



Rated power : ● 7KW ● 11KW ● 22KW

Network Configuration: ● No ● 4G card ● WIFI Bluetooth ● Ethernet

Start method: ● Plug and charge ● Swipe to activate ● APP startRGER

CHARGING PILE INSTRUCTION MANUAL

Please read this manual carefully before use

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Parameters Table

Category	Items	Specification	Remark
Name	Product name	AC vehicle charging pile	
Environmental indicators	Applicable scene	Indoor/outdoor	
	Protection degrees	IP55	
	Operating Temperature	-40℃ ~ +50℃	
	Operating humidity	5%~ 95%, non-condensing	
	Cooling method	Natural cooling	
Electrical indicators	Installation method	Wall-mounted	Wall or ground column
	Input voltage	Single phase 220VAC Three-phase 380VAC	For the specific voltage, check the label or nameplate on the side of the charging pile
	Input power	7KW/11KW/22KW	For specific power, check the label or nameplate on the side of the charging pile
	Output power	7KW/11KW/22KW	
	Input frequency	50/60Hz	
	Output current	16A/32A	For the specific current, check the label or nameplate on the side of the charging pile
Protection function	Over voltage protection	Phase voltage $\geq 265V$	

Category	Items	Specification	Remark
Protection function	Under voltage protection	Phase voltages \leq 175V	
	Over current protection	\geq 110% rated output	
	Leakage protection	Leakage current \geq 30mA0.1s	An external leakage switch is required
	Over temperature protection	Temperature \geq +80 °C	Temperature inside the control box
	Low temperature protection	Temperature \leq -15 °C	Temperature inside the control box
	Grounding protection	Yes	Good grounding required
	Surge protection	Yes	Wall-mounted
Standard	Standards compliant	IEC 61851 / IEC 62196	

Installation tool



POWER DRILL



MULTIMETER



TAPE MEASURE



WIRE STRIPPER



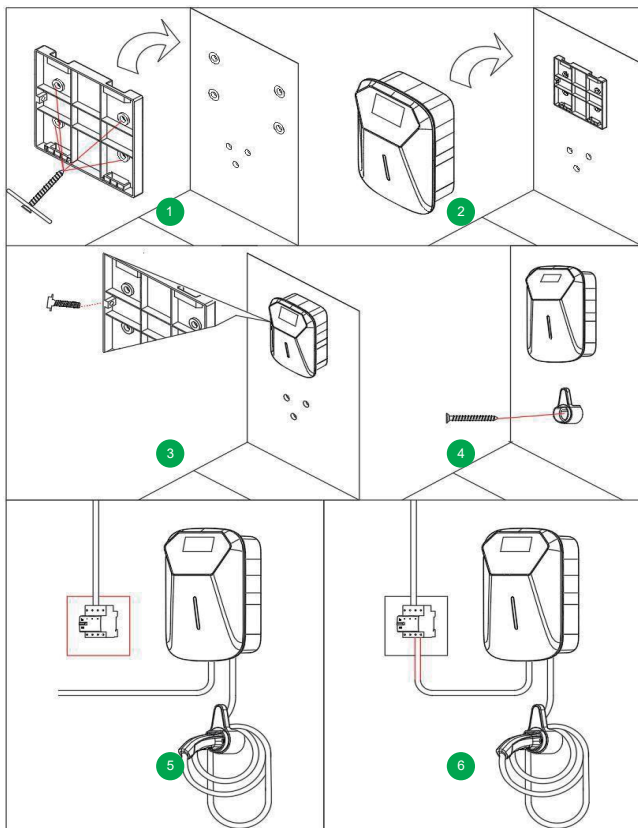
LEVEL



SMARTPHONE (WITH WI-FI)

1. Electrical tools: For removal and installation of screws.
2. Multimeter: Measure and check whether the installation line voltage is normal.
3. Tape measure: Measure the installation height.
4. Terminal clip: Install the earth leakage switch crimp wire crimp terminal.
5. Level ruler: Measure whether the charging pile is installed horizontally.
6. Cell phone: Use the APP to connect to wifi and Bluetooth to view the charging data of the charging pile.

Charging pile installation



1. Fix the back panel of the charging pile at the place where the installation hole is drilled on the wall.
2. Hang up the charging pile (from top to bottom).
3. Lock the screws on the back panel from the left side of the charging pile.
4. Install the special outlet for the charging gun.
5. Install the special switch waterproof box of the charging pile and install the special switch, connect the power cord at the front of the switch, and tighten the screws.
6. Connect the charging pile input power line, please refer to (wiring installation).

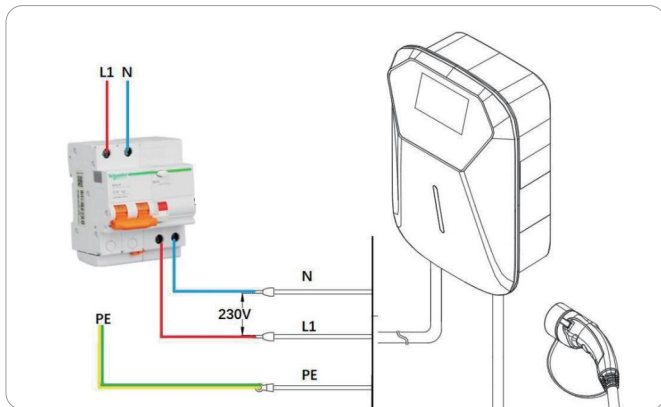
Installation material selection

Input power	Voltage and current	Material name	Specification parameters (Corresponding to the power of the charging pile, select the corresponding installation material)
7KW	230V 32A	Switch	Single-phase three-wire system 2P, 63A leakage current control switch
		Cable	Single-phase three-wire system, single-strand cable $\geq 6\text{mm}^2$ 2 copper wires*3 pieces
11KW	380V 16A	Switch	Three-phase five-wire system 4P, 40A leakage current control switch
		Cable	Three-phase five-wire system, single-strand cable $\geq 4\text{mm}^2$ 2 copper wires*5 pieces
22KW	380V 32A	Switch	Three-phase five-wire system 4P, 63A leakage current control switch
		Cable	Three-phase five-wire system, single-strand cable $\geq 6\text{mm}^2$ 2 copper wires*5 pieces

Wiring installation

LN-PE installation wiring

1. Input power supply L1-N-PE 230V connected to charging pile L1-N-PE 230V



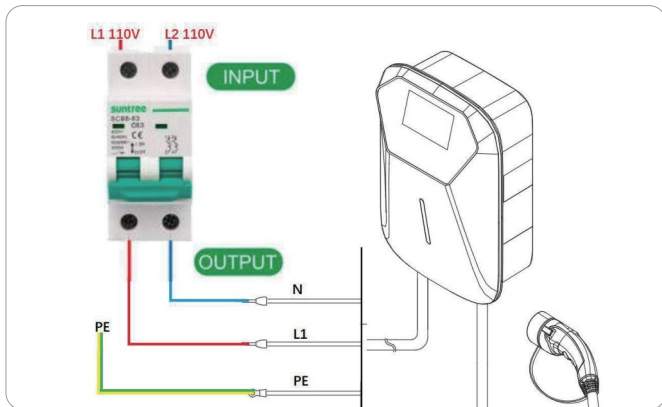
(1) Prepare the materials of the above specifications according to the power of the selected charging pile, and turn off the power supply of the upper level.

(2) Connect the charging pile's own power line L1 fire wire N zero wire to the load terminal L1-N of the charging pile's special leakage protection switch; the ground terminal of PE earth wire needs to be well grounded.

(3) After checking that there is no error, close the leakage switch, and the indicator light comes on when the charging pile is available.

L1-L2-PE Installation wiring

2. Input power supply L1 110V-L2 110V-PE connected to charging pile L1-N-PE



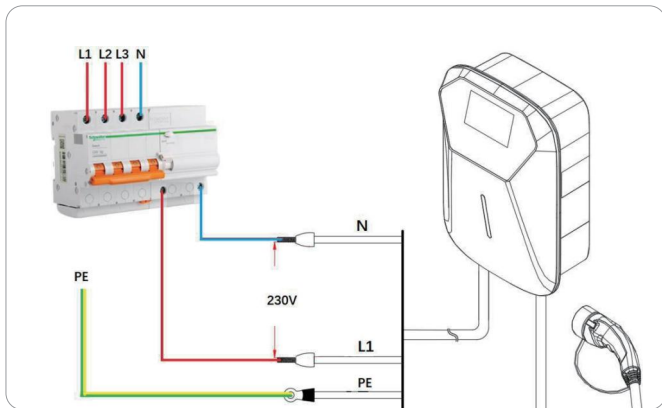
(1) Prepare the materials of the above specifications according to the power of the selected charging pile, and turn off the power supply of the upper level.

(2) Connect the charging pile's own power cable L1-N to the L1-L2 of the charging pile's special switch load terminal respectively; the ground terminal of the PE earth cable needs to be well grounded.

(3) After checking that there is no error, close the leakage switch, and the indicator light comes on when the charging pile is available.

L1-L2-L3-N-PE installation wiring (charging pile single phase)

3. Input power supply L1-L2-L3-N-PE connected to charging pile L1-N-PE



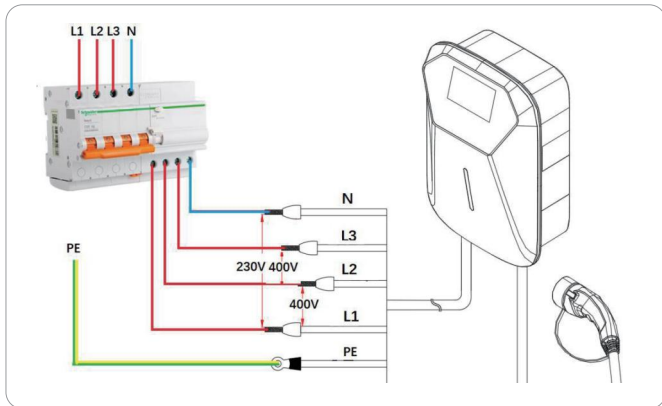
(1) Prepare the materials of the above specifications according to the power of the selected charging pile, and turn off the power supply of the upper level.

(2) Connect the charging pile's own power line L1 fire wire N zero wire to the load terminal L1-N of the charging pile's special leakage protection switch; (L2,L3 left null); the PE earth ground terminal needs to be well grounded.

(3) After checking that there is no error, close the leakage switch, and the indicator light comes on when the charging pile is available.

L1-L2-L3-N-PE installation wiring (three-phase charging pile)

4. Input power supply L1-L2-L3-N-PE connected to charging pile L1-L2-L3-N-PE



(1) Prepare the materials of the above specifications according to the power of the selected charging pile, and turn off the power supply of the upper level.

(2) Connect the charging pile's own power line L1;L2;L3 fire wire N zero wire to the charging pile's special leakage protection switch load terminal L1-L2-L3-N; PE earth ground terminal needs to be well grounded.

(3)After checking that there is no error, close the leakage switch, and the indicator light comes on when the charging pile is available.

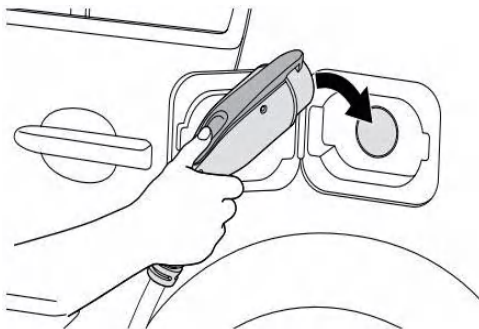


Kind reminder: Ask a professional to connect the wires, wrong wiring will lead to the damage of the charging pile.

Charging operation

1. Charging connection

After parking your electric vehicle, remove the charging gun and insert it into the charging port of your electric vehicle, please double check that it is plugged in place to ensure a reliable connection.



2. Charging start

(1) Plug and charge

Take the charging cable and insert it into the car charging port and connect it in place to start charging automatically, and the corresponding indicator light will show the color of charging.

(2) Swipe to activate

Take the charging gun and insert it into the charging port of the car and connect it in place, then swipe the card to charge, the card should stay in the area of the charging pile swipe icon for about 2S before starting the charging pile to charge the electric vehicle; the indicator light shows the color of charging in progress.

(3) Scan code to start

Take the charging gun and insert it into the vehicle charging port to connect in place, scan the QR code shown on the charging post display with applet or APP to start the charging pile; the indicator light shows the color of charging in progress.

3. Stop charging

(1) Plug and charge

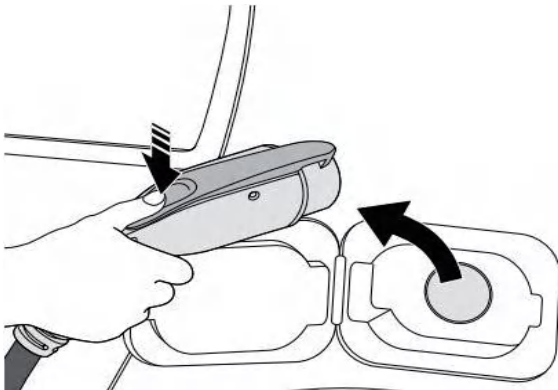
When the charging pile is in operation, or the charging has been completed, you can press the handle button to unplug the charging gun. If you can't unplug the charging gun, firstly, the you should unlock the charging port of the vehicle , and then unplug the gun.

(2) Swipe to activate

When the charging pile is in operating status, or charging has been completed, swipe the card to end charging, press the handle button to pull out the charging gun; if you can't pull out the charging gun, first unlock the vehicle charging port , and then pull out the charging gun.

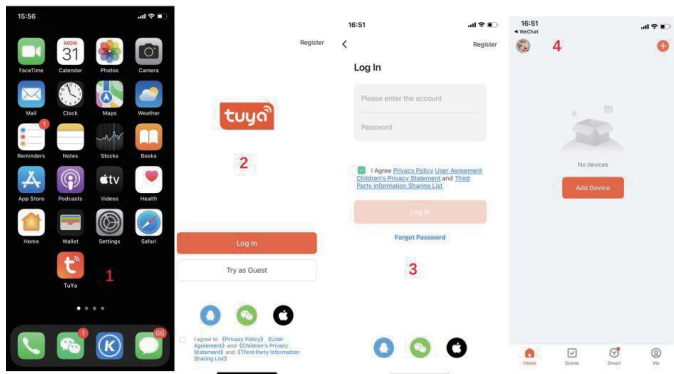
(3) Scan code to start

When the charging pile is in operating status, or the charging has been completed, press the handle button of the charging pile after scanning the code, and pull out the charging gun. If the charging gun cannot be pulled out, first unlock the vehicle charging port , and then pull out the charging gun.



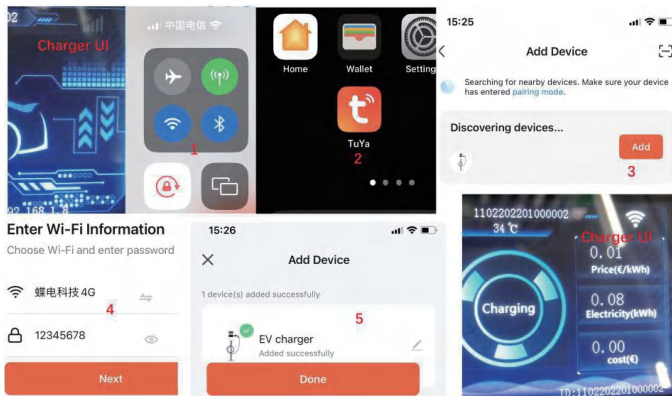
APP operation

1. Login or register new user



- Download "Tuya" APP click to open.
- Click on "Login" to choose a login method, such as QQ/WeChat/Apple ID, or click on "Register" to open a new account.
- Fill in the account and password to log in.
- After the login is complete, go to the next step to add a charging pile.

2. Charging pile WIFI Bluetooth connection



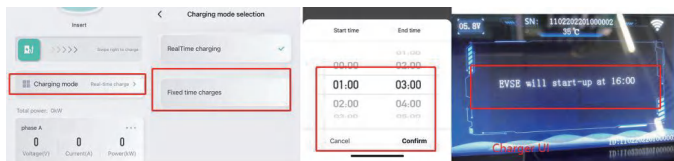
- If there is no "wifi" LOGO on the display interface of the charging pile, turn on the WIFI/Bluetooth function of your cell phone and download the " Tuya APP".
- Open the downloaded " Tuya"; click Add Device. ☑ Click Add; select the received device and click "Add".
- Select the WIFI the device is connected to; click "Next".
- You can enter the charging status display interface until the added device displays "✓". The charging pile display interface shows the WIFI icon, the connection to WIFI is successful.

3. How to use APP to start charging



- Insert the charging gun of the charging pile into the charging port of the vehicle. After insertion, the charging pile will display the "QR code" as shown in the figure.
- Open the "APP", the app shows that it has been plugged in, and then drag the start button, the charging pile will enter the charging interface after starting, and the current charging voltage, charging current, etc. will be displayed.

4. How to turn on the "Timed Charging Mode"



- Insert the charging gun of the charging pile into the charging port of the vehicle, and then insert the charging pile.
- Click on the charging mode "Timed charging".
- Select the charging start and end time, after successful selection, the charging pile displays the timed start time.

5. How to use the card to "Start" and "Stop" the charging pile



- Insert the charging gun of the charging pile into the charging port of the vehicle. After insertion, the charging pile will display the "QR code" as shown in the figure.
- Use the card to stick to the card swiping area for 2 seconds to start the charging pile, and it will display charging after starting.
- To finish charging click "Swipe Again".

6. How to set "Charging Current"



- Click "Settings" on the charging interface.
- Click on the Charging Current.
- Set the current value that needs to be charged, and the setting cannot exceed the rated current of the charging pile.
- After setting the start charging, the APP will display the charging current as the set charging current.

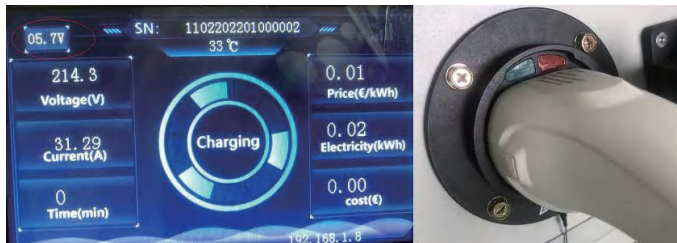
Charging pile status determination Available

1. The voltage in the upper left corner of the display is 11.2-12.8V.



Single phase plug and charge

2. Plug in the charging gun, the upper left corner of the display voltage 5.2-6.8V, automatically start charging.



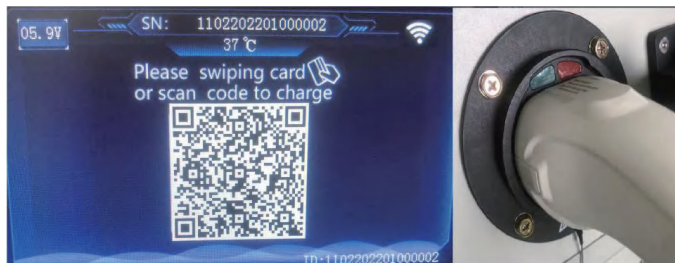
Three-phase plug and charge

3. Plug in the charging gun, the upper left corner of the display voltage 5.2-6.8V, automatically start charging.



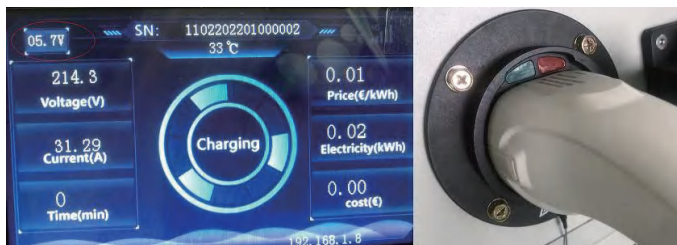
Card swiping or APP start

4. Plug in the charging gun, when the voltage in the upper left corner of the display is "5.2-6.8V", then the charging can be activated by swiping the card in the swipe card area or by scanning the code on the APP of the cell phone.



Single phase charging

5. The voltage in the upper left corner of the display is 5.2-6.8V "the voltage and current are normal during charging"



Three-phase charging

6. The voltage in the upper left corner of the display is 5.2-6.8V "the voltage and current are normal during charging"



Fully charged or stop charging

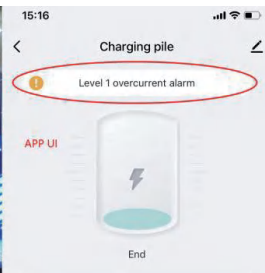
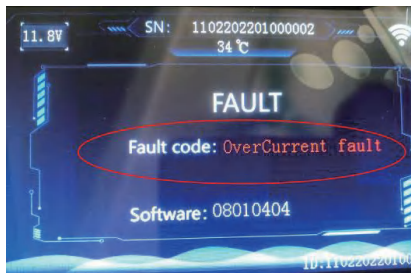
7. The voltage in the upper left corner of the display is 8.2--9.8V



Abnormal display of charging pile

Over current protection

8. (1) The vehicle current limiter does not limit the charging current, which triggers the over current protection of the charging pile.
- (2) End charging, and the charging pile returns to normal when the power is turned off and reset.

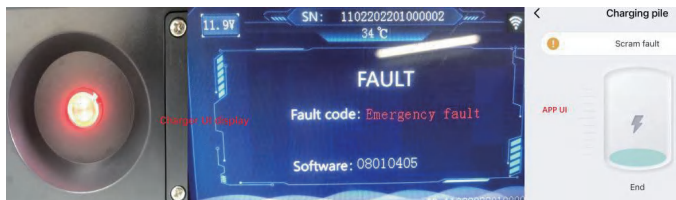


Emergency stop protection

9. Application scenario:

Major accidents, such as fire, flood and other natural disasters; to prevent electric shock, fire or explosion.

(1) The emergency stop button of the charging pile is pressed to stop charging; the emergency stop button turns red, and the charging pile interface displays "Emergency fault" and the mobile APP displays "Scan fault".

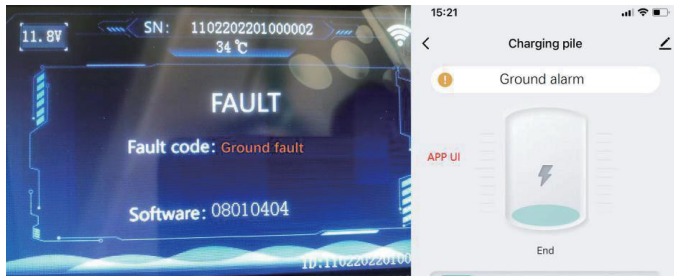


(2) Press out the emergency stop button of the charging pile, return to normal, and continue charging.



Grounding protection

10. (1) The PE ground wire of the input power cord of the charging pile is suspended or not connected properly.
- (2) Check the ground wire, connect the ground wire and return to normal.



Leakage protection

11. Vehicle needs to go to a 4S store for an insulation test; unplugging the charging gun and resetting the charging post with the power off will eliminate this protection.



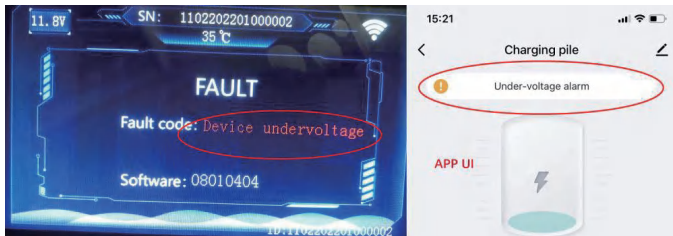
Over voltage protection

12. (1) Use a voltmeter to measure whether the input power voltage is higher than the rated input value of the charging gun. If it is higher, you need to check the input power voltage.
- (2) The voltage returns to normal and the power-off reset can eliminate this protection.
- (3) Please refer to the nameplate of the charging pile for the input voltage range.



Under voltage protection

13. (1) Use a voltmeter to measure whether the input power voltage is lower than the rated input voltage of the charging pile. If it is lower, you need to check the input power.
- (2) The voltage returns to normal and the power-off reset can eliminate this protection.
- (3) Please refer to the nameplate of the charging pile for the input voltage range.



Over temperature protection

14. (1) When the internal sensor inside the charging pile detects that the temperature reaches $+80^{\circ}\text{C}$, it triggers the over-temperature protection of the charging pile and stops charging.
- (2) When the temperature drops below $+65^{\circ}\text{C}$, power off and reset to resume normal charging.



Low temperature protection

15. (1) Trigger the charging pile low temperature protection when the internal temperature of the charging pile reaches -20°C .
- (2) Temperature drops to -10°C to resume normal charging.



Indicator status comparison table

Operating status	Red	Green	Blue
Available	/	Always on	/
Plug in charging gun	/	/	Always on
Charging	/	/	Flashing
Metering communication error	Flashing 1 time	/	/
Under voltage warning	Flashing 2 times	/	/
Over voltage warning	Flashing 3 times	/	/
Grounding fault	Flashing 4 times	/	/
Over current protection	Flashing 5 times	/	/
Permanent over current protection	Flashing 6 times	/	/
Leakage protection	Flashing 7 times	/	/
Over temperature protection	Flashing 8 times	/	/
Emergency stop button	Flashing 9 times	/	/
RFID failure	Flashing 10 times	/	/
Relay failure	Flashing 11 times	/	/
Relay failure	Flashing 12 times	/	/
Memory failure	Flashing 13 times	/	/
Abnormal clock	Flashing 14 times	/	/

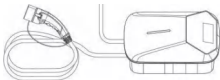



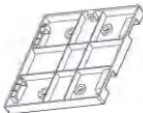






Pending
Indicator lights: Green always on

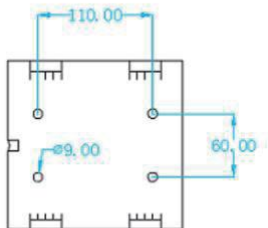
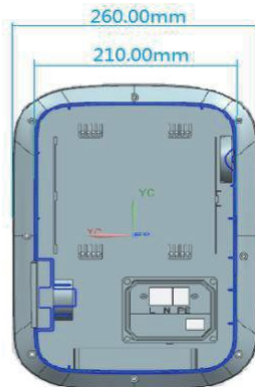
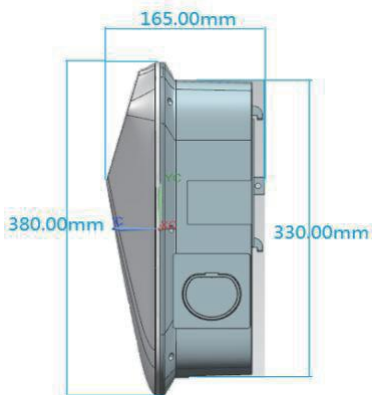
Charging/charging complete
Indicator lights: Blue
(blinking/always on)

Fault
indicator lights: Flashing red

Parts List

Charging pile (1PCS)	Charging gun seat (1PCS)	Screw/expansion screw sleeve (7pcs)	Gasket (4pcs)
			
Back panel + Back panel screws (1 set)	Warranty card (1PCS)	Manual (1PCS)	Card (2pcs)
			
Packing box (1PCS)			
			
Remark: The card is only matched with the charging pile can be activated by swiping the card			

Installation tool



Installation dimension: 110*60mm

Warnings

This document contains important instructions and warnings that must be followed when using charging pile

1. Do not put flammable, explosive or combustible materials, chemicals, flammable vapors and other dangerous items close to the charging pile;
2. Keep the charging head clean and dry. If it is dirty, please wipe it with a clean dry cloth. It is strictly forbidden to touch the charging head with your hands when it is charged;
3. It is strictly forbidden to use the charging pile when the charging gun or charging cable is defective, cracked, worn, broken, or the charging cable is exposed. Please contact the staff in time;
4. Do not attempt to disassemble, repair, or modify the charging pile. Improper operations may cause equipment damage, water leakage, and electricity leakage;
5. If there is any abnormal situation during use, you can immediately press the emergency stop button to cut off all output power;
6. In case of rain and thunder, please charge carefully;
7. Children should not approach or use the charging pile during charging to avoid injury;
8. During the charging process, the vehicle is prohibited from driving, and can only be charged when it is stationary;
9. For hybrid electric vehicles, please turn off the ignition before charging;

If the color of the picture in this manual does not match the actual object, please refer to the actual object.

Welcome to use EV charging pile

Version V1.6

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