feyree

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EV Charging Station Manual

It is recommended to read the instructions before use

Type 2 Parameter introduction

Type 2 IEC 62196-2									
Power Rating	7.6KW			11KW			22KW		
Load balancing	/	/	●	/	/	●	/	/	●
APP	/	●	●	/	●	●	/	●	●
RFID Card	/	●	●	/	●	●	/	●	●
Type A RCD	● /	● /	/	● /	● /	/	● /	● /	/
Type B RCD	/ ●	/ ●	●	/ ●	/ ●	●	/ ●	/ ●	●
Power supply system	Single Phase			Three Phase			Three Phase		
Rated voltage	85V-264V			380V±20%			380V±20%		
Rated current	8-10-13-16-25-32A			8-10-13-16A			8-10-13-16-25-32A		
Input Frequency	50Hz/60Hz			50Hz/60Hz			50Hz/60Hz		
Protection level	IP66			IP66			IP66		
Working temperature	-35℃ ~ +55℃			-35℃ ~ +55℃			-35℃ ~ +55℃		
Storage temperature	-40℃ ~ +80℃			-40℃ ~ +80℃			-40℃ ~ +80℃		
Standby power	<3W			<3W			<3W		
Working humidity	5% ~ 95% non-condensation			5% ~ 95% non-condensation			5% ~ 95% non-condensation		
L*W*H	310*161*86 mm			310*161*86 mm			310*161*86 mm		
Cable Specification	3G 6mm²+1*0.5mm² 3G 6mm²+2*0.5mm²			5G 2.5mm²+1*0.5mm² 5G 2.5mm²+2*0.5mm²			5G 6mm²+1*0.5mm² 5G 6mm²+2*0.5mm²		

Control box function :

1.Earth leakage protection (restart recovery)

2.Overvoltage and undervoltage protection (self-test recovery)

3.Lightning protection

4.Overcurrent protection

5.Overheat protection

6.Grounding protection

7.RFID card function (can be set according to user needs)

8.Appointment Time

9.WIFI

Product Performance :

1.Charging plug according to IEC 62196-2 standard

2.Charging control box in accordance with IEC 61851 control principle

3.Insulation resistance: >1000Ω

4.Terminal temperature rise: <50K

5.Mechanical life: Charging Plug plugging and unplugging times (Non operating state)>10000 times

6.External impact: Charging staion's Plug can withstand the 1-meter drop and 2 tons of vehicle crushing

7.Altitude: ≤2000m

8.With emergency stop function

Type 1 Parameter introduction

Type 1 SAE J1772									
Power Rating	7.6KW			9.6KW			12KW		
Load balancing	/	/	●	/	/	●	/	/	●
APP	/	●	●	/	●	●	/	●	●
RFID Card	/	●	●	/	●	●	/	●	●
Type A RCD	● /	● /	/	● /	● /	/	● /	● /	/
Type B RCD	/ ●	/ ●	●	/ ●	/ ●	●	/ ●	/ ●	●
Power supply system	Level 1 and Level 2			Level 1 and Level 2			Level 1 and Level 2		
Rated voltage	85V-264V			85V-264V			85V-264V		
Rated current	8-10-13-16-25-32A			13-16-25-32-40A			13-16-25-32-40-50A		
Input Frequency	50Hz/60Hz			50Hz/60Hz			50Hz/60Hz		
Protection level	IP66			IP66			IP66		
Working temperature	-35℃ ~ +55℃			-35℃ ~ +55℃			-35℃ ~ +55℃		
Storage temperature	-40℃ ~ +80℃			-40℃ ~ +80℃			-40℃ ~ +80℃		
Standby power	<3W			<3W			<3W		
Working humidity	5% ~ 95% non-condensation			5% ~ 95% non-condensation			5% ~ 95% non-condensation		
L*W*H	310*161*86 mm			310*161*86 mm			310*161*86 mm		
Cable Specification	3G 6mm²+1*0.5mm² 3G 6mm²+2*0.5mm² 3G10AWG+1*18AWG 3G10AWG+2*18AWG			3G 8mm²+1*0.5mm² 3G 8mm²+2*0.5mm² 2G8AWG+1*10AWG+1*18AWG 2G8AWG+1*10AWG+2*18AWG			3G 10mm²+1*0.5mm² 3G 10mm²+2*0.5mm² 2G6AWG+1*8AWG+1*18AWG 2G6AWG+1*8AWG+2*18AWG		

