

# **EV charger Instruction Manual**

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When there is a discrepancy between the actual product and the instruction manual, the actual product shall prevail.

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## Safety precautions

- 1) Do not put flammable, explosive or combustible materials, chemicals, flammable steam and other dangerous goods near the charging pile;
- 2) Children are not allowed to approach or use the charging pile during charging to avoid injury;
- 3) In case of rain and thunder, please charge carefully;
- 4) It is strictly forbidden to use the charging pile when the charging gun or charging cable has defects, cracks, wear, cracks, or the charging cable is exposed. If any, please contact the staff in time;
- 5) Please keep the charging gun head clean and dry. If there is any dirt, please use a clean dry cloth to wipe it. It is strictly forbidden to touch the charging gun core with your hands when it is electrified;
- 6) Do not attempt to disassemble, repair or refit the charging pile. If there is a need for repair or refit, please contact the staff. Improper operation may cause equipment damage, water leakage, electric leakage, etc;
- 7) In case of any abnormality during use, press the emergency stop button immediately to cut off all input and output power;
- 8) During the charging process, the vehicle shall not be driven and can only be charged when it is stationary;
- 9) Please turn off the hybrid electric vehicle before charging.

## Chapter 1 Basic Introduction

### 1.1 Basic parameters

- AC input voltage: 260V-530V ( L1, L2, L3, N, PE)
- Grid frequency: 45 Hz-60Hz
- Power factor:  $\geq 0.99$
- Relative humidity: $\leq 95\%$
- Altitude:  $\leq 2000\text{m}$
- Ambient temperature:  $-40^{\circ}\text{C} \sim 75^{\circ}\text{C}$
- Protection grade: IP54
- Output voltage: 150V-1000VDC

### 1.2 Normal service conditions

- The altitude shall not exceed 2000m.
- The ambient air temperature during equipment operation shall not be higher than  $75^{\circ}\text{C}$  and not lower than  $-40^{\circ}\text{C}$ .
- Daily average relative humidity is not more than 95%, and monthly average relative humidity is not more than 90%.
- The installation and use site shall be free of strong vibration, impact and strong electromagnetic interference, and the induction intensity of external magnetic field shall not exceed 0.5mT.
- The vertical inclination of installation shall not exceed 5%.
- The place of use shall be free of explosive hazardous media, and the surrounding media shall be free of harmful gases and conductive media that corrode metals.
- Three phase five wire system shall be adopted for AC input, and the voltage asymmetry shall not exceed 5%.
- AC input voltage shall be sine wave with non sine content not exceeding 5%.
- The equipment can be installed indoors and outdoors, and pay attention to the ambient temperature of equipment operation. If it is built outdoors, it is recommended to build a rain cover for the charger.

## Chapter 2 Installation and Opening Method

### 2.1 Installation method of charger

#### 2.1.1 Unpacking inspection

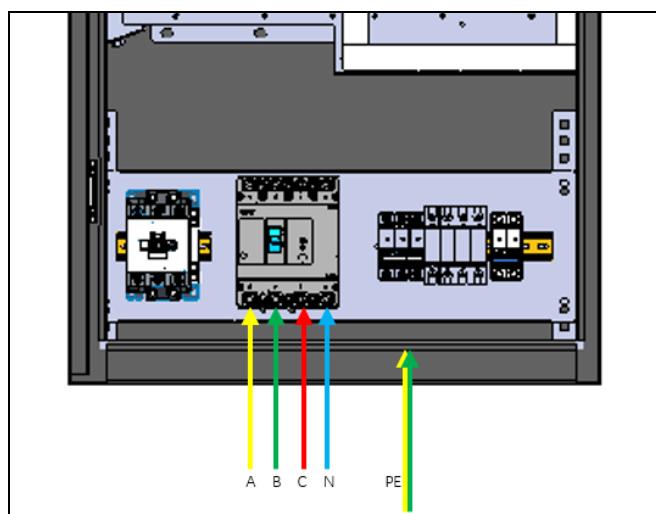
- After receiving the goods, open the box to check whether the cabinet is damaged or not, and whether the module package is damaged or not. If it is damaged or damaged, immediately contact the logistics company and our company.
- Check whether the packing list corresponds to the actual goods. If there is any difference, please contact our company for verification.

### 2.2 Charging machine opening method

#### 2.2.1 System wiring

- The system wiring is three-phase five wire system. Connect the input line to the input terminal and the ground bar according to the system wiring diagram. During wiring, ensure that the circuit breaker at the power supply end and all circuit breakers in the cabinet are in the disconnected position.

Shown in Figure



- Check the upper left corner of the display, no fault codes are displayed. If a fault code is displayed, please contact the manufacturer immediately.

## 2.2.2 Power on operation

- Check whether the internal fasteners are loose and whether the electrical components are intact.
- Whether the system is well grounded, and all switches are in the off position.
- Use a multimeter to measure whether the input power is 260V-530V.
- Close AC circuit breaker, air switch.
- The inspection indicator light should only have a blue light on.
- There is no fault code in the upper left corner of the display.

## 2.3 HMI configuration mode of charger

The charger is already configured at the factory and can be used without special configuration

## Chapter 3 Instructions for Charger

### 3.1 Power on the equipment

1. Confirm that the above inspection items meet the requirements;
2. Close switch JK1, JK2, JK3 and close the door;
3. Power on: The power-on self-test time is about 1 minute, and the screen is turned on;
4. After the power-on self-test is completed, observe the status of the indicator light.
  - **Normal standby: the blue light is always on**
  - **Charging cable connection: green light flashes**
  - **Normal charging: the green light is always on**
  - **Device failure: the red light is always on**

### 3.2 Charge Gun Instructions

Before plugging and charging, observe whether there is any foreign matter inside the charging socket of the vehicle end, whether the reed of the socket is broken; whether there is any foreign matter inside the head of the charging gun, whether the terminals are complete, whether the gun wire is intact.

Press the charging gun button to pull out the charging gun.

Insert the charging gun into the socket of the vehicle, push it a little bit hard, and it will be qualified if the hook falls down to the horizontal state.

If the screen shows “gun connected”, it means the gun is in place, if not, please re-insert the gun.

Do not operate the charging gun during the charging process.

After charging, press the button to unplug the charging gun only when the screen shows “Please unplug the gun”. If you are unable to unplug the charging gun, please contact the operator and do not force to unplug the charging gun to avoid damage.

After unplugging the charging gun, put the charging gun back to its original position and store the cable on the lug.

## Chapter 4 Daily Maintenance Methods of Charger

- The charging gun shall be put back after use and inserted into the gun seat in front of the cabinet to prevent rainwater from entering.
- Chargers without background management system need regular on-site maintenance.
- The dust-proof cotton shall be disassembled and cleaned after 6 months of system operation, and shall be installed and used after being dried. If the dust-proof cotton is not cleaned for a long time, it will cause difficulty in air inlet, increase the module load, and easily cause module damage. .

Maintenance object	job content(Every 3 months)	job content(Once a year)
Cleaning of cabinet (External and internal base plates)	Check for dust and dirt	/
Terminal blocks	Check for dust and dirt	Check dust and dirt; Insulation and fastening
Wiring cable	Check for dust and dirt	Check dust and dirt; Insulation and fastening
Air outlet filter screen	Check the dust accumulation and replace the filter screen according to the operating conditions of the equipment	/
Component fastening	/	Check for looseness
Equipment function inspection	/	Charging control functions include man-machine interface, electrical control, safety protection, etc