VERDEXON

BORN FROM EARTH, BUILT FOR TOMORROW

Installation, Operation & Maintenance Guide.

Earth Lite Series AC Charger

7kW/11kW/22kW

Table of Contents

1. Introduction and general information 1
    1.1 Disclaimer and Warranty Conditions 1
    1.2 Purpose of this document 1
    1.3 Language 1
    1.4 Illustration 1
    1.5 How to use this document 1
    1.6 Abbreviation 1
    1.7 Term 1
    1.8 General Signs and Signal Words 2
2. Security 3
    2.1 General Safety Instructions 3
    2.2 Owner's Responsibilities 3
    2.3 Personal Protective Equipment 3
    2.4 Safety Instructions 3
        2.4.1 Safety Instructions - Installation of Equipment 3
        2.4.2 Safety Instructions - Grounding Specifications 4
        2.4.3 Safety Instructions - Maintenance of Equipment 4
        2.4.4 Safety Instructions - Use of Charging Piles 4
    2.5 Discard the device or parts of the device 4
    2.6 Network Security 5
3. Product Description 6
    3.1 Briefing 6
        3.1.1 Product Model Description 6
        3.1.2 Model nameplate - device identification 6
    3.2 Product Overview and Main Components 6
    3.3 Mode of Operation 6
    3.4 Charging Mode 6
    3.5 Communication method (optional) 7
    3.6 Self-test and self-recovery function 7
    3.7 Security Protection Functions 7
4. Technical Data 8
5. Storage and Transportation 9
    5.1 Storage 9
    5.2 Transportation and Handling 9
    5.3 Inspection of packaging specifications 9
6. Installation 10
    6.1 Unpacking inspection 10
        6.1.1 Inspection Content 10
        6.1.2 Execution after inspection 10
    6.2 Prepare cables and tools 10
    6.3 Mechanical Installation 10
    6.4 Electrical Installation 11
        6.4.1 Connecting the AC Input Cable (Single Phase) 11
        6.4.2 Connecting AC Input Cables (3 Phase) 11
    6.5 Post-Installation Checks 11
7. Operation 12
    7.1 Power on 12
    7.2 Tuya APP 12
        7.2.1 Device Connection 12
        7.2.2 Tuya unbinding/resetting settings 12
        7.2.3 Device Number Settings 12
        7.2.4 Mode Selection 12
        7.2.5 Reserve power 12
        7.2.6 Current Setting 12

7.2.7 Remote Upgrade 12
7.2.8 Shared Devices 12
7.3 Charging Process 13
7.3.1 Start a charging session 13
7.3.2 Stop the charging session 13
7.3.3 Indicator Status 13
7.3.4 Emergency stop of the charging session 13
7.4 Precautions for Use 13
8. Maintenance and Cleaning 14
8.1 Maintenance Schedule 14
8.2 Inspect the cabinet 14
9. Fault diagnosis 15
9.1 Troubleshooting 15
9.2 Troubleshooting Form 15
9.3 Overview of Error Codes 16
10. Appendix 17
10.1 Quality Assurance 17
10.2 Precautions 17

1. Introduction and general information

1.1 Disclaimer and Warranty Conditions

The equipment manufacturer shall not be liable for any damages, losses, costs or expenses resulting from improper handling, installation and use of the products described in this document, in particular losses resulting from failure to comply with the instructions of this document and other applicable regulations and standards, such as installation, transport, occupational health, digital safety and other safety standards.

1.2 Purpose of this document

This document applies to the owner of the charging station, the installation engineer and a description of the owner's responsibilities.

This document applies to these devices (including all variants and options): NEAH series, and is intended to provide the safety information needed to accomplish the following tasks:

Transportation and storage equipment

Install the device

Operate the equipment

Perform basic maintenance tasks

1.3 Language

The original description of this document was written in English (EN-US). All other language versions are translations of the original instructions and the manufacturer is not responsible for errors in the translation. If in doubt, please refer to the original English version.

1.4 Illustration

This file does not show the configuration of all charging stations. Therefore, the illustrations in this file only show typical settings. They are for illustrative and descriptive purposes only.

1.5 How to use this document

Make sure you understand the structure and content of this document. Read the safety section and make sure you understand all the instructions. Follow the steps in the program exactly and in the correct order.

1.6 Abbreviation

Abbreviations	Definition
AC	Communication
HMI	Hmi
EV	Electric vehicle
EVSE	Electric vehicle power supply equipment
MCB	Miniature circuit breakers
RFID	Radio Frequency Identification
OR	Protective grounding
PPE	Personal protective equipment

1.7 Term

Term	Definition
Cabinets	The housing of the charging pile, including the internal parts.
contractor	A third party engaged by the owner or site operator to carry out engineering,
Grid providers	The company responsible for the transportation and distribution of electricity.

Local regulations	All regulations that apply to charging stations throughout their entire life
owner	The legal owner of the charging station.
user	Electric vehicle owners who use charging stations to charge their electric

1.8 General Signs and Signal Words

In manuals and on equipment, hazardous or hazardous areas, components are identified by symbols, icons, or labels to indicate the precautions to be followed during installation, operation, and maintenance of equipment. The safety symbols are shown in the following table:

Symbol	Description
	General Risks
	With the signal word "dangerous": failure to follow instructions could result in injury or death.
	With the signal word "warning": Failure to follow instructions may result in injury.
	With the signal word "Caution": Failure to follow instructions may result in damage to EVSE or other property.
	Voltage with a risk of electric shock
	Hot surfaces can lead to the risk of burn injury
	With the signal word "Attention": Caution provides more data and makes the step easier to perform
	Information about the condition of the EVSE before starting the program
	Requirements for the personnel required to perform a procedure
	General safety guidance for the procedure
	Information on spare parts required for the procedure
	Supporting device information required by the program
	Information on supplies (consumables) required for the procedure
	Make sure to disconnect the power supply to the EVSE
	Electrical technical expertise is required according to local regulations
	Protective Ground (PE)
	Waste of electrical and electronic equipment

2. Security

2.1 General Safety Instructions

The warnings contained in this document and related documents do not replace your responsibility to apply common sense to work on charging stations.

You can only perform the programs shown in the relevant file and the procedures that you are eligible to perform.

Follow local regulations and instructions in this manual. In the event of any inconsistency or contradiction between any requirements or procedures contained in this document and any such local regulations, the stricter provisions shall prevail in both the requirements and procedures set forth in this document and the local regulations.

2.2 Owner's Responsibilities

The Owner has a legal responsibility to protect the User or third parties and must comply with the following instructions:

Understand and enforce the laws and regulations of the country and region where you are located.

Identify hazards posed by on-site working conditions (based on risk assessment).

The charging station should be operated with a protective device installed.

An emergency plan should be developed that guides people on what measures to take in case of an emergency.

Make sure there is enough space around the charging station to carry out maintenance and installation work safely.

After installation or maintenance work is complete, ensure that all protective devices are installed.

Make sure the installer is qualified to work on high-voltage and high-current electrical installations.

2.3 Personal Protective Equipment

Personal protective equipment (PPE) refers to clothing or equipment designed to protect and reduce an employee's exposure to workplace hazards and injuries.

Symbol	Description
	Protect the garment
	Safety gloves
	Safety shoes
	Protect your eyes
	Work hard hats

2.4 Safety Instructions

- Follow the steps indicated in this manual to perform the procedure.
- You may perform any services as a qualified installer or for a user of the device only if you are fully qualified.

2.4.1 Safety Instructions - Installation of Equipment

- Installation engineers are qualified to work in high-voltage and high-current electrical installations.
- The installation engineer must be fully aware of the charging station and its safe installation instructions.

- Wear the correct personal protective equipment.
- Before proceeding with any installation activities, make sure that there is no voltage on the input cable.
- During installation, ensure that untrained personnel maintain a safe distance.

- Use sufficiently sized and insulated wires to handle rated current and voltage needs.
- Ensure that the load capacity of the grid meets the requirements of the equipment.
- Adopt designated safety devices and protective equipment in accordance with local regulations.
- Ensure that the connection to the charging station complies with all applicable local regulations.

