

AC EV Chargers User Manual



Before using this product, please read the enclosed operating instructions in full

CATALOGUE

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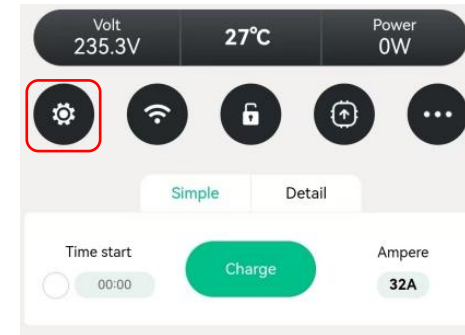
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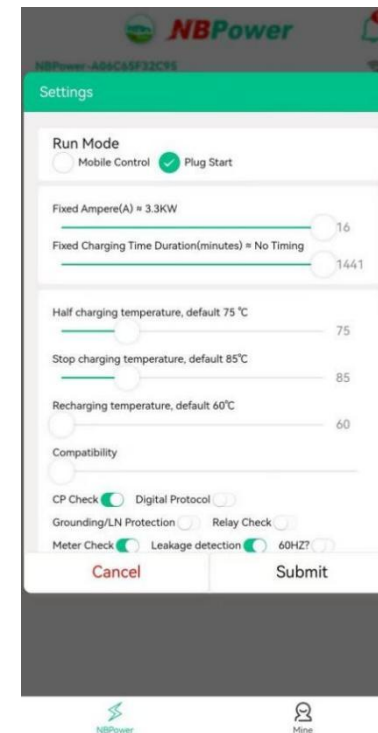
Chapter 4 How to download and use the APP applications

- 4.1 The operation mode of downloading the APP
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⑤After clicking on Settings, more features will be displayed



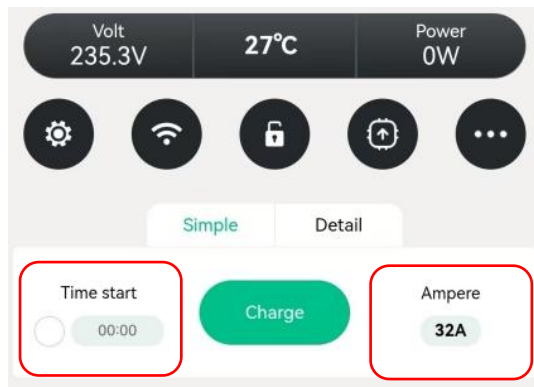
⑥Within the settings, you can change the operation mode, mobile phone start or plug and play, set the ground-free mode, adjust the 50/60HZ frequency and a series of other functions. (For detailed function explanation, please contact online customer service)



③Successful Bluetooth connection will jump to the main operation interface



④You can view the current charging related values in the main control interface, start charging, stop charging and other functions, you can also make appointments for charging, current size adjustment settings



Preface

Thank you for your support of our products, our company focuses on the field of new energy electric vehicle charging. We are committed to providing customers with excellent charging equipment and perfect charging operation solutions.

The electric vehicle chargers developed and produced by our company have advanced functions, stable performance, wide application and strong practicality, and have a good reputation in the industry.