Control box function :

1.Earth leakage protection (restart recovery)

2.Overvoltage and undervoltage protection (self-test recovery)

3.Lightning protection

4.Overcurrent protection

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7.RFID card function (can be set according to user needs)

8.Appointment Time

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Product Performance :

1.Charging plug according to SAE J1772 standard

2.Charging control box in accordance with IEC 61851 control principle

3.Insulation resistance: >1000Ω

4.Terminal temperature rise: <50K

5.Mechanical life: Charging Plug plugging and unplugging times (Non operating state)>10000 times

6.External impact: Charging staion's Plug can withstand the 1-meter drop and 2 tons of vehicle crushing

7.Altitude: ≤2000m

8.With emergency stop function

GB/T Parameter introduction

GB/T												
Power Rating	7.6KW				11KW				22KW			
Load balancing	/	/	●		/	/	●		/	/	●	
APP	/	●	●		/	●	●		/	●	●	
RFID Card	/	●	●		/	●	●		/	●	●	
Type A RCD	●	/	●	/	/	●	/	●	/	/	●	/	●	/	/
Type B RCD	/	●	/	●	●	/	●	/	●	●	/	●	/	●	●
Power supply system	Single Phase				Three Phase				Three Phase			
Rated voltage	85V-264V				380V±20%				380V±20%			
Rated current	8-10-13-16-25-32A				8-10-13-16A				8-10-13-16-25-32A			
Input Frequency	50Hz/60Hz				50Hz/60Hz				50Hz/60Hz			
Protection level	IP66				IP66				IP66			
Working temperature	-35℃ ~ +55℃				-35℃ ~ +55℃				-35℃ ~ +55℃			
Storage temperature	-40℃ ~ +80℃				-40℃ ~ +80℃				-40℃ ~ +80℃			
Standby power	<3W				<3W				<3W			
Working humidity	5% ~ 95% non-condensation				5% ~ 95% non-condensation				5% ~ 95% non-condensation			
L*W*H	310*161*86 mm				310*161*86 mm				310*161*86 mm			
Cable Specification	3G 6mm²+1*0.5mm² 3G 6mm²+2*0.5mm²				5G 2.5mm²+1*0.5mm² 5G 2.5mm²+2*0.5mm²				5G 6mm²+1*0.5mm² 5G 6mm²+2*0.5mm²			

Control box function :

1.Earth leakage protection (restart recovery)

2.Overvoltage and undervoltage protection (self-test recovery)

3.Lightning protection

4.Overcurrent protection

5.Overheat protection

6.Grounding protection

7.RFID card function (can be set according to user needs)

8.Appointment Time

9.WIFI

Product Performance :

1.Charging plug according to GB/T 20234 standard

2.Charging control box in accordance with GB/T 18487 control principle

3.Insulation resistance: >1000Ω

4.Terminal temperature rise: <50K

5.Mechanical life: Charging Plug plugging and unplugging times (Non operating state)>10000 times

6.External impact: Charging staion's Plug can withstand the 1-meter drop and 2 tons of vehicle crushing

7.Altitude: ≤2000m

8.With emergency stop function

Operating Instructions

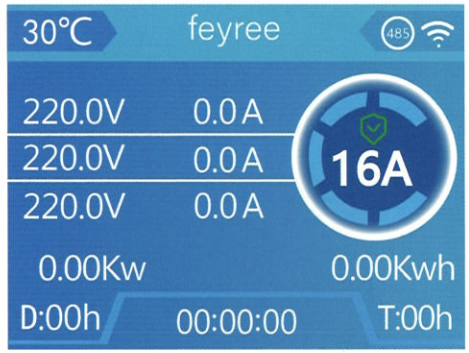
Pre-use preparation :

1. Ensure that there are no open flames around the equipment and that the surrounding space is not blocked
2. Ensure that the equipment casing and charging cable are not damaged
3. Ensure proper maintenance of equipment
4. Make sure the emergency stop button is popped up, if it has been pressed, Please rotate the button clockwise to turn the button back.

Charging steps :

(1) Standby status

1. When the charging station is in standby mode, the interface shows that the device is ready for charging, as shown in the figure below:
2. The indicator light on the case (for Wi-Fi function only) is green and always on;



(2) Waiting for card swipe status

After park your car near the charging station, take the charging plug from the plug holder , set the charging current ,then insert the charging plug into the connector of the electric vehicle.Please make sure that the plug is inserted in place and the connection is safe and reliable. When the charging plug monitors that the charging plug is inserted correctly , It will enter the status of identity verification, as shown in the following figure:

(3) Start-up device

1. Use RFID cards to authorize the use of charging station

START

(4) Start charging

1. The device starts charging and the interface displays the charging status and information parameters as shown in the following figure:

2. The indicator light on the case (for Wi-Fi function only) is green breathing;

(5) Stop charging

1. When the vehicle is fully charged, the charging station will automatically stop charging; in case of emergency, you can manually press the Emergency stop button to cut off power:

2. RFID card can also be used to authorize stopping the use of the charging station during charging;

STOP

3. The display is as follows

4. The indicator light on the case (for Wi-Fi function only) is green flashing or green always on;

Key Operation Instructions :

(1) How to set the charging current

1.When the charging plug is not inserted in the car, press the button A on the panel to modify the charging current, After use the RFID card to turn on the charging, the device will output the corresponding current. the current setting range is determined by the max charging power of charging station , 7KW and 22KW version can set the curent of 8-10-13-16-25-32A,11KW version can set the current of 8-10-13-16A.。

(2) How to set the time delay charging

1.When the charging plug is not inserted in the car , touch the button on the panel shows below to modify the delayed charging time, after swiping the card and turn on the charger , the device will start charging after "X" hours according to the delayed time setted.which means the charger will start charging after "X" hours , and the range can be set from 0 to 15 hours (each touch increase an hour);

(3) How to set the timing charging

1.touch the button on the panel shows below to modify the timing charging , after swiping the card and turn on the charger , the device will start charging after "X" hours according to the time you setted.which means the charger will keep charging for "X" hours , after the time runs out , the charger will stop charging. you can set the time from 0 to 15 hours (each touch increase an hour);

(4) How to access the menu page

1. Press the area in the picture below for 5 seconds to enter the setting menu （without RFID function version charging station）

2. Press the area in the picture below for 5 seconds ,then swip the RFID card to enter the settings menu （with RFID function version charging station）

Long press for 5 seconds to enter the settings page

(5) Menu page basic key operation

1. Touch the panel icon area to upward, downward, enter, back and increase or decrease the parameters of the menu.
Note: When the Charging plug is plugged in, it is not possible to enter the charging plan and load balance setting function. Need to pull out the charging plug to operate.

2.Menu - Charging plan

Set Current : Adjust Current

Delay Start : Set Delay Time

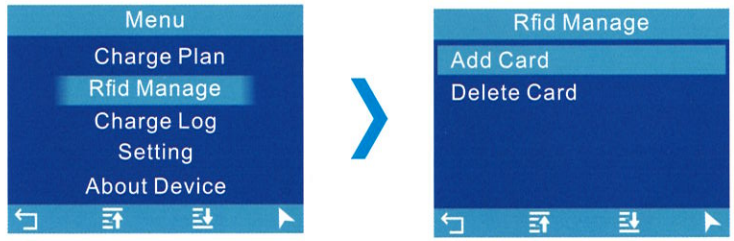
Charge Time : Set Charging Time

Total Current : Load balancing,setting the total current value of the circuit

3.Menu - Rfid Manage

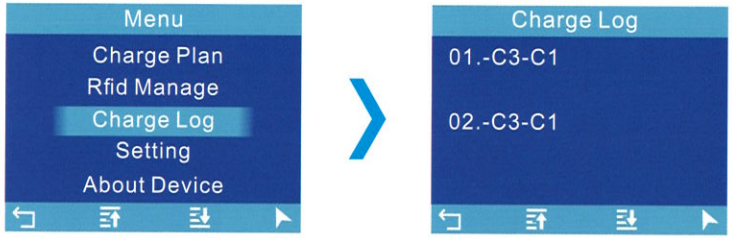
Add Card : Add a blank RFID card to the charging station that can be used

Delete Card : Delete RFID that has already been added



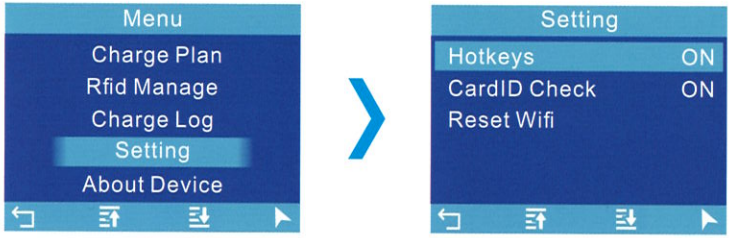
4.Menu - Charge Log

Record the last 10 charging statuses for fault diagnosis

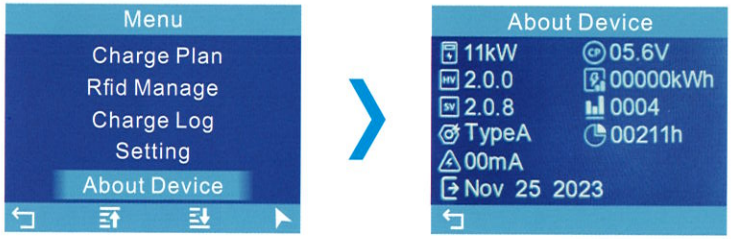


5.Menu - Setting

Hotkeys:Turn on and off the lock button to prevent others from operating it
CardID Check : Cancel or restart the use of RFID cards
Reset Wifi : Clear network configuration



6.Menu - About Device



Load balancing function description

1. Introduction:

By connecting the meter to the home circuit circuit, the current level of the home circuit is collected in real time, and the collected data information is transmitted remotely to the charging device through 485 communication.The charging equipment adjusts the current in real time by comparing the collected data with the rated current of the home circuit set by the user. when the available current is is less than 6A, the device will enter the load balancing protection state.When the available than 10A, the device will resume charging.

2. Prerequisites for the load balancing function to work properly:

(1) 485 communication is correctly and reliably connected

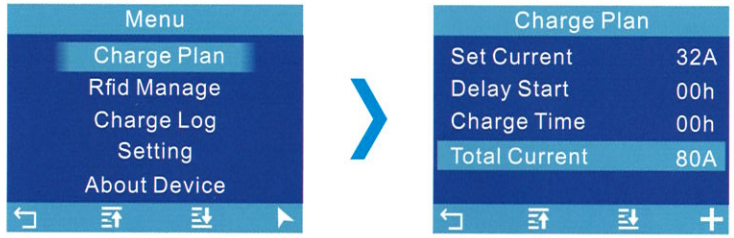
(2) The charging station is not on the same circuit as the meter and the meter is on the same circuit as other household appliances

(3) The rated current of the home circuit set on the charging station matches the actual

3. Set the home rated current level:

You need to follow the prompts for swipe operation before entering the modification to open the home rated current setting, Settable in the range of 20A to 80A;

Total Current : Load balancing,setting the total current value of the circuit



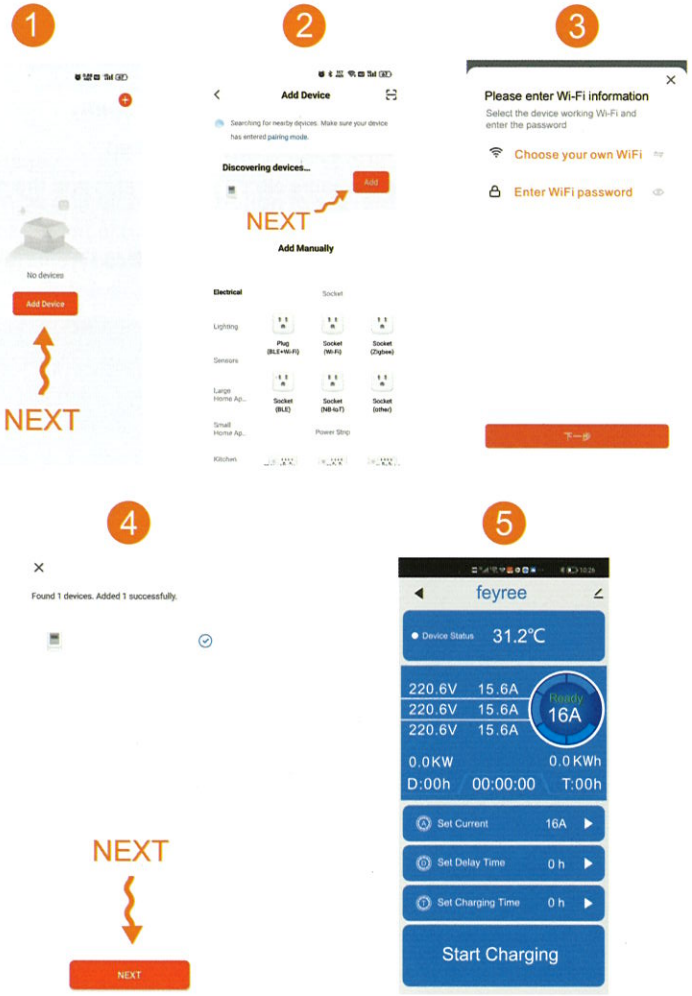
Rated current:Setting the home circuit current rating

(9) How to use the App (the device needs to have Wifi function, optional function)

tuya smart　Smart life

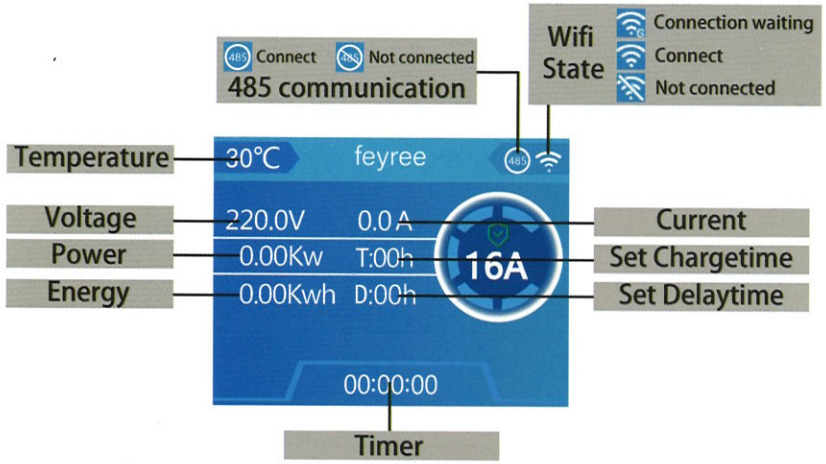
1.Please download the "Tuya Smart " or "Smart Life"App on your cell phone, the APP icon as shown above

2. After downloading, open the app, turn on your phone WiFi and Bluetooth, select Add Device, and follow the instructions to complete Add a new device, as shown below:

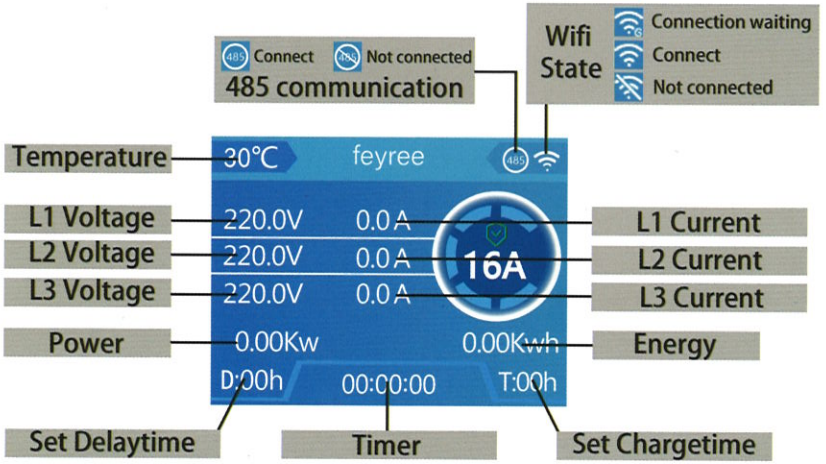


(10) Interface description (device should have Wifi or load balancing function, optional function)

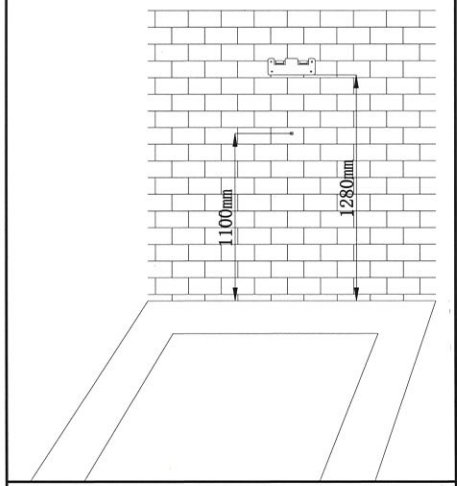
7.6KW/9.6KW/12KW interface as shown below



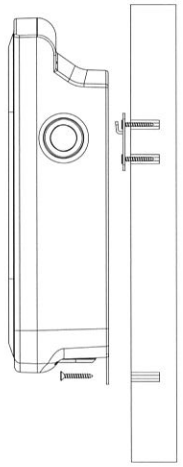
11KW/22KW interface as shown below



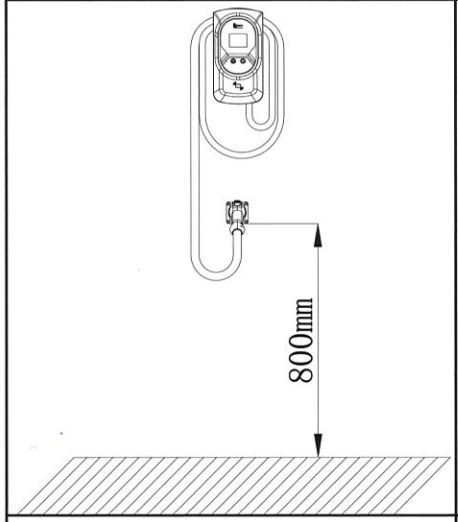
Installation and operation instructions



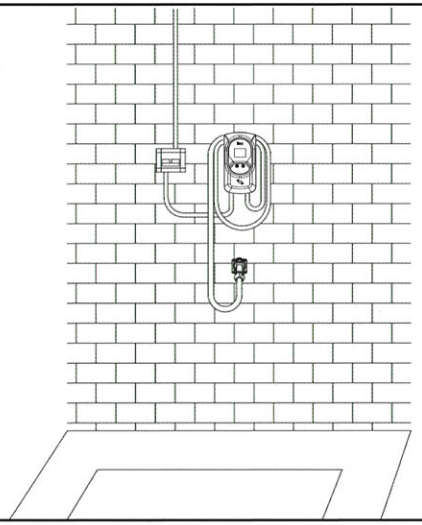
Step 1 : According to the position of the holes on the metal back mounting bracket, use an electric drill to drill holes in the corresponding positions . Please refer to the height in the photo below to determine the charger installation height. then put the expansion tube in the hole , and then use long screws fix the metal mounting bracket on the wall.



Step 2 : After fixed the metal bracket to the wall, hang the charger on the bracket while using the screws to fix the Metal bracket underneath the charger to the wall.