2.4.2 Safety Instructions - Grounding Specifications

- Ensure that the charging pile is reliably grounded and the connection complies with local standards and specifications.

2.4.3 Safety Instructions - Maintenance of Equipment

- Wear the correct personal protective equipment.
- Throughout the cleaning or maintenance process, make sure that there is no supply voltage on the input cable.

- During cleaning or maintenance, ensure that unauthorized personnel keep a safe distance.
- If safety or protective devices must be removed for cleaning or maintenance, restore them to their original condition as soon as the work is complete.

2.4.4 Safety Instructions - Use of Charging Piles

- It is strictly forbidden to use equipment with faulty or disabled identification.
- Unless expressly stated otherwise, the appliance or parts of the appliance may not be connected to other machines or equipment.
- It is strictly forbidden to arbitrarily modify the operating parameters in order to change their performance or change their isolation.

- Do not use if the device presents a safety hazard: the connector or cable is damaged; Water got into the device; The device shows signs of impact, lightning strike, or other damage.

2.5 Discard the device or parts of the device

Equipment and parts can contain hazardous substances, and improper waste disposal can have a negative impact on the environment and human health. Proper disposal of used equipment and parts helps to promote the reuse and recycling of materials and protect the environment.

- Comply with local laws and regulations when discarding parts, packaging materials, or charging stations.
- Electrical and electronic equipment is disposed of separately in accordance with the regulations for the disposal of waste electrical and electronic equipment.
- At the end of use, please do not mix or dispose of the device with household waste, and should hand over the device to a waste collection point in the local community for recycling.
- For more information, please contact your country's government waste management department.

2.6 Network Security

Charging stations are connected and transmit information and data via a network interface, and it is the sole responsibility of the owner to provide and continuously ensure a secure connection between the charging station and the owner's network or any other network. The Owner uses the Embedded Software at its own risk and is responsible for the quality, accuracy and performance.

3. Product Description

3.1 Briefing

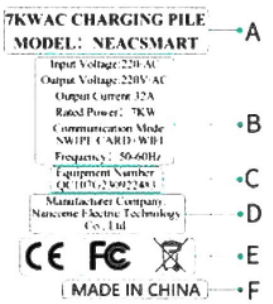
NEAH is an AC charging station that powers electric vehicles, integrating human-computer interaction, charging control, remote communication and intelligent safety protection. The product series has a variety of power configurations, and the charging interface has different standard configurations such as national standard, European standard, American standard and Japanese standard.

3.1.1 Product Model Description

Example: NEAH-7-S

NE: Maker A: AC output H: Household type Power:7/11/22kW S:single plug D:dual plugs

3.1.2 Model nameplate - device identification



Number	description
A	The model name of the electric vehicle power supply equipment
B	The main technical parameters of the power supply equipment of electric vehicles
C	The serial number of the electric vehicle power supply equipment
D	manufacturer
E	Certification mark
F	Producer

Note:
Please find the nameplate on your Electric Vehicle Charging Equipment (EVSE) to view the relevant data.

3.2 Product Overview and Main Components

Ref.	Parts	Function
1	Indicator light	Different colors and flashing patterns provide users with information about the status of the EVSE device
2	Touchscreen display	Control and monitor charging sessions
3	RFID readers	Read information from RFID cards
4	Charging connector	Connect to the EV charging port, and the charging pile will provide power to the EV
5	Panic button	In an emergency, press the emergency stop button quickly to immediately stop the charger operation
6	AC cable inlet	Grid AC cable entry

3.3 Mode of Operation

This device can support two modes of operation: local and Tuya APP.

3.4 Charging Mode

Users can choose three modes: instant charging, normal charging, and timed charging:

- Instant charging, plug in the gun and start charging, no authorization is required.
- For normal charging, you can use the Tuya APP or swipe the card to authorize and start and stop the charging pile.

- Timed charging, the user sets the charging on/off time.

3.5 Communication method (optional)

Support WIFI communication.

3.6 Self-test and self-recovery function

The equipment has self-test and fault alarm functions. After troubleshooting, the function can be automatically restored, but charging will not be automatically restored.

3.7 Security Protection Functions

It is equipped with functions such as emergency stop, reverse connection, anti-misoperation, over-voltage, under-voltage, abnormal charging, over-current, short circuit, leakage, over-temperature protection, lightning protection and other safety protection functions.

4. Technical Data

Model	Description	NEAH-7-S	NEAH-11-S	NEAH-22-S/NEAH-22-D
AC Input Specification	Input power connection	1Ph + N + PE (L1, N, PE)	3Ph + N + PE (L1, L2, L3, N, PE)	
	AC input voltage	220 VAC ± 15%	400VAC± 15%	
	AC input frequency	50 / 60 Hz		
	Maximum input current	32A	16A	32A
AC Output Specification	Charging port	GB/T Type2 Type1		
	Output voltage	220 VAC ± 15%	400VAC± 15%	
	Maximum output current	32A	16A	32A
HMI	Optional	3.5-inch LCD touch screen		
Signal indicator	Standard	Yes		
RFID	Standard	Yes		
Internet connection	Optional	WIFI		
size		Product: W378 D320 H1362mm Package: W400 D460 H1442mm		
weight		G.W.:~27kg N.W.:~25kg		
Ingress protection		IP55		
Environmental conditions	Operating temperature	-25℃ ~ +50℃		
	Storage temperature	-40℃~+65 ℃		
	relative humidity	5% ~ 95%, non-condensing		
	Use elevation	≤ 2000 m		
	Use environment	Indoor or outdoor		
Compliance, safety standards		IEC/ EN 61851-1:2019 IEC/ EN61851-21-2:2021 EN60335-1:2012+A15:2021EN 60335-2-65:2003+A12:2022		
Security		Over-current, over-voltage, under-voltage protection, comprehensive surge protection, grounding fault protection		
Cooling method		Air-cooled		

Note: The parameters of products with different models vary.Please refer to the actual specifications.

5. Storage and Transportation

5.1 Storage

Please store the device in accordance with the relevant specifications of this manual. Do not expose the charging infrastructure equipment to places with adverse weather conditions (such as rain, snow or high humidity environments) and avoid storing in environments containing alkaline or other corrosive or explosive gases.

5.2 Transportation and Handling

The equipment must be packaged in complete condition before leaving the factory, and must be operated in accordance with the requirements of the specification during transportation, loading and unloading, so as to avoid strong shock and vibration to prevent damage to the outer packaging of the product.

5.3 Inspection of packaging specifications

- Check and follow the instructions of the symbol on the package:

Symbol	Description
	Handle with care
	fragile
	Keep dry
	Do not stack

- Read and follow the handling and safety instructions marked on the package.
- Inspect the outer packaging of the product for damage or scratches.
- After receiving the goods, if you find that the outer packaging of the equipment is damaged or crushed, please do the following:
- Inspect the equipment, unpacking it if necessary to check the extent of damage to the equipment, and take photos as evidence.
- Record the damage on the shipping documents (e.g. CMR/bill of lading or AWB/air waybill) before receiving the goods.
- Accept the equipment with the reservation and return the shipping documents with the reservation of the damage indication to the carrier.

6. Installation

6.1 Unpacking inspection

6.1.1 Inspection Content

- Check whether all product accessories are complete, and the packing list is as follows:

S/N	Name	Quantity	Remark
1	AC charging pile	1	The contents of this packing list refer to the equipment and materials included in the box
2	Factory Report (Certificate of Conformity)	1	
3	Instructions	1	
4	RFID card	2 (Available only in the offline version)	
5	Install the template	1	
6	Assemble screws and plugs	1 set	

- Inspect the appearance of the product for abnormalities such as scratches, rust, cracks, or deformation.
- Check that the display and charging connector are in good condition, and that the cables are not damaged or scratched.

6.1.2 Execution after inspection

If the inspection finds that the device is damaged or the accessories don't match the list, do the following:

- Notify the transporter immediately and contact the local dealer or manufacturer's service department.
- Take photos as evidence of damage.

6.2 Prepare cables and tools

The selection of cables should comply with the relevant specifications of the electrical industry and the requirements of this manual.

Please refer to the following table to determine the cable, the cable selection in the table is for reference only, please refer to the judgment of the professional construction qualification unit.

Product power	Input Cable		
	Cable Name	Cable Position	Cable Specification
7KW	AC single-phase L	MCCB L	≥6mm²
	AC input N	MCCB N	≥6mm²
	AC PE line	MCCB PE	≥4mm²
11KW	AC three-phase A	MCCB L1	≥6mm²
	AC three-phase B	MCCB L2	≥6mm²
	AC three-phase C	MCCB L3	≥6mm²
	AC input N	MCCB N	≥6mm²
	AC PE wire	MCCB PE	≥4mm²
22kw	AC three-phase A	MCCB L1	≥10mm²
	AC three-phase B	MCCB L2	≥10mm²
	AC three-phase C	MCCB L3	≥10mm²
	AC input N	MCCB N	≥10mm²
	AC PE wire	MCCB PE	≥6mm²

6.3 Mechanical Installation

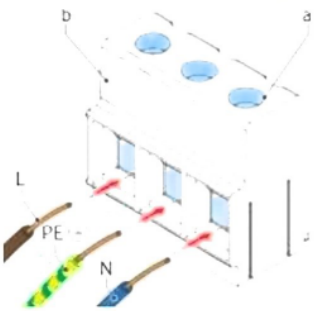
Please refer to the specific product installation instructions for details.

6.4 Electrical Installation

The charging pile is electrically connected to the grid through a circuit breaker:

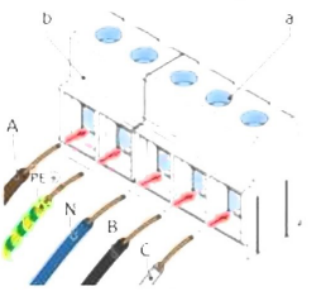
- Install a compliant circuit breaker next to the charging station.
- The AC cable of the grid is connected to the circuit breaker input.
- Connect the AC input cable reserved for the charging pile to the circuit breaker output.

6.4.1 Connecting the AC Input Cable (Single Phase)



1. Loosen the screws (a) in the three holes.
2. Strip the wire and insert the cable connector into the terminal strip (B).
3. Connect the following wires:
   - Grounding Wire(PE)
   - Neutral Line(N)
   - Fire Wire (L)
4. Tighten the screws (a)

6.4.2 Connecting AC Input Cables (3 Phase)



1. Loosen the screws (a).
2. Insert the cable connector into the terminal strip (b).
3. Connect the following wires:
   - Grounding Wire (PE)
   - Neutral Line(N)
   - L1 (A)、L2 (B)、L3 (C)
4. Tighten the screws (a)

6.5 Post-Installation Checks

- Check that the cabinet installation is horizontal, vertical, and secure.
- Check whether the cabinet is damaged or painted. If there is paint loss, the paint part needs to be repaired immediately with anti-rust paint to prevent corrosion.
- Check that all cable connections are secure and reliable, and verify that the specifications of all circuit breakers and cables are correct.

7. Operation

7.1 Power on

- Close the circuit breaker that supplies power to the charging pile and energize the charging pile.

Warn:
Be careful when using electricity for electric shock, please protect and operate according to the regulations.

- The device starts a series of self-tests to ensure that the charger is working properly and safely: if the charger detects a fault, the fault LED lights up and an error code is displayed on the screen.

7.2 Tuya APP

Download the TUYA APP from the app store on your mobile phone, install it and complete the registration.

7.2.1 Device Connection

- Open the Tuya APP, log in and enter the main page;
- Click to find the device to be bound and add: A 2.4GHz Wi-Fi is required to add the device;

Note: If you can't search for the device for a long time, first check whether the mobile phone is connected to WIFI, and finally you can press the emergency stop 5 times in a row, exit the APP and try to configure the network again.

7.2.2 Tuya unbinding/resetting settings

Continuously press to trigger and recover the emergency stop fault five times to unbind Tuya WIFI, which will not clear the data stored in the pile, and will only be unbound by Tuya WIFI.

7.2.3 Device Number Settings

After the device is bound, you can enter the settings page and modify the device number.

7.2.4 Mode Selection

Users can choose three modes: instant charging, normal charging, and timed charging.

7.2.5_ Reserve power

It only takes effect in the offline state, and does not enable the power judgment in the default state; After setting, it will stop when the preset power value is reached, and the charging will stop when either the timer mode or the predetermined power level meets the stop condition.

7.2.6 Current Setting

The default output current of the charging pile is 32A, and the maximum output current can be adjusted in the range of 6A~32A, select the corresponding current value, click OK, the setting is successful, and the tab changes to the corresponding current value.

7.2.7 Remote Upgrade

When the software is upgraded, users need to click the edit icon in the upper right corner to enter the Tuya APP management interface. Click the Device Upgrade button, and if there is a version update, click Start to upgrade the software.

7.2.8 Shared Devices

Enter the Tuya APP management interface, click Device Sharing, and share the device with other accounts through the WeChat link or Tuya Smart Account for joint use of the device.

7.3 Charging Process

7.3.1 Start a charging session

- Park your EV where the charging station has access to the connector.
- Remove the charging connector from the exterior and plug it into the electric vehicle's charging port.

Users can choose three modes to start charging: instant charging, normal charging, and timed charging:

- Instant charging, plug in the gun and start charging.
- Normal charging, you can use Tuya APP or swipe RFID card to authorize start.
- Timed charging, reaching the predetermined time set by the user, starts charging.

7.3.2 Stop the charging session

- The battery will automatically stop when it is fully charged, the indicator light will be on, and the mobile phone app and display screen will show that the electric vehicle is fully charged.
- Authorize the stop using your RFID card or mobile app.
- In timer mode, it will automatically stop when the predetermined time is reached.
- Remove the connector from the vehicle and place it back on the stand.

Danger: Dangerous voltage
During the charging phase, the charging connector will be locked in place to prevent unplugging.

7.3.3 Indicator Status

Status	Blue	Green	Red
Standby	Bright	Extinguish	Extinguish
The plug-in gun did not start	Extinguish	Bright	Extinguish
Charging	Extinguish	Flashing (1.5S on, 1.5S off)	Extinguish
Full	1 fast and 1 slow	Extinguish	Extinguish
Fault	Extinguish	Extinguish	Bright

7.3.4 Emergency stop of the charging session

The manufacturer has installed an emergency stop button on the right side of the charging station, if there is an emergency, please do the following:

- Press the emergency stop button. The device stops working.

If the emergency stop button is accidentally pressed:

- Confirm that the situation is safe.
- Pull the emergency stop button out by twisting the button. The device reactivates and returns to normal operation after a few seconds.

7.4 Precautions for Use

- It is strictly forbidden to directly plug and unplug the charging gun head during charging.
- It is forbidden to pull or twist the charging cable too hard.
- When plugging in or unplugging the charging cable, pay attention to the force and avoid using excessive force.
- In non-emergency situations, please do not press the panic button at will.
- In the event of abnormal noise, vibration, sparks, smoke or other serious conditions during operation, the emergency button should be pressed immediately.
- When charging is complete, remember to put the charging connector back in place.

8. Maintenance and Cleaning

8.1 Maintenance Schedule

Task	Frequency
Clean the cabinet cover and enclosure of the charging pile	Every three months
Inspect the cabinet with the naked eye for damage	Before each use
Visually inspect EV charging cables or sockets and connectors for damage	Before each use

Danger: Dangerous voltage
Do not use high-pressure water to flush the charging pile. Water will leak into the cabinet.

8.2 Inspect the cabinet

- Check these parts for damage:

Part	Damage
Charging cables, sockets, and connectors	cracks or cracks
	The internal wires of the cable can be seen
display screen	break
Cabinet coating	cracks or cracks

- If damage is found, suspend use of the device and contact your local dealer or manufacturer's service center.

9. Fault diagnosis

9.1 Troubleshooting

- With the help of the information in this document, try to find a solution to the problem.
- If you can't find a solution to the problem, contact your local dealer or manufacturer's service center.

9.2 Troubleshooting Form

Issue	Possible Causes	Possible Solutions
The current is too high	The side of the electric car is overloaded	Contact the manufacturer's service center or a qualified electrical contractor
The AC input voltage is too high or too low	L is reversed to N	Please contact a qualified electrical contractor
The electrical connection is faulty		
The charging pile is overheating	The ambient temperature exceeds the operating temperature specification	The charging station will reduce the current output
		Check that the charging pile is installed in an environment with a suitable ambient temperature
	The AC power input voltage is too high	Perform the steps described for the "AC input voltage too high" issue
	The internal charger is faulty	Restart the charging station and operate the charging process again.
		If that doesn't work, don't use the charging station. and contact the manufacturer's service center.
The AC input cable is overheating	The cable specifications are insufficient	Please contact a qualified electrical contractor
An error that says "Grounded device not found" is displayed	The charging pile is not properly grounded	Please contact a qualified electrical contractor
The electric car is not charging	There is a problem with the charging pile	Make sure the power to the charging station is turned on
		Check the charging LED indicator
		Check that the charging process is validly authorized
		Restart the charging station and operate the charging process again.
		If that doesn't work, don't use the charging station. Contact the manufacturer's service center or a qualified electrical contractor.
	The vehicle connection or authorization process failed	Make sure the EV charging cable is connected correctly
		Make sure the charging process is authorized
The vehicle connection or authorization process failed	The EV charging cable is not connected correctly	Check the EV charging cable connection
		If the EV charging cable is defective, contact the manufacturer's service center or a qualified electrical contractor.
	There is a problem with the RFID card	Make sure you are using the RFID card provided by the manufacturer
	TuyaAPP authorization failed	Reauthorize, follow the manual instructions to reconnect

9.3 Overview of Error Codes

If EVSE detects a fault, the error LED lights up and the screen displays an error code.

Fault codes	Fault	Fault Light Language
ERR 0001	Leakage self-test failed	[Red] 5 fast and 1 slow
ERR 0002	Emergency stop	[Red] 1 fast and 1 slow
ERR 0003	creepage	[Red] 3 fast and 1 slow
ERR 0004	CP abnormality	[Red] 2 fast and 2 slow
ERR 0007	Overcurrent	[Red] 2 fast and 1 slow
ERR 0008	Overvoltage	[Red] 4 fast and 1 slow
ERR 0009	Undervoltage	[Red] 3 fast and 2 slow
ERR 0010	conglutination	[Red] 6 fast and 2 slow
ERR 0011	short circuit	[Red] 5 fast and 2 slow
ERR 0012	Ungrounded	[Red] 7 fast and 1 slow
ERR 0013	The card reader is abnormal	[Red] 4 fast and 2 slow
ERR 0014	Overtemperature	[Red] 2 fast and 3 slow

10. Appendix

10.1 Quality Assurance

Please keep the invoice, warranty card and other information of the purchased equipment, which are valid proof of equipment warranty.

During the warranty period, if the equipment has non-human failure, the manufacturer, dealer or designated after-sales service provider will provide free accessories and remotely guide the maintenance service or replace the new equipment. Reasonable time should be reserved for maintenance services according to the distance and equipment damage. If the equipment is replaced with a new one, the unqualified equipment after replacement shall be disposed of by the manufacturer or distributor.

If the equipment fails or is damaged due to the following circumstances, the manufacturer has the right not to carry out quality assurance, and the manufacturer can provide paid maintenance services if the customer has maintenance needs:

- The device has exceeded the free warranty period.
- Failure to transport, store, install, use, and maintain in accordance with the specifications and standards required by this manual.
- Failure to operate and use in accordance with the safety specifications and standards applicable to the installation site.
- Repairing, altering, or disassembling the device without the manufacturer's authorization.
- Damage caused by abnormal natural environment.

10.2 Precautions

- The manufacturer shall not be liable for any damages caused by the configuration software product supplied with the product.
- It is forbidden to use part or all of the data of the firmware or software developed by the manufacturer for commercial purposes in any way.
- It is forbidden to decompile, decrypt or otherwise destroy the original program design of the software developed by the manufacturer.