EV Charger
User Manual



Instrucciones de seguridad importantes relacionadas con el riesgo de incendio o descarga eléctrica

ADVERTENCIA: Al trabajar con productos eléctricos, deben seguirse siempre las precauciones básicas. Este manual contiene instrucciones importantes para los modelos ECA-NC8002S-SG80
ECA-NC8002S-DG40, ECA-NC8002S-DG80, que deben observarse durante la instalación, el funcionamiento y el mantenimiento.
1.Lea todas las instrucciones antes de utilizar este producto.
2.El uso de este aparato cerca de niños debe hacerse bajo supervisión.
3.No introduzca los dedos en el conector EV.
4.No utilice este producto si el cable de alimentación flexible o el cable del scooter están deshilachados, tienen el aislamiento roto o presentan cualquier otro daño.
5.No utilice este producto si la carcasa o el conector EV están rotos, agrietados, abiertos o presentan cualquier otro daño.
6.Indique el grado de temperatura ambiente: -30°C a 50°C.
7.Anote lo siguiente o algo similar: "Para reducir el riesgo de incendio, conecte a un circuito que cumpla la siguiente función". La protección máxima contra sobreintensidades del circuito derivado de @ampere deberá ser conforme al Código Eléctrico Nacional ANSI/NFPA 70, y al Código Eléctrico Canadiense Parte 1 C22.1.
8.Medios de desconexión. Para equipos de más de 60 amperios o más de 150 voltios a tierra, los medios de desconexión se proporcionarán e instalarán en un lugar de fácil acceso. Los medios de desconexión
-Los medios de desconexión deberán poder abrirse con llave de acuerdo con 110.25.

GUARDE ESTAS INSTRUCCIONES

Important Safety Instructions Related To Risk of Fire or Electric Shock

WARNING: When working with electrical products, basic precautions should always be followed. This manual contains important instructions for
ECA-NC8002S-SG80 ECA-NC8002S-DG40, ECA-NC8002S-DG80 models, needs to be observed during installing, operating and maintaining.
1.Please read all instructions before using this product.
2.Use of this device around children should be done under supervision.
3.Do not stick your fingers into the EV connector.
4.Do not use this product if the flexible power cord or scooter cable is frayed, has torn insulation, or has any other damage.
5.Do not use this product if the housing or EV connector is broken, cracked, open, or otherwise damaged.
6.Indicate the ambient temperature grade: -30°C to 50°C.
7.Note the following or something similar: “To reduce the risk of fire, connect to a circuit providing the following function”. @ampere's maximum branch circuit overcurrent protection shall be in accordance with the National Electrical Code ANSI/NFPA 70, and Canadian Electrical Code Part 1 C22.1.
8.Disconnecting Means. For equipment rated more than 60 amperes or more than 150 volts to ground, the disconnecting means shall be provided and installed in a readily accessible location. The disconnect
-ing means shall be lockable open in accordance with 110.25.

SAVE THESE INSTRUCTIONS

Instructions de sécurité importantes relatives au risque d'incendie ou de choc électrique

AVERTISSEMENT : Lors de l'utilisation de produits électriques, des précautions de base doivent toujours être prises. Ce manuel contient des instructions importantes pour les modèles ECA-NC8002S-SG80 ECA-NC8002S-DG40, ECA-NC8002S-DG80 , qui doivent être respectées lors de l'installation, de l'utilisation et de l'entretien.

1) Veuillez lire toutes les instructions avant d'utiliser ce produit.

2. l'utilisation de cet appareil en présence d'enfants doit se faire sous surveillance.

3 Ne mettez pas vos doigts dans le connecteur EV.

4. n'utilisez pas ce produit si le cordon d'alimentation flexible ou le câble du scooter est effiloché, si l'isolation est déchirée ou s'il est endommagé de quelque manière que ce soit.

5. n'utilisez pas ce produit si le boîtier ou le connecteur EV est cassé, fissuré, ouvert ou autrement endommagé.

6 Indiquer la température ambiante : -30°C à 50°C.

7. notez la mention suivante ou une mention similaire : "Pour réduire le risque d'incendie, branchez l'appareil sur un circuit assurant la fonction suivante". La protection maximale contre les surintensités du circuit de dérivation de @ampere doit être conforme au Code national de l'électricité ANSI/NFPA 70 et au Code canadien de l'électricité, partie 1 C22.1.NFPA 70, and Canadian Electrical Code Part 1 C22.1.

8.moyens de déconnexion. Pour les appareils de plus de 60 ampères ou de plus de 150 volts à la terre, le dispositif de déconnexion doit être fourni et installé dans un endroit facilement accessible. Le dispositif de déconnexion

-Le dispositif de déconnexion doit être verrouillable et ouvert conformément à l'article 110.25.

CONSERVER CES INSTRUCTIONS

CONTENTS

Abbreviations 1

Satety Instructions 2

Standard 3
- Safety Standard 3
- Radio Frequency Standard 3
- Energy Star Standard 3
- Charging Connections 3

1 Product Information 4
- 1.1 Type 4
  - 1.1.1 Shape and Size 4
  - 1.1.2 Block Diagram 5
- 1.2 Cable Holder and Hook 6
- 1.3 Model definition 8
- 1.3 Specifications 11

2 Operations 14
- 2.1 Power Switch 14
- 2.2 About the Interface 14

3 Function Introduction 16
- 3.1 User Interface & Control 16
- 3.2 Configure the Network 22
- 3.3 Operation Guide 22
- 3.4 Troubleshooting 26

4 Product Installation 28
- 4.1 Labels 28
- 4.2 Packing List 29
- 4.3 Check and Confirm 30
- 4.4 Preparation 30
- 4.5 Installation Steps 31
  - 4.5.1 Wall Mount 31
  - 4.5.2 Pedestal Mount 36
- 4.6 Grounding Instructions 39
- 4.7 Maintenance 40

Warranty Agreement

Abbreviations

S/N	Abbreviations	Description
1	EV/PHEV	Electric vehicles, either BEV (battery electric vehicles) or PHEV (plug-in hybrid electric vehicles)
2	EVSE	Electric vehicle supply equipment
3	KW	Kilowatt
4	A	Ampere (unit of current)
5	V	Volts (unit of voltage)
6	Hz	Hertz (unit of frequency)
7	RFID	Radio frequency identification

Safety Instructions

In this manual, the following warning labels and precautions are used on AC EV Chargers:

ADVERTENCIA

Para uso con vehículos eléctricos.
No se requiere ventilación.
Para evitar el riesgo de incendio o descarga eléctrica, no use este dispositivo con un cable de extensión.
Este dispositivo está destinado únicamente para cargar vehículos que no requieran ventilación durante la carga.
IDONEIDAD DEL USO DE CORDÓN FLEXIBLE DE ACUERDO CON EL CÓDIGO CE, PARTE I.

PRECAUCIÓN

Para reducir el riesgo de descarga eléctrica, conéctelo sólo a enchufes con toma de tierra.
No utilice este producto si la unidad presenta daños.
Riesgo de descarga eléctrica, No retire la tapa ni intente abrir la carcasa. El interior no contiene piezas que el usuario pueda reparar. Encargue el mantenimiento a personal cualificado.



WARNING

For use with Electric Vehicles.
Ventilation Not Required.
To avoid a risk of fire or electric shock, do not use this device with an extension cord.
This device is intended only for charging vehicles not requiring ventilation during charging.
THE SUITABILITY OF THE USE OF FLEXIBLE CORