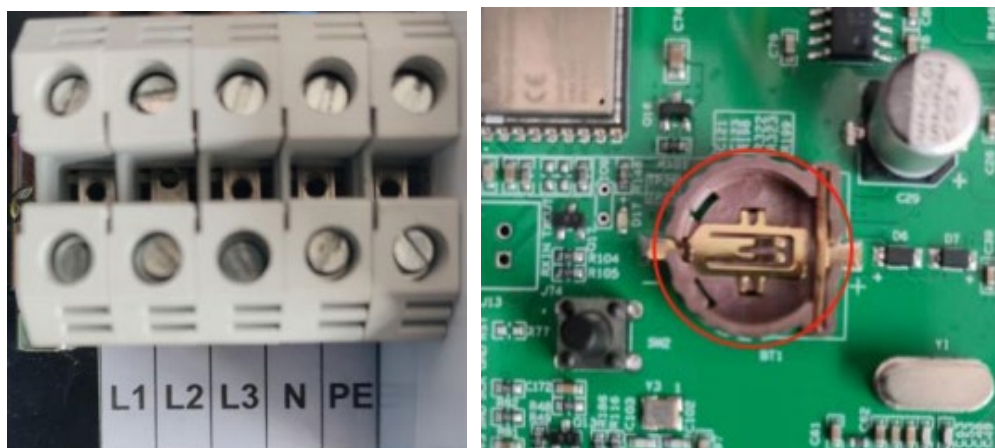
3. **Tighten the cable gland with the lock nut to ensure the input cables are fixed well.**

4. **Install a 3V CR1220 battery.**

5. **Lock the enclosure.**

(If using Ethernet connection, users can lock the enclosure. If using Wi-Fi connection, users need to configure Wi-Fi with the app after powering on, and then lock the enclosure)

6. **Connect the input cable to the dedicated supply on the consumer unit.**

7. **Check the emergency stop button is at a normal open status，then turn on the power supply.**

Operation Instructions

1. **Introduction**

    1.1 Outlook and Main Parts

1. Swipe Card Area

Swipe RFID card at the Swipe Card Area

2. Indicator Lights

The indicator light's status corresponds to the charging station status.

3. Emergency Stop Button

Pressing the emergency stop button will stop the charging within 15ms. Rotate the emergency.

stop button clockwise to exit the emergency stop.

4. WIFI Antenna

There should be no obstructions near the WIFI antenna as it may affect the signal.

5. QR Code

QR code can be scanned through the App to bind the charging station and authenticate the charging process.

6. Door Lock

Prevent the charging station door from opening.

7. Socket or Gun Holster

Gun Holster is where the gun connects with the charging station.

1.2 LED Legend

- Network light indicates the network status, with a solid green light indicating a successful network connection.
- OCPP light refers to the server status, with a solid green light indicating a successful connection to the OCPP server.
- Fault light is a display light for indicating faults or errors.
- Charge light is a display light indicating the status of charging.
- Ready light is a display light indicating readiness for charging.

1.3 Explanation of Signal Lights:

- The white (blue) light corresponds to "ready", the green light corresponds to "charge", and the red light corresponds to "fault". Please refer to the attached table for more details.

2. Operating Procedures

2.1 Binding Charging Station

Once the charging station is installed and powered on, please refer to the instruction manual of Pheilix APP to scan the QR code on the charging station for binding. After successful binding, the charging station number will be displayed on the "My Station" page.

Note: "APP" refers to Pheilix APP in the following instructions.

2.2 Network Connections:

There are two ways to connect to the network: WIFI and Ethernet:

a. WIFI setup:

(1) Disconnect the network cable from the charging station.

(2) Open the charging station door and press the emergency stop button. Please note that the emergency stop button should be kept pressed throughout the following steps. If it is released, the setup process needs to be restarted from step (1).

(3) Long Press the touch switch or micro switch on the charging station's motherboard for 3-10 seconds and release it.

(4) When the WIFI indicator light on the panel starts flashing, the charging station enters the WIFI setup mode.

(5) Follow the setup procedures in the APP to configure the WIFI, please refer to the "APP User Manual".

(6) After the setup is completed, the WIFI indicator light will stop flashing. Wait a few seconds until the WIFI is connected to the APP and the light will remain on.

(7) Release the emergency stop button and close the charging station door.

(8) If a new WIFI network needs to be configured, repeat steps (1) to (7)

b. Ethernet connection:

Connect the network cable to the Ethernet port.

After a successful network connection, the "Online" status of the charging station will be displayed on the "My Station" page.

2.3 Charging Process

Plug in	→	Authentication	→	Charge	→	Stop Charge	→	Disconnect
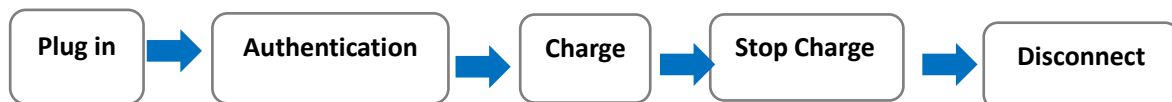
- **Charging Gun Connection**
- **Connect the charging gun to the charging station end.**
- **Connect the other end of the charging gun to the electric vehicle end.**
- **Observe the status of the charging station lights or check the "My Station" status on the APP to confirm that the charging gun connection is successful and charging authorization can be obtained.**

Note:

After connecting the charging gun:

- a. If the APP prompts an electronic lock failure, the charging station end and the charging gun need to be reconnected.
- b. If the APP prompts a suspension of the vehicle end, the vehicle end and the charging gun need to be reconnected.
- c. If the APP prompts a communication failure of the electric vehicle, the charging station end, the vehicle end, and the charging gun need to be reconnected.