Safety Measures

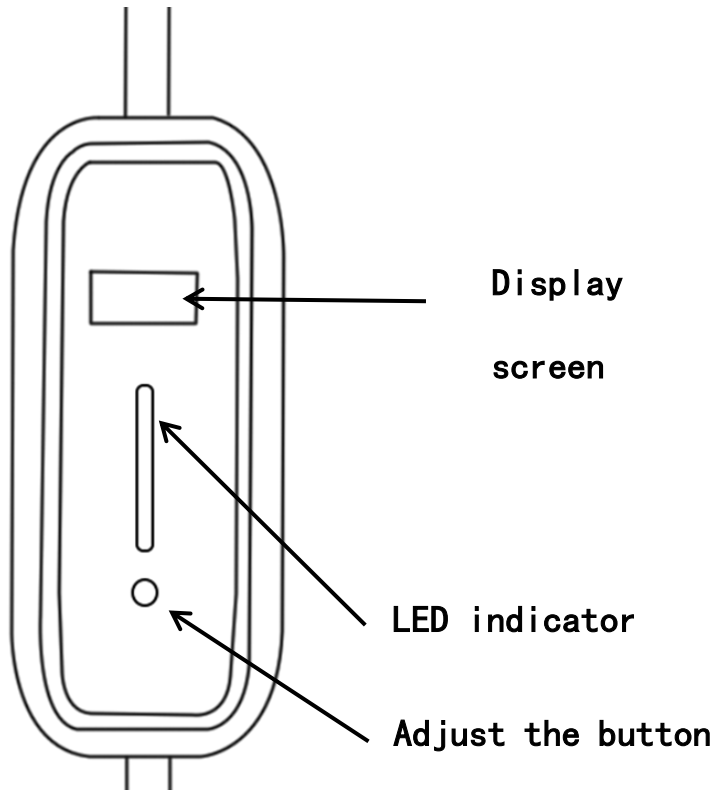
- 1) Do not place flammable, explosive or combustible materials, chemicals, combustible vapours or other hazardous materials near the charger.
- 2) Keep the charging gun head clean and dry. If dirty, wipe with a clean dry cloth. Do not touch the gun when the charging gun is charged.
- 3) It is strictly prohibited to use the charger when the charging gun head or charging cable is defective, cracked, frayed, broken or the charging cable is exposed. If any defects are found, please contact the staff promptly.
- 4) Do not attempt to disassemble, repair or modify the charger. If repair or modification is required, please contact a staff member. Improper operation may result in equipment damage, water and electricity leakage.
- 5) If any abnormality occurs during use, immediately turn off the leakage insurance or air switch, and turn off all input and output power.
- 6) In case of rain and lightning, please be careful charging.
- 7) Children should not approach and use the charger during the charging process to avoid injury.
- 8) During the charging process, the vehicle is prohibited from driving and can only be charged when it is stationary. Hybrid electric vehicles should be switched off before charging.

Chapter 1. Product Introduction Description

1.1 Product introduction

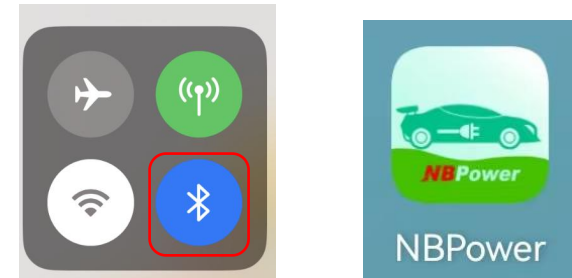
This product is an AC charger, which is mainly used for AC slow charging of electric vehicles..

The design of this product is very simple. It provides plug-and-play, appointment timing, Bluetooth/WiFi multi-mode activation with charging protection function. The equipment adopts industrial design principles to ensure the safe operation of the equipment. The protection level of the whole set of equipment reaches IP54, with good dustproof and waterproof function, which can be safely operated and maintained outdoors.

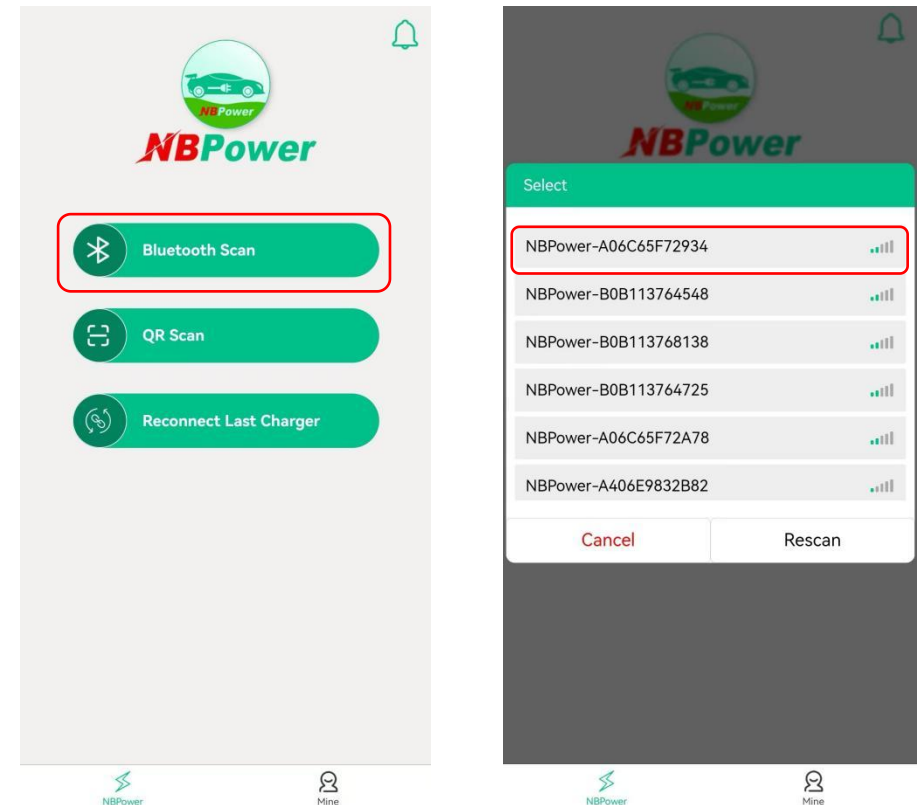


4.2 Bluetooth connection APP operation mode

①First of all, we need to turn on the Bluetooth of the mobile phone, and then open the 'NBPower' APP



② Click on Bluetooth scanning in the initial interface of 'NBPower' APP and select the corresponding Bluetooth connection

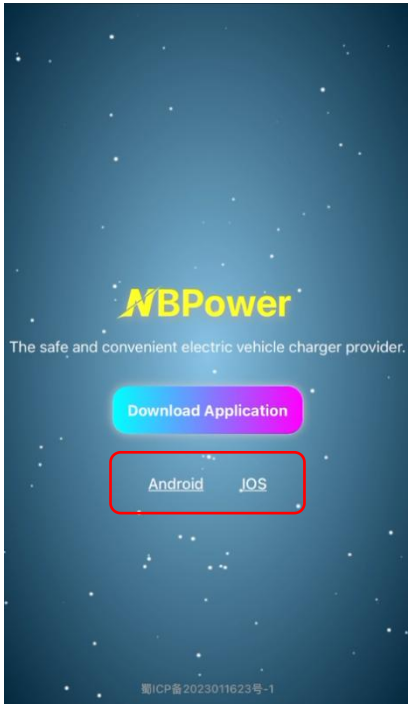


Chapter 4. How to download and use the APP applications

4.1 The operation mode of downloading the APP



- ①Scanning mobile phone to identify the QR code
- ②Once the QR code is recognised, you will be redirected to the download screen, which you need to open in your browser, select the download channel of your corresponding mobile phone model, and then download the ‘NPower’ APP



Product parameter description

Detailed parameters		Parameter details	
Appearance structure	Shell material	Gun head PC9330/Control box PC+ABS	
	Equipment Size	Gun head230*70*60mm/Control box 220*95*50mm	
	Use	Portable	
	Cable specifications	3*2.5mm²+0.75mm²	3*6mm²+0.75mm²
Electrical indicators	Input voltage	85V-265Vac	85V-265Vac
	Input frequency	50Hz/60Hz	
	Maximum power	3.5KW	7KW
	Output voltage	85V-265Vac	85V-265Vac
	Output current	16A	32A
	Standby power	3W	
Environmental indicators	Applicable scenarios	Indoor/Outdoor	
	Working humidity	5%~95% non-condensing	
	Operating temperature	-30℃~+50℃	
	Working altitude	≤2000 meters	
	Protection class	IP54	
	Cooling method	Natural cooling	
	Flammability rating	UL94 V0	
Functional design	human-computer interface	<input type="checkbox"/> LED indicator <input type="checkbox"/> 1.7inch display <input type="checkbox"/> APP	
	Communication interface	<input type="checkbox"/> 4G <input type="checkbox"/> WIFI （match）	
Security by design	Under-voltage protection, over-voltage protection, overload protection, over-current protection, over-temperature protection, leakage protection, grounding protection, lightning protection, flame retardant protection		

1.2 Product performance

- ① Modular design, stable and reliable: the equipment adopts modular design principle, flexible configuration and convenient maintenance.
- ② All-round protection, safe operation: over-voltage protection, under-voltage protection, overload protection, leakage protection, grounding protection, over-temperature protection, low-temperature protection, lightning protection, to ensure safe and reliable operation of the equipment, effectively prevent accidents.
- ③ Easy to use: easy to carry and use.






Product features

- ① High protection level: IP54, support the harsh outdoor environment, no need to set up additional umbrella cover, etc.
- ② Low power consumption: equipment standby power consumption as low as 3W, energy saving and low consumption.
- ③ Strong compatibility: the device is a simple home version, which can be configured by software for remote operation mode. Only the software needs to be set up, and the hardware does not need to be converted.

