EV Charging Station Manual

It is recommended to read the instructions before use

Catalog

Safety instructions

Warning : The charging station must be grounded (PE) in order to use it properly

Warning : Do not place flammable, explosive or combustible materials, chemicals, combustible vapors or other hazardous materials near the charging station.

Warning : Keep the charging plug head clean and dry, if dirty, please wipe it with a clean and dry cloth, it is strictly forbidden to touch the charging plug core by hand when it is charged

Warning: It is strictly forbidden to use the charging station when thecharging plug or charging cable is defective, cracked, worn, broken or when the charging cable is exposed

Warning : Do not attempt to disassemble, repair or modify the charging station. If you need to repair or modify it, please contact the relevant staff. improper operation may cause the charging station damage, water leakage, leakage of electricity, short circuit, electric shock and other risks

Warning : Use with caution during thunderstorms

Warning : Children should not approach or use the charging station during the charging process to avoid electric shock

Warning : Do not drive the car while it is charging. You can only start charging When the car is stationary. For hybrid Cars, please turn off the engine before charging

Warning : In case of emergency during the operation of the product, press the emergency stop button immediately to cut off all input and output power

Warning : The use of the charging station is prohibited in the following cases and the manufacturer should be contacted immediately:

* Charging Station shell is broken
* When the charging cable on the charging station is damaged, cracked, frayed, broken, etc.
* Lightning strikes charging station
* Accidents or fires near charging stations
* Water in the charging station
* The length of the charging cable on charging station is not long enough to connect to the car, an extension cable needs to be installed

Product Overview

Brief description :

This product is used for electric vehicle AC charging, the product design is highly simple, divided into Type2, Type1, TS-NACS GB/T four kinds of specifications. It is plug-and-play charging methods and multiple safety protection functions. with good dustproof and waterproof function, can be operated safely in outdoor.

Status Indicator

Display

Adjustment of charging current

Set delayed charging time

Long press for 5 seconds to enter the settings interface

Set charging time

Emergency stop switch

Type 2 Parameter introduction

Type 2 IEC 62196-2						
Power Rating	7.6KW		11KW		22KW	
APP	●		●		●	
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	-30℃ ~ +50℃		-30℃ ~ +50℃		-30℃ ~ +50℃	
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	
APP	●		●		●	
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		8-10-13-16-25-32-40A		8-10-13-16-25-32-40-50A	
Input Frequency	50Hz/60Hz		50Hz/60Hz		50Hz/60Hz	
Protection level	IP66		IP66		IP66	
Working temperature	-30℃ ~ +50℃		-30℃ ~ +50℃		-30℃ ~ +50℃	
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 3G10AWG2 *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

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 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

TS-NACS Parameter introduction

TS-NACS						
Power Rating	7.6KW		9.6KW		12KW	
APP	●		●		●	
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		8-10-13-16-25-32-40A		8-10-13-16-25-32-40-50A	
Input Frequency	50Hz/60Hz		50Hz/60Hz		50Hz/60Hz	
Protection level	IP66		IP66		IP66	
Working temperature	-30℃ ~ +50℃		-30℃ ~ +50℃		-30℃ ~ +50℃	
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 3G10AWG2 *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

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 TS-NACS 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	
APP	●		●		●	
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	-30℃ ~ +50℃		-30℃ ~ +50℃		-30℃ ~ +50℃	
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

Key operation instructions

(1) How to set the time delay charging

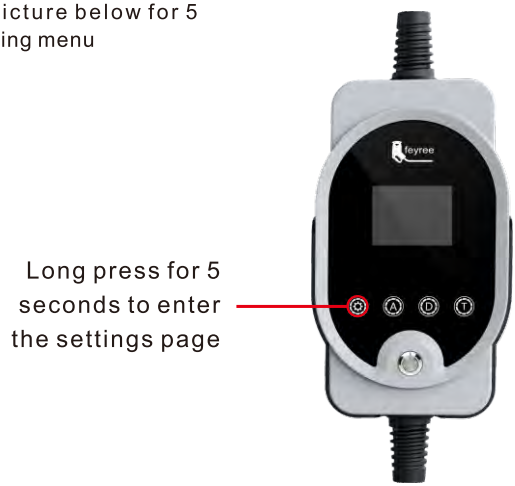
1.When the charging plug is not inserted in the car , touch the button on the panel shows below to modify the delayed charging time, The device will start charging after “X" hours according to the delayed time setted.which means the charger will start charging after "X" hours , and the range can be set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

(2) How to set the timing charging

1.touch the button on the panel shows below to modify the timing charging , 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);

(3) How to access the menu page

1. Press the area in the picture below for 5 seconds to enter the setting menu



(4) Menu page basic Button operation

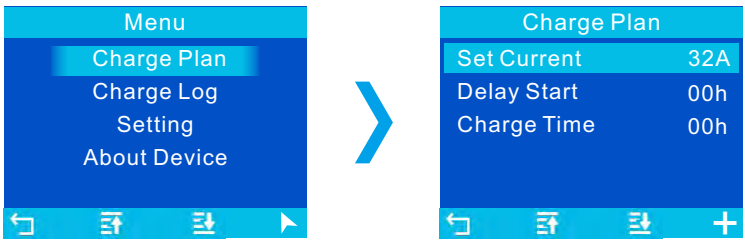
1. Touch the panel icon area to upward, downward, enter, back and increase or decrease the parameters of the menu.

2.Menu - Charging plan

Set Current：Adjust Current

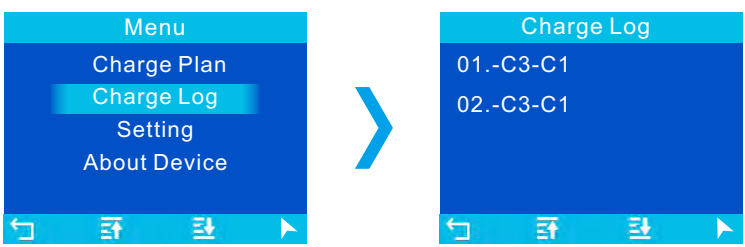
Delay Start：Set Delay Time

Charge Time：Set Charging Time



3.Menu - Charge Log

Record the last 10 charging statuses for fault diagnosis

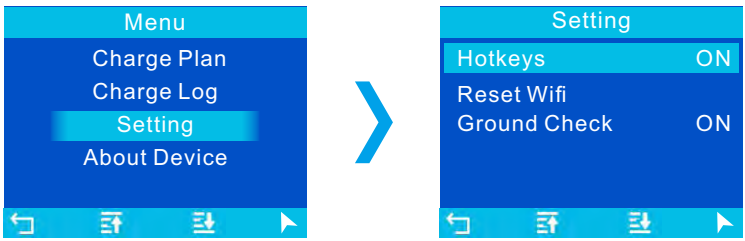


4.Menu - Setting

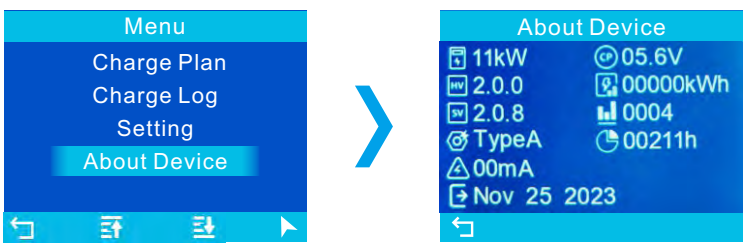
Hotkeys:Turn on and off the lock button to prevent others from operating it

Reset Wifi：Clear network configuration

Ground Check：To turn on and off the grounding (PE) detection, please use the charging station in the grounded (PE) state



5.Menu - About Device



(5) How to use the App (the device needs to have Wifi function, Bluetooth function)

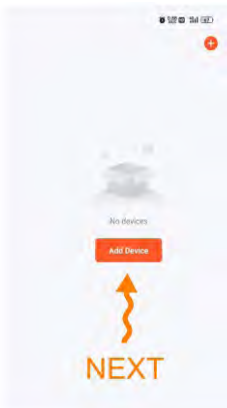
tuya smart

Smart life

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

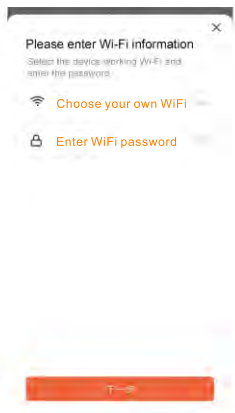
2. After downloading, open the app, turn on your phone WiFi and Bluetooth, select Add Device, and follow the instructions to complete Add a new device, as shown below:

1



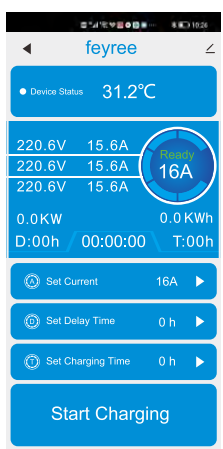
2

3



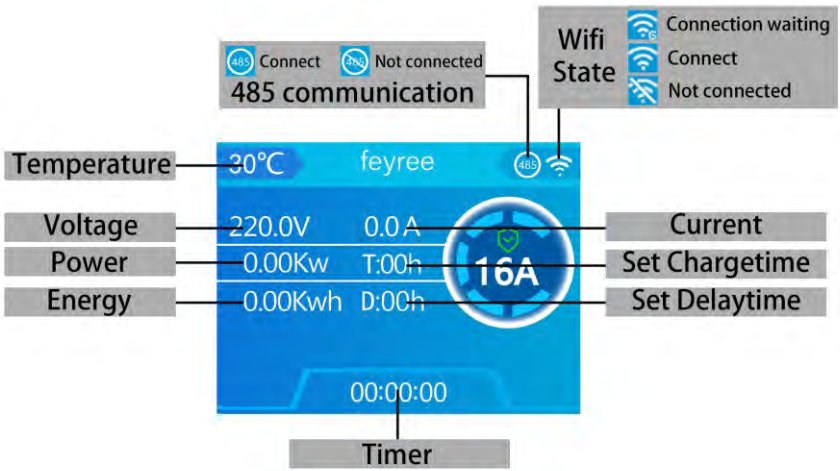
4

5

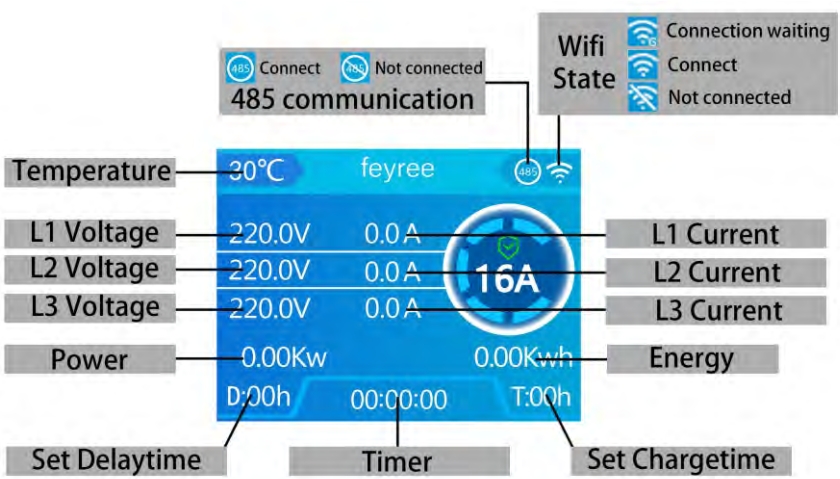


Control Box LCD Display

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

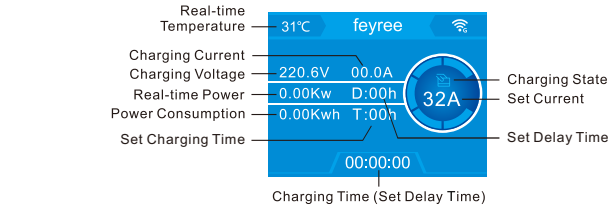


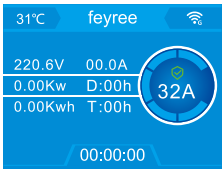
11KW/22KW interface as shown below



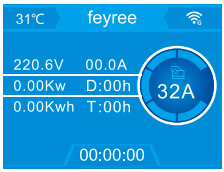
Control Box LCD Display

Single-phase

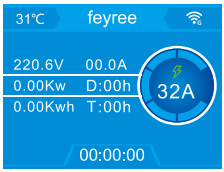




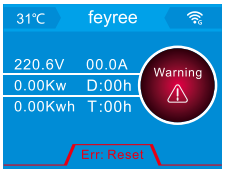
Ready to Charge



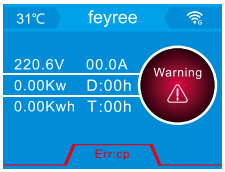
Swipe RFID Card



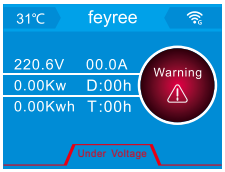
Charging



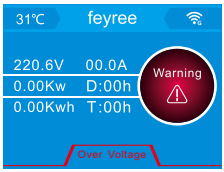
EMERGENCY STOP



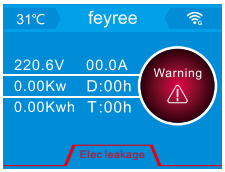
Signal Failure



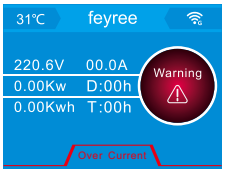
Under Voltage



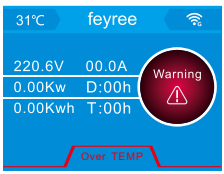
Over Voltage



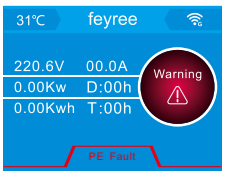
Leakage



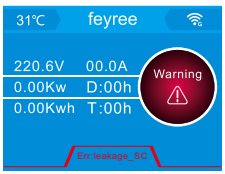
Over Current



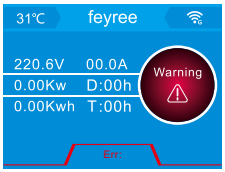
Over TEMP



Missing of PE Protection



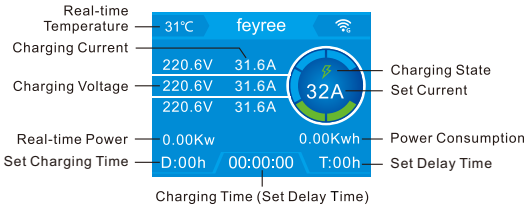
Leakage self check

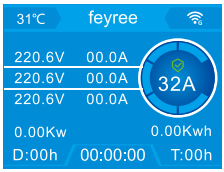


Relay self check

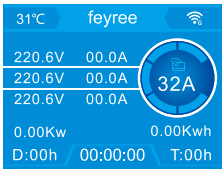
Control Box LCD Display

Three-phase

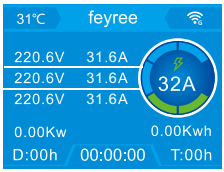




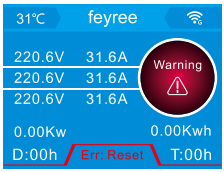
Ready to Charge



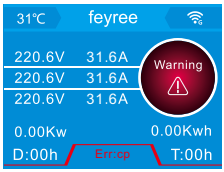
Swipe RFID Card



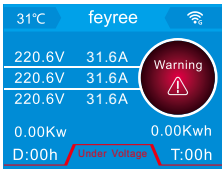
Charging



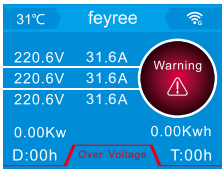
EMERGENCY STOP



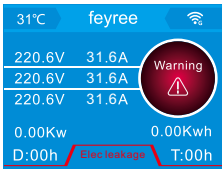
Signal Failure



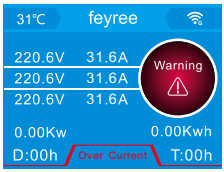
Under Voltage



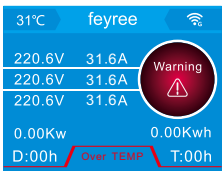
Over Voltage



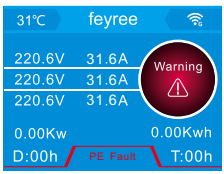
Leakage



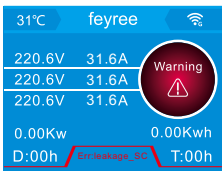
Over Current



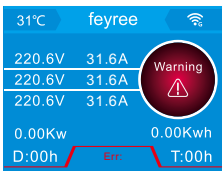
Over TEMP



Missing of PE Protection



Leakage self check



Relay self check

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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FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement.

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation configurations of the transmitter and its antenna(s).

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