

EV Charging Station Manual



SAE J1772

It is recommended to read the instructions before use

Feature

Charging plug meet SAE J1772 standard.

Control box meet IEC 61851 control principle.

Excellent protection performance, protection grade IP65-Working condition.

Operating temperature: -30℃ to 55℃.

Mechanical Properties

Mechanical life: no-load plug in/pull out>10000times

- Impact of external force: can afford 1m drop and 2T vehicle run over pressure

Control Box Function

Leakage protection (restart recover).

- Over voltage under-voltage protection (self-checking recover).
- Lightning protection.
- Over current protection.
- Overheat protection.
- Ground protection.

Appearance dimension



Charger Cord

Specification:

7.6KW : $3\text{G}6\text{mm}^2 + 1 \times 0.5\text{mm}^2$

9.6KW : $3\text{G}8\text{mm}^2 + 2 \times 0.5\text{mm}^2$

12KW : $3\text{G}10\text{mm}^2 + 2 \times 0.5\text{mm}^2$

Electric Performance

Rated voltage, current and power:

85V-264V AC 8A-10A-13A-16A-32A/7.6KW

85V-264V AC 13A-16A-25A-32A-40A/9.6KW

85V-264V AC 13A-16A-25A-32A-40A-50A/12KW

- Insulation Resistance: $>1000\text{M}\Omega$ (DC500V)

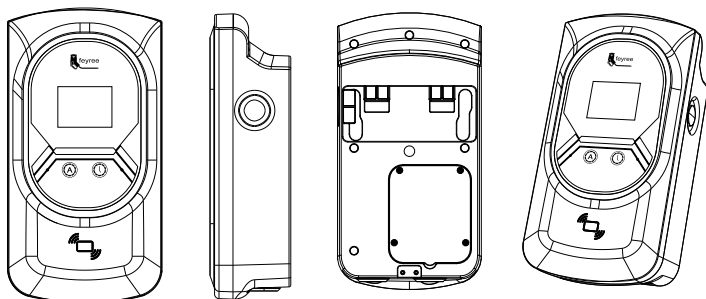
- Terminal Temperature Rise: $<50\text{K}$

Cautions

- Do not bring dangerous items such as flammable, explosive or combustible materials, chemicals, flammable steam, etc. near the charging pile;
- Keep the charging gun head clean and dry. If it is dirty, wipe it with a clean dry cloth.
It is strictly forbidden to touch the charging gun core with your hands when it is charged;
- 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. If you find any, please contact the staff in time;
- Do not attempt to disassemble, repair, or modify the charging pile. If there is a need for maintenance or modification, please contact the staff. Improper operation may cause damage to the equipment, water leakage, leakage, etc.;
- If there is any abnormality during use, press the emergency stop button immediately to cut off all input and output power supplies;
- In case of rain and thunder, please charge carefully;
- Children are not allowed to approach or use the charging pile during the charging process to avoid injury.
- During the charging process, the vehicle is prohibited from driving and can be charged only when it is stationary. Please turn off the hybrid electric car before charging.
- DO not use the device in extreme temperatures (normal operating range (-30°C to 55°C)).