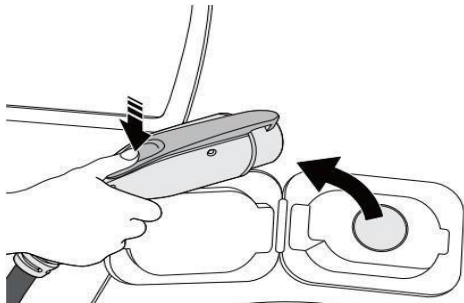
1.3 Product operation environment

- ① Altitude: $\leq 2000\text{m}$
- ② Equipment operating temperature: $-30\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$
- ③ Relative humidity of air: 5%~95%
- ④ Indoor / outdoor operation






Chapter 3. Common Troubleshooting Instructions

Fault name	Possible causes	Troubleshooting recommendations	Fault display code
Voltage protection	AC input voltage may be too high	1. Check input voltage from background monitoring data	
		2. Voltage exceeds 480V AC for a short period of time, wait for the grid to return to normal voltage range or disconnect and restart	
		3. If the fault cannot be eliminated, please contact us	
	AC input voltage may be too low	1. Check input voltage from background monitoring data	
		2. If the voltage falls below 140V AC for a short period of time, wait for the power grid to return to normal voltage range or disconnect and restart	
		3. If the fault cannot be eliminated, please contact us	
Current protection	The AC input current may be too large	1. Immediately switch off the leakage/overcurrent protection switch in the switchboard cabinet	
		2. Check whether there is a low resistance connection between the two AC output wires	
		3. Eliminate the above reasons, turn on the power again, if the fault continues, please contact us	
Leakage current fault	Leakage current to ground may be too high	1. Immediately switch off the leakage/overcurrent protection switch in the switchboard cabinet	
		2. Check whether the AC output line has broken wire or low resistance grounding	
		3. Exclude the above reasons, reconnect the power supply, if the fault continues unresolved, please contact us	
Ground fault	Input/output not standard grounding or reverse connection of L/N wire	1. Immediately switch off the leakage/overcurrent protection switch in the switchboard cabinet 2. Check whether the AC input/output line is normal, or reverse connection with L/N line input 3. Exclude the above reasons, reconnect the power supply, if the fault persists, please contact us	

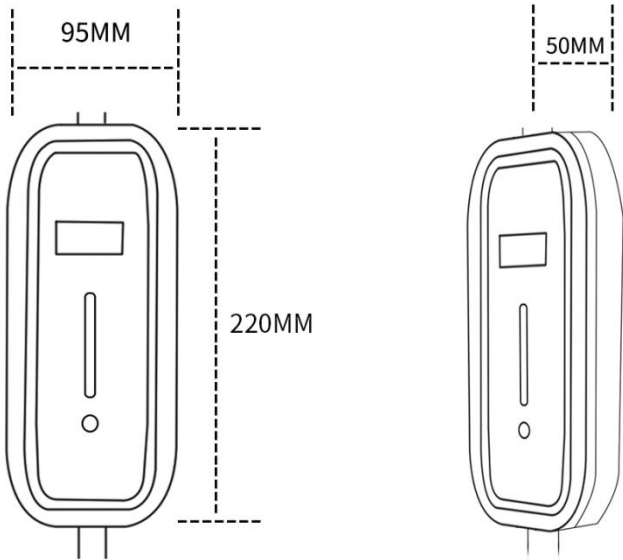
⚠️You need to unlock the vehicle before pulling out the gun. Some vehicles have electronic locks, so you cannot remove the charging gun head normally without unlocking the vehicle. Forcibly pulling out the gun will cause damage to the charging seat of the vehicle.

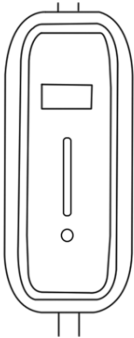
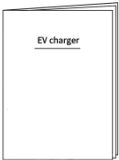



Indicator light colour status meaning

LED Colour	Displayed State	Hidden Meaning	What to do at this point
	Green light flashing	The charger is in standby mode	You can insert the gun at this point.
	Yellow light always on	Charger is plugged in	At this point you can start the charging operation
	Green light to breathe	Charger is on	The car is charging normally.
	Green light always on	Charger is fully charged or de-charged	Unplug the charging gun cable
	Red light always on	The charger is in a faulty state	Check what the charger is reporting as faulty and seek a solution

1.4ProductStructure/Accessories



				
Charging Cable (x1)	Instruction Manual (x1)	Round Storage Bag (x1)		

Chapter 2. Installation and operation instructions



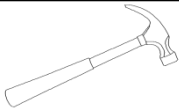
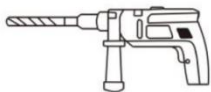
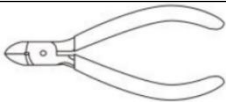
2.1 Unpacking inspection

After the AC charging gun arrives, open the package and check the following things:

Visually inspect the appearance and inspect the AC charging gun for damage during transportation.