2.4 Charging Authorisation

Charging authorization must be performed when the charging station is in the "Charging Gun Connected" state. The following charging authorization methods are available:

Method A: APP authorization

Click "Charge Now" or "Start Charging" on the "My Station" page to start charging.

Method B: QR code authorization

Scan the QR code on the charging station using the APP to start charging.

Method C: RFID card authorization

Swipe the RFID card in the charging station's card reader area. A "beep" sound will be heard once or twice if the card is successfully authorized.

Note:

(1) To use the RFID card for charging authorization, it needs to be bound to the APP account. Please refer to the "APP User Manual" for the binding process

(2) If a single "beep" sound is heard, it means the RFID card is already bound to the charging station and ready for offline use. Please refer to the "APP User Manual" for the binding process. If two "beeps" are heard, it means the RFID card is not bound to the charging station and can only be used online.

(3) To use an RFID card for charging authorization on a commercial charging station, the commercial function for the RFID card needs to be activated on the APP. Please refer to the "APP User Manual" for the activation process

Loss or theft:

If the RFID card is lost or stolen, click "Loss of Card" on the "My Cards" page and click "Confirm" on the prompt page to unbind the card from the charging station. If the card is found, click "Cancel Loss" on the "My Cards" page to rebind it to the charging station.

After successful charging authorization, charging will commence immediately, and the status can be viewed on the APP homepage. If the charging station is set to non-peak charging mode and the charging session occurs during peak hours, the charging station will enter the "Charging Station Suspended" state. Refer to section 3.2 of the manual for details on how to perform peak charging.

2.5 Charging in Progress

The "Charging Station" information on the APP homepage displays real-time information, including the charging station ID, charging status and time, charging power, charging capacity, and the actual charge cost. For home charging stations, additional information can be viewed on the "My Station" page. The charging station lights will display the "Charging in Progress" status. If there are any billing inquiries, please contact customer service.

2.6 Stop Charging

The charging station can stop charging in both automatic and manual modes.

2.7 Automatic Stop

When the charging current is less than 0.1A, the station assumes that the car is fully charged and will automatically stop charging. The station lights or APP status will display "Charging Complete."

If a fault occurs that requires stopping the charging process, the station will automatically stop charging and display a "Fault Status" on the lights or APP.

2.8 Manual Stop

During charging, the APP can be used to stop charging by clicking "Stop Charging," or the original authorized RFID card can be swiped to stop charging.

2.9 Emergency Stop

In the event of an emergency stop, the customer can press the emergency stop button, and the station will stop charging within 15ms. The lights and APP status will display "Fault" -> "Emergency Stop." To exit the emergency, stop state, the emergency stop button should be rotated clockwise gently. The lights and APP status will return to the current state.

After stopping the charging, the electronic lock on the charging gun connector will be automatically unlocked.

2.10 Removing the Charging Gun

After stopping the charging, the charging gun can be removed from the charging station end. If it is difficult to remove, the charging station's electronic lock mechanism will continue to unlock automatically until it is successfully removed. After removing the charging gun, the station lights and APP status will return to "Idle Waiting" state.

Note:

If the charging gun cannot be removed, even after multiple attempts, please contact customer service.

3. Smart Functions

3.1 Home Load Balancing

Based on the total current of the home power supply, the maximum home load current must be set through the APP. Please refer to the "APP User Manual" for the specific steps.

The home load balancing function requires the addition of the "CT485 Control Box" to work.

3.2 Non-Peak Charging and Random Delay

3.2.1 Customers can set non-peak charging periods based on local power grid conditions. Please refer to the "APP User Manual" for the specific steps.

3.2.2 After setting the non-peak charging period, when the charging station is in the peak period, the APP can select "Start Charging" for authorization. After successful authorization, the charging station enters the "Charging Station Suspended" state and waits to enter the random delay period (default 0-600s). At the same time, the charging station enters the "Charging Gun Inserted" random delay state, waiting for the countdown to end before it will automatically start charging. The APP can also choose "Immediate Charging" authorization, which allows the station to skip the peak waiting period and start charging immediately. With RFID card authorization, swiping the card once will enter the peak waiting charging process. If the customer does not want to wait, they can swipe the same RFID card again to start charging immediately.

Note:

The maximum value of the random delay can be changed in the "My Station" -> "Settings" section of the APP. Please refer to the "APP User Manual" for specific steps.

4. Sharing

Home charging stations can be shared with others. Please refer to the "APP User Manual" for specific steps.

5. Troubleshooting

If the station's lights or APP shows a fault, press "Press and Release Emergency Stop" to clear general faults. If the fault persists, report the problem through the APP or contact customer service

Contact Us

Moss Electrical Co. Ltd

Maxmor House, Sandpit Road

Dartford

Kent

DA1 5BU

01322 282 700

sales@mosselectrical.co.uk

Moss Electrical Co. Ltd (SW)

Waterton Ind. Estate, Horsefair Road

Bridgend

CF31 3YN

01656 765 300

sales@mosselectricalsw.co.uk

Moss Electrical Co. Ltd (NW)

Unit 18, Europa Way, Trafford Park

Manchester

M17 1JZ

01618 482 468

sales@mosselectricalnw.co.uk