

Charging Piles for Electric Vehicles Charging Pile Instruction Manual

Catalog

Safety Precautions	2
1. Brief account	2
2. Equipment parameters	2
3. Schematic diagram	3
4 Shape Model Diagram	4
5. Dimension instructions of foundation installation	5
6. Charging operation	6
6.1 Charging operation flowchart	6
6.2 Operation interface for starting charging mode	7
6.3 Setting Parameters Process	8
7. Operating instructions and use of emergency stop switch	11
8. User maintenance instructions	12
9. Description of packing, handling, transportation and storage	12

Safety Precautions

- 1. Do not bring dangerous items such as inflammable, explosive, or combustible materials, chemicals, and combustible steam near charging piles.
- 2. Keep the head of the charging gun clean and dry. If there is any dirt, please wipe it with a clean dry cloth. Do not touch the charging refill with your hand when it is energized.
- 3. Do not use charging piles in case of broken charging guns or charging cables, cracks, exposed wires, etc. If anything above is found, please contact the staff in time.
- 4. Do not disassemble, repair and modify charging piles without permission. If there is any need for maintenance and modification, please contact the staff. Improper operation may cause equipment damage and power leakage.
- 5. If there is any abnormal situation during use, please immediately press the emergency button and cut off the power supply.
- 6. During the charging process, the vehicle is not allowed to drive and can only be charged when it is stationary. Please turn off the hybrid tram before charging.
- 7. In case of rain and thunder, please charge carefully.
- 8. Children should not approach and use charging piles during charging to avoid injury.
- 9. Please close the doors on both sides when charging to avoid electric shock.
- 10. During the charging process, the charging connector shall not be forcibly unplugged, which can avoid safety accidents caused by the ignition at the joints.

1. Brief account

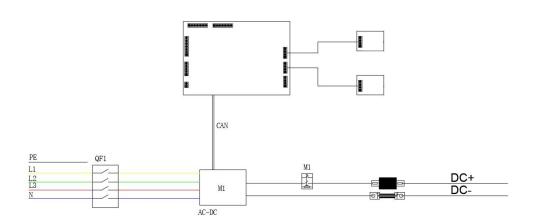
This product is a floor-type DC charging pile, which is mainly used for DC fast charging of electric vehicles. It integrates charging control, human-computer interaction control, communication, billing and metering functions. With protection class up to IP54, it can work safely indoors (outdoors need to be equipped with an awning). The power conversion unit of the charging pile follows the principle of modular design to meet the charging needs of electric vehicles with different capacities. It is the best choice for DC fast charging.

2. Equipment parameters

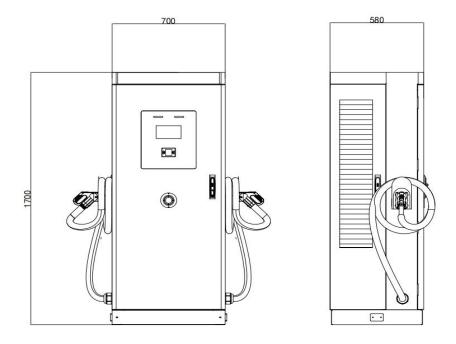
Specifications	Values	
Product Power	120kW 240kW	
Input Voltage	380-480VAC	
Input Frequency	50/60Hz	
Output Voltage	200-1000VDC	
Single Maximum	200A	
Output Current	200A	
Double Maximum	200A	
Output Current	200A	
Charge Mode	Offline swipe card, password charging, operation online swipe	
	card, operation online scan code	
Communication Mode	Ethernet	

Operating Temperature	-20~55°C
Relative Humidity	≤95%
Protection Class	IP54
Safety Design	The protection of leakage, over voltage, over current ,under voltage, emergency stop, full stop charging, short circuit, over temperature.
Installation Mode	Floor-type
Interfaces Count	Two (the line is 5 meters)
Size	700*580*1700mm
Operating environment	Outdoor (Equipped with rainproof shelter), Indoor
Operating occasion	Home charging, commercial charging

3. Schematic diagram

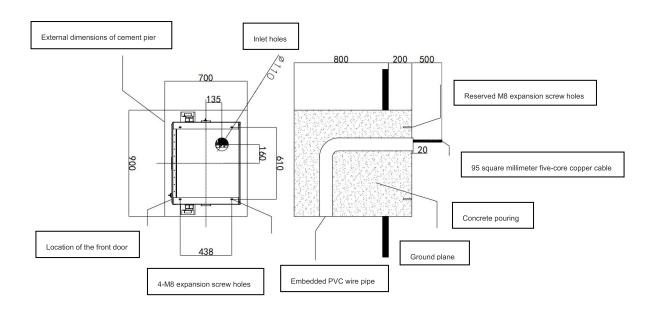


4. Shape Model Diagram

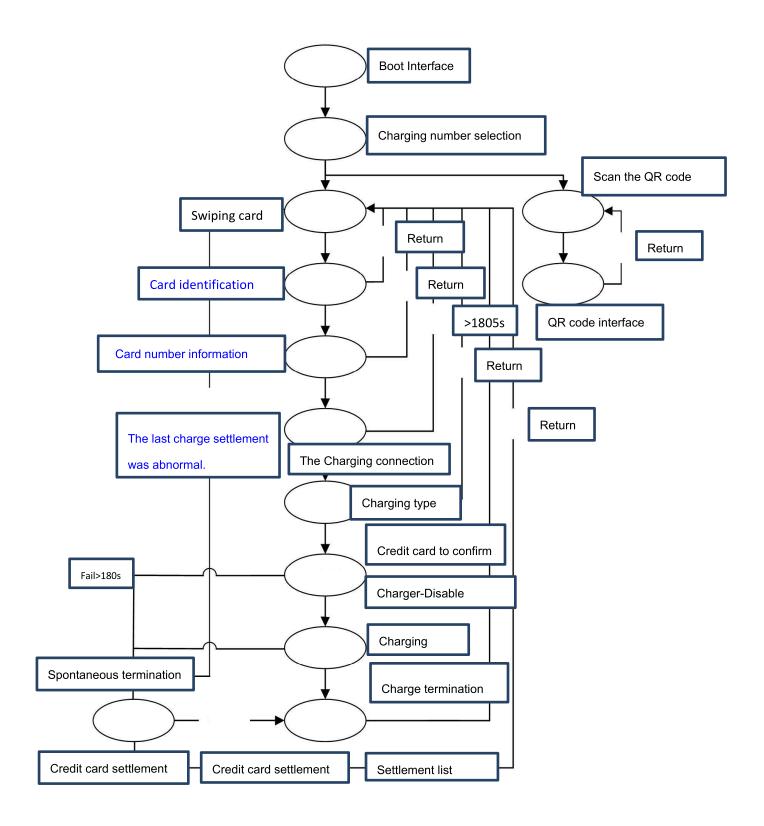




- 5. Dimension instructions of foundation installation
- 5.1 The pile installation needs to be surrounded by an operating space of not less than 1 meter.
- 5.2 Charging piles must be installed on customized concrete.
- 5.3 The height of concrete installation should be 250mm above the horizontal ground and the vertical inclination of installation should not exceed 5 degrees.
- 5.4 Installation method: Drill four holes with a diameter of 18mm and a depth of 100mm on the cement base according to the requirements of the drilling template, then insert the expansion screw into the drilled hole through the expansion bolt, place the pile on the cement base to align the hole, and tighten with bolt $M12\times60$.
- 5.5 The charging pile and cement base should have reliable grounding connection, the grounding resistance must be less than 4Ω .
- 5.6 Rat measures must be taken inside the pile body.



- 6. Charging operation
- 6.1 Charging operation flowchart



6.2 Charging Mode Startup operation interface

This series of charging machine has two charging startup modes: swiping card and scanning

QR code. Specific operation examples are as follows:

a. Charging by swiping card

Click any position on the screen to enter the charging mode selection interface.



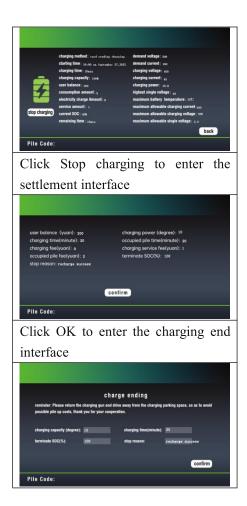
Click the scan code option to enter the QR code interface.



Swipe the card successfully and click Gun A or Gun B to select the charging mode.



Click the swipe card option to enter the swipe card interface.



6.3 Parameter setting process

Click continuously in the upper right, then choose the language to jump to the password input interface.



Enter a 4-digit password ****



The device parameter page is displayed.