Step 3 : Install the charging plug holder in the position shown in the pics above



Step 4 : Connect the power supply and make sure the charger can work properly

Common Troubleshooting

Fault name	Possible causes of fault phenomena	Troubleshooting recommendations
AC, overvoltage	AC input voltage is too high	1. Ask an electrician to test the input voltage of the switch 2. If the actual voltage exceeds 264V AC for a short time, wait for the network to return to the normal voltage range on its own 3. If the actual voltage is greater than 264V AC for a long time, please contact the power supply department 4. If the actual voltage is less than 264V AC, please contact us
AC Undervoltage	AC input voltage is too low	1. Ask an electrician to test the input voltage of the switch 2. If the voltage is below 176V AC for a short time, wait for the voltage to return to the normal range 3. If the actual voltage is less than 176V AC for a long time, please contact the power supply department 4. If the actual voltage is greater than 176V AC, please contact us
AC Overcurrent	AC input current is too high	1. Immediately disconnect the power distribution box leakage / overcurrent protection switch 2. Check whether there is a low impedance connection between the two lines of the AC pile output line 3. After eliminating the above problems, reapply power, if the fault still exists, please contact us
overheating	Internal temperature greater than 85 degrees	1. Check the AC pile installation environment, verify that there is no heat generating equipment or devices next to it, and ensure that the ambient temperatureneeds to be below 60°. 2. If the fault cannot be eliminated, please contact us
Leakage current exceeds the standard	Leakage current greater than 30mA	1. Immediately disconnect the power distribution box leakage / overcurrent protection switch 2. Check whether the AC pile output line is broken or has a low impedance connection to ground 3. After eliminating the above problems, and reset the leakage current protector reset switch, reapply power, if the faultstill exists, please contact us
Leakage current sensor Sensor anomaly	Sensor for detecting leakage current Abnormalities	1. Immediately disconnect the power distribution box leakage / overcurrent protection switch 2. Check whether the AC pile output line is broken or has a low impedance connection to ground 3. After eliminating the above problems, reapply power, if the fault still exists, please contact us
Ground fault	Poor input/output ground or input L/N reversed	1. Immediately disconnect the power distribution box leakage / overcurrent protection switch 2. Check whether the AC pile input/output line grounding is normal, and whether the input L/N is connected in normal order 3. After eliminating the above problems, reapply power, if the fault still exists, please contact us
Charge gun connection Abnormal	Charging gun CC/CP connection abnormal	1. Check whether the connection of the charging gun is correct and reliable 2. If the fault still exists, please contact us

Charging Status and Indicator Light

Serial number	charging	Green	Blue	Red	Definition description
1	Ready	On	Off	Off	Power-on self-test or reset
2	Connect	Flash	Off	Off	The voltage of detection point 1 is 9±0.8V,
3	Charging	Off	Breathe	Off	Detection point 1 voltage is 6±0.8V, the relay is closed
4	Finish	Off	On	Off	Charging complete
5	Err:CP	Off	Off	Fault (0.5s) 1 time	Detection point 1 voltage of 9.8V<U<11.2V. 6.8V<U<8.2V; 12.8V<U or U<5.2V. Relay is disconnected
6	Under Voltage	Off	Off	Fault (0.5s) 2 time	1 phase:voltage<85V;3 phase:voltage<147V
7	Over Voltage	Off	Off	Fault (0.5s) 3 time	1 phase:voltage>264V;3 phase:voltage>457V
8	Elec Leakage	Off	Off	Fault (0.5s) 4 time	The relay is disconnected, and it needs to be re-powered after the fault is removed before the relay is allowed to close
9	Over Current	Off	Off	Fault (0.5s) 5 time	When the line current is Ie+2<I≤Ie+4, 60S, the relay is disconnected, and it will automatically restart after 10S. Repeat three times for permanent disconnection. When I>Ie+4, the relay is disconnected, and the charging ends
10	Over Temp	Off	Off	Fault (0.5s) 6 time	Temperature>85 degrees, disconnect the relay, wait for the temperature <65 degrees, then turn on charging
11	Ungrounded	Off	Off	Fault (0.5s) 7 time	The ground wire is not connected, the relay is disconnected, and the relay is allowed to close after the fault is removed

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