Check whether the attached accessories are complete according to the packing list.

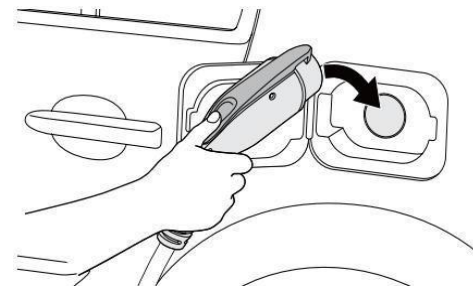
2.2 Installation and preparation

Tool name	Physical drawing	Key features:
multimeter		Check the electrical connections and electrical parameters
screwdriver		Install the wall mounting screws
hammer		Install the expansion tube
electric drill		Holes in the wall
Diagonal pliers		Cut the cable short

prepare material

name	specification	quantity
Power cord	Single-phase power cable	Configure according to the actual installation length

2.4 Charging operation



1) Charging connection

After the EV owner has parked the EV, insert the charging gun head into the charging seat of the EV. Please double check that it is inserted in place to ensure a reliable connection.

2) Charging control

In the case of no appointment charging, when the charging gun is connected to the vehicle, it will start charging immediately, if you need to make an appointment to charge, please use the 'NBPower' APP to make an appointment charging setting, or if the vehicle is equipped with the appointment function, set the appointment time and then plug in the gun to connect.

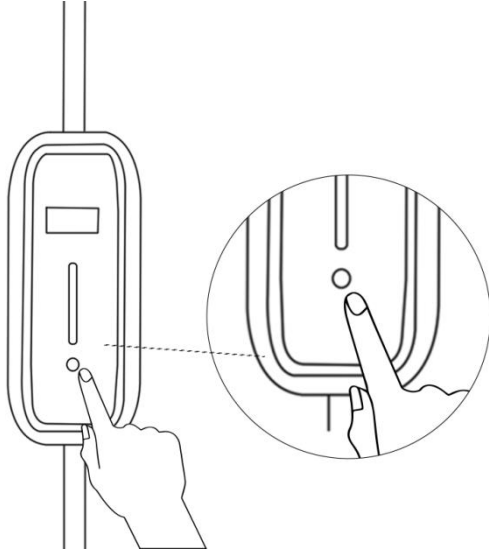
3) Stop charging

When the charging gun is in normal operation, the vehicle owner can end the charging by the following operation.

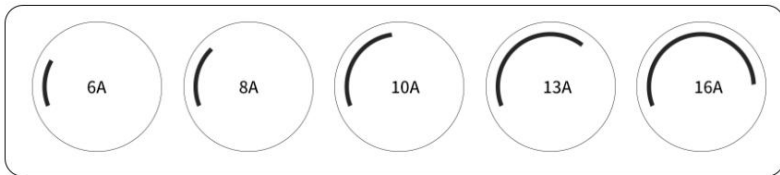
① Unlock the vehicle, unplug the power supply from the socket, and finally remove the charging gun from the vehicle charging seat to finish charging.

②Or click stop charging in the main control interface of the 'NBPower' app, then unlock the vehicle and remove the power plug and charging gun to finish charging.

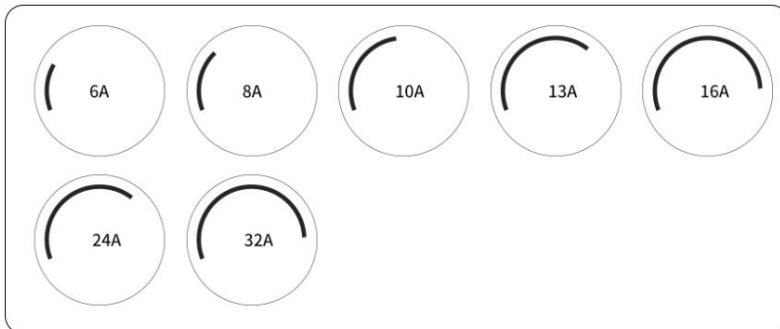
④ Adjustment of current size for each model [Adjustment of current by touching for 1 second, automatic switching of current size]



16A specification model with vehicle charge flow adjustment gear diagram

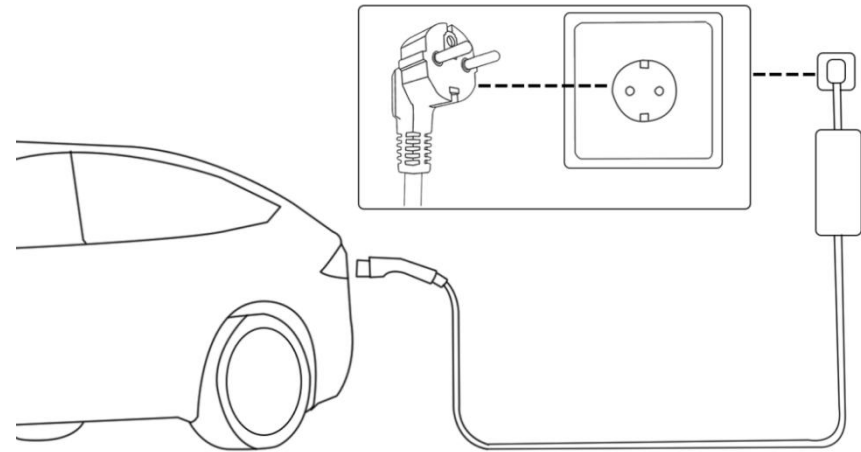


32A specification model with vehicle charge flow adjustment gear diagram



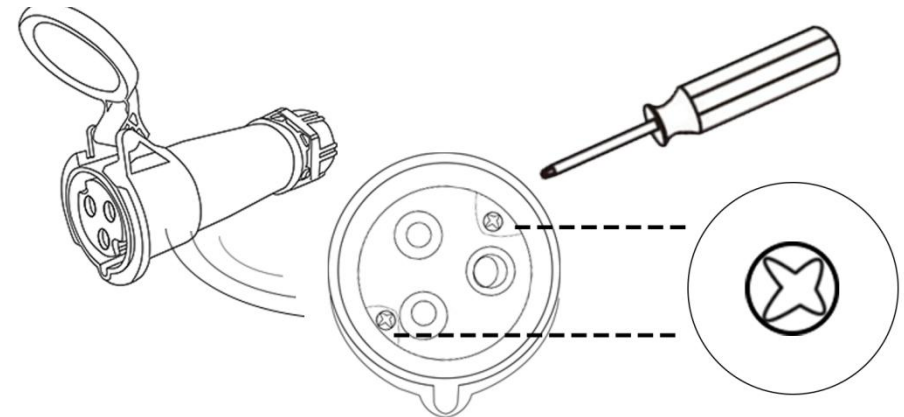
2.3 Equipment power wiring and commissioning

① 16A3.5KW charging gun power plug use instructions schematic diagram

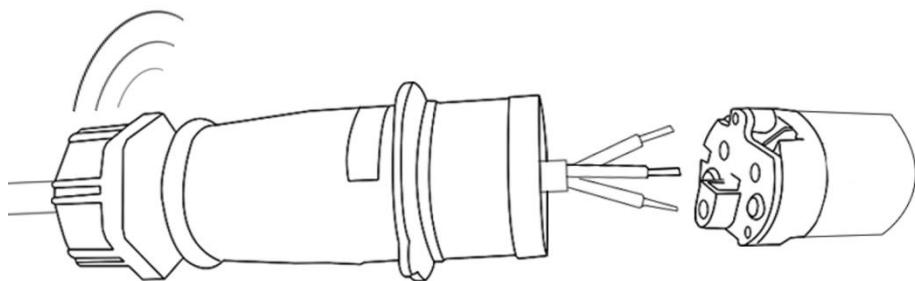


② Industrial plug wiring schematic:

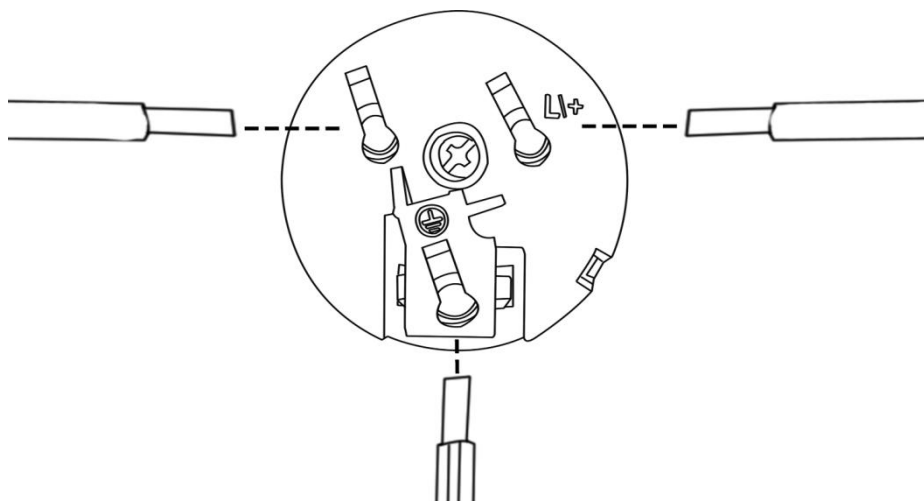
Step 1: Firstly, use a screwdriver to remove the two screws on the front of the plug in turn, and separate the terminals from the plug shell.



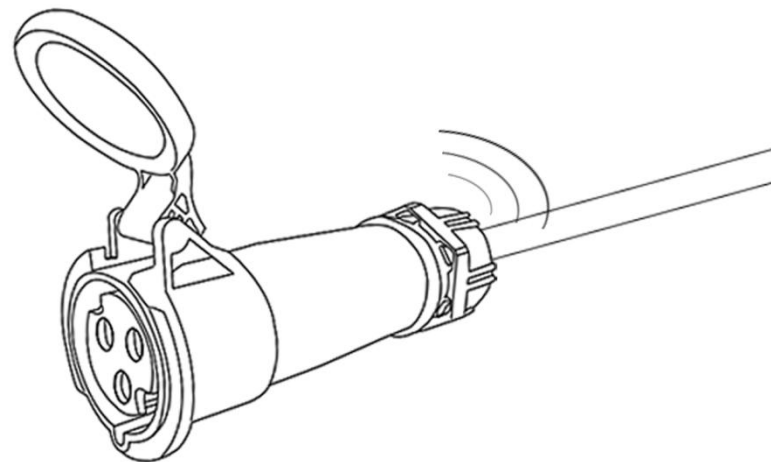
Step 2: Turn the bundle coil at the end of the plug and pass the cable through the inside of the plug.



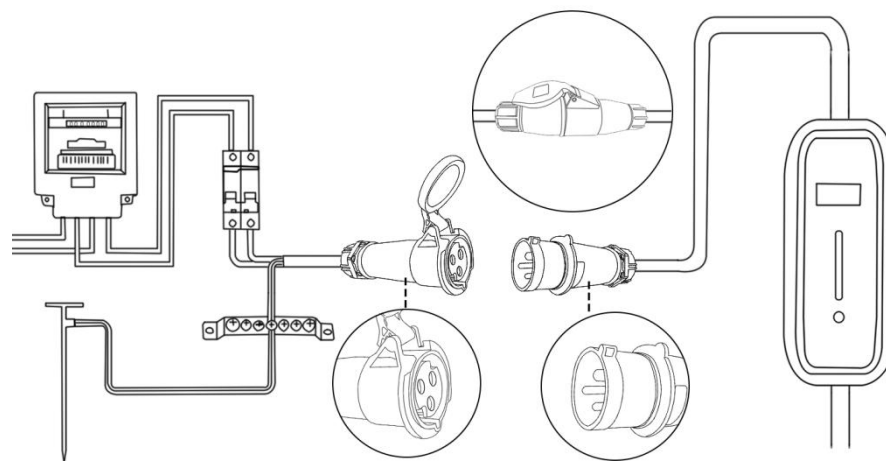
Step 3: Connect the wires according to the line markings shown on the connector and tighten the screws. The screws for fixing the wiring must be tightened.



Step 4: Install the two screws on the front of the plug back in and turn the bundle coil on the end of the plug tightly, the plug is installed.



③ Three-phase power 11KW-22KW equipment wiring effect diagram



※Please arrange for a professional/electrician to operate the wiring installation.