Click Save to return to the charging parameter setting interface



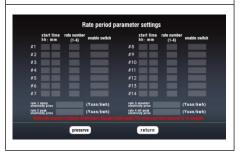
Click Save to return to the power parameter setting interface



Click Save to return to the device parameter setting interface.



Click Save to enter the interface for setting rate period parameters.



Click Save to enter the extended parameter setting interface.



Click Save to enter the interface for setting other parameters.



After setting parameters, click Save to return to the first interface.



b. Scan QR code for charging modeScan the QR code on the pile body directly with applet of WeChat .

- 7. Operation procedures and the use of emergency stop switch
- 7.1 Operating procedures
- 1. Park the car in the charging pile parking space, then unlock the car and open the protection cover and hatch cover of AC charging.
- 2. Connect the charging pile plug to the vehicle socket.
- 3. Operate according to the steps shown in the charging pile of electric vehicles, select Gun A or Gun B, select the required mode, set the corresponding amount, power amount and duration, and

then click OK to charge.

- 4. When the charging indicator lights up, the combined instrument will display relevant parameters.
- 5. The vehicle is unlocked and charged when fully charged. Press and hold the unlock button to pull out the front of the vehicle and insert it into the charging box.
- 6. Close the hatch cover and protective cover of the socket, and then the charging case is finished.

7.2 Use of emergency stop switch

- 1. In case of fire or electric shock, press the emergency stop switch immediately;
- 2. If the machine leaks electricity, please press the emergency stop switch immediately;
- 3. When the emergency stop switch is pressed in the charging state, the charging will stop immediately, the circuit breaker on the output side will be disconnected, and the fault light will turn on;
- 4. In case of pile failure, unable to stop charging, internal circuit short circuit and other abnormal conditions, please immediately press the emergency stop switch;
- 5. When the emergency stop switch is pressed in the non-charging state, the fault light will be on and the display screen will jump to the fault interface;
- 6. When the critical situation is relieved, please rotate the emergency stop switch, otherwise the charging cannot continue

Reminder:

- 1. Please read the operation instructions and precautions carefully.
- 2. Before charging, check whether the charging gun is firmly in contact with the charging interface and whether the indicator works well.
- 3. During the charging process, do not forcibly pull out the charging connector. Forcibly pulling out the charging connector may cause fire at the connector, resulting in safety accidents.
- 4. To stop charging in advance, press the stop button and hold it for 5-10 seconds before pulling out the charging gun.
- 5. If any safety accident occurs during the charging process, such as abnormal sound or short circuit, press the emergency stop button immediately, disconnect all power supplies, and contact the on-site personnel.

8. User maintenance instructions

8.1 Instructions

The maintenance of DC charging pile is relatively simple. During operation, attention should be paid to ventilation and heat dissipation and keep the environment clean. There should be no explosive dangerous medium in the air, and no gas enough to corrode metal and destroy insulation. The device should be placed in a stable place without violent vibration or turbulence. Before the device is put into operation for the first time after transportation, or when it is put into operation again after a long-time outage, the whole machine

should be checked. In addition to checking the wiring according to the drawings, it is also necessary to check whether the components are loose or fall off, whether the connection is strong, whether the contact is good due to transportation and other reasons. After the inspection, carry out the electrification test. Dust removal and cleaning should be carried out regularly according to the degree of ambient air. When cleaning, all power supplies should be cut off, and the surface and internal components of the device and the connection of wires should be cleaned with compressors, vacuum cleaners, or small brushes. Do not use any cleaning agent or damp rags when cleaning the internal components of the device, including the circuit board.

8.2 Maintenance

According to the need to clean the pile inside and outside, regularly check wiring terminals, wiring cables, contactors, switching switches, insurance for excessive dust and dirt. Check whether the insulation of terminals and wiring cables is strong, check the contact force of contactors, contacts and insurance, check whether the jumper cap of the circuit board is loose, whether the component is strong, and the control function and state switch of each module, to avoid the hidden trouble caused by failure.

- 9. Instructions of packing, handling, transportation and storage
- 9.1 Package: 120KW charging pile product weight 270KG including outer box

Dimensions: 1700*900*600mm

- 9.2 The transportation can be by car, vessel or aircraft.
- 9.3 During transportation, attention should be paid to sunscreen and civilized loading and unloading, avoiding violent vibration and impact.
- 9.4 Products stored in Class I environment and stored for more than 6 months are recommended to be re-tested and can only be used if they are qualified.