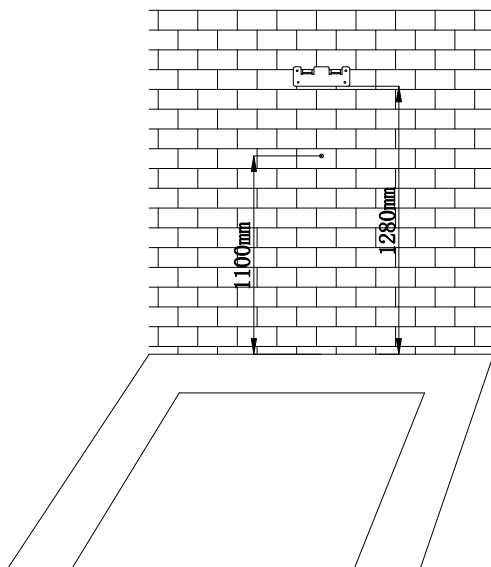
product structure

Overall outline drawing



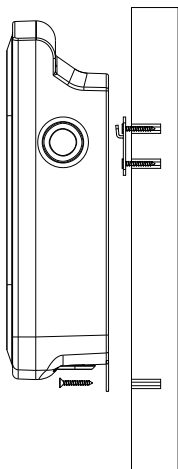
Installation process

1) Wiring and installing the wall bracket



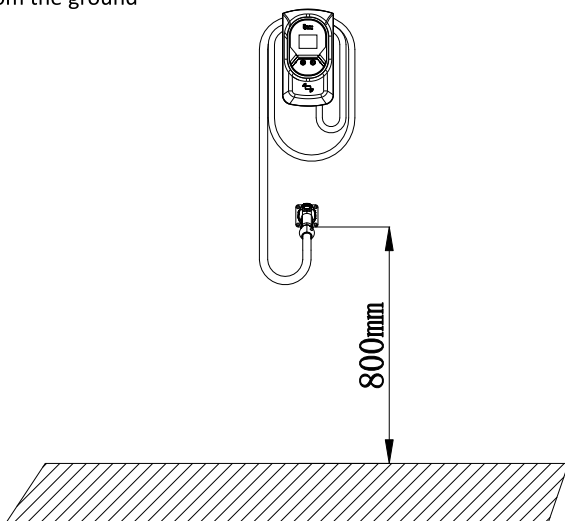
2) Wall-mounted installation and fixing

Hang the mounting holes on the back of the device into the fixing screws on the wall from the front, and fix them;

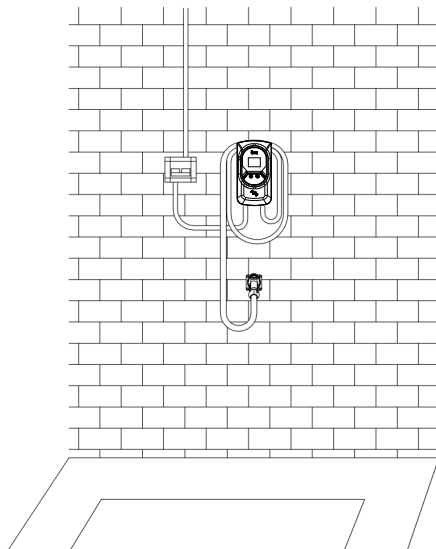


3) Installation of gun base

Just below the equipment, install the gun base, the installation height, 800mm from the ground



4) The installation is over, the effect is as follows:



Power-on inspection and debugging

1) Check before operation

Before running, please check carefully and ensure the following items:

- The installation position of the AC pile is convenient for operation and maintenance
- The AC pile and accessories are correctly connected and installed firmly
- Reasonable selection of leakage protection switch for AC inlet
- No external objects or parts are left on the top of the AC pile

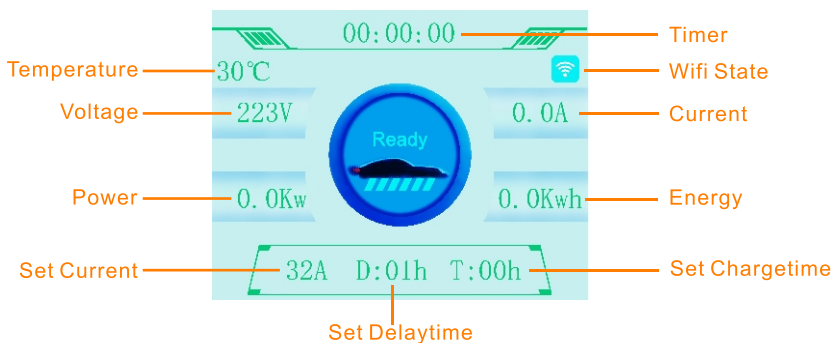
2) Power on the device

1. Make sure that the above inspection items before operation meet the requirements
2. Close the power inlet leakage protection circuit breaker
3. Power on the AC pile: There is about 5 seconds of power-on self-check time, and the green indicator light flashes.
4. After the power-on self-check is completed, observe the status of the LED indicator.

Normal standby: the green light is always on

Equipment failure: red light is always on

Led Screen Description:



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 $9 \pm 0.8V$,
3	Charging	Off	Breathe	Off	Detection point 1 voltage is $6 \pm 0.8V$, the relay is closed
4	Finish	Off	On	Off	Charging complete
5	Err:CP	Off	Off	Fault (0.5s) 1 time	Electrical disconnection
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 $I_e + 2 < I \leq I_e + 4$, 60S, the relay is disconnected, and it will automatically restart after 10S. Repeat three times for permanent disconnection. When $I > I_e + 4$, 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

Warranty:

Damage caused for the following reasons is not covered by the warranty:

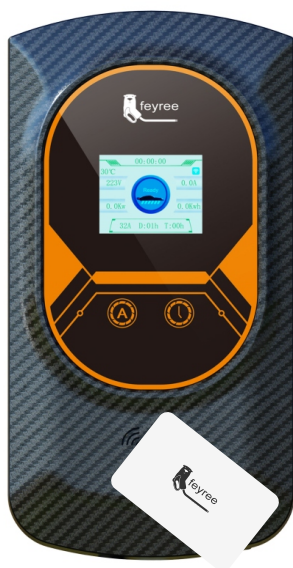
1. Improper handling, installation, use and maintenance by the user.
2. Product falls into the water.

This warranty is for the original purchaser only and is NOT transferable.

How to use RFID card?

1) When the RFID function is cancelled by the charging pile, the charging gun can be directly inserted into the car charging base for charging

2) When the RFID function is turned on, just put the RFID card in the sensing position and start charging, and then you can take away the RFID card



3) If you want to end charging, you can place the RFID card in the sensing position again and end charging after a short delay

4) If you want to continue charging, you must pull out the charging gun or press the emergency stop switch, then reset, and put the RFID card at the sensing position again to continue charging

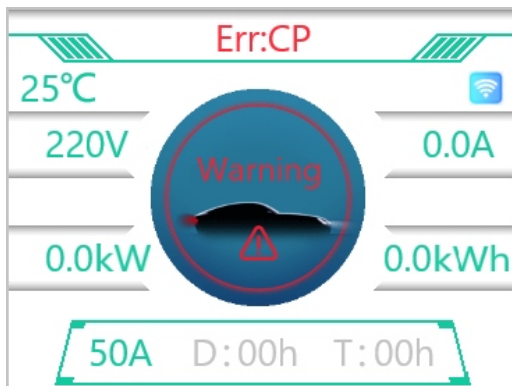
How to cancel RFID card



If you want to continue using the RFID card, just repeat the above operation

(1) Err:cp (abnormal connection of charging gun)

Fault display:

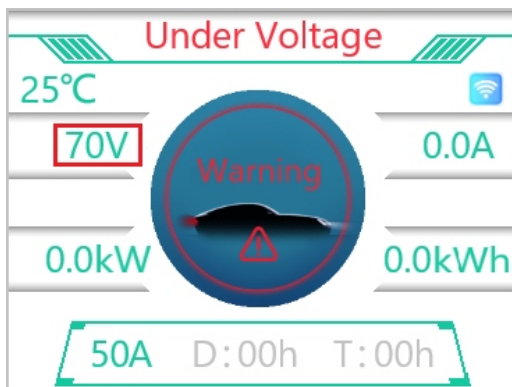


Troubleshooting:

1. check whether the connection of charging gun is correct and reliable
2. if the fault still exists, please contact us

(2) Under Voltage (AC input voltage too low)

Fault display:

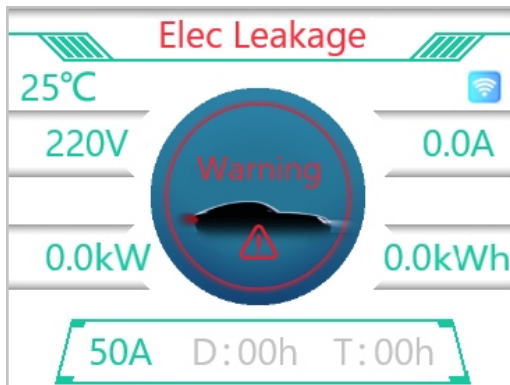


Troubleshooting:

1. use a multimeter to measure the actual input voltage of the equipment
2. if the actual voltage is lower than 85V for a short time, please wait for the power grid to recover to the normal range
3. if the actual voltage is less than 85V AC for a long time, please contact the power supply department
4. if the actual voltage is greater than 85V AC, please contact us

(3) Elec Leakage (Leakage current greater than 30mA)

Fault display:



Troubleshooting:

1. immediately disconnect the leakage / overcurrent protection switch of the distribution box
2. check whether the AC pile output line is damaged or has low impedance connection to the ground
3. after the above problems are eliminated, power on again. If the fault still exists, please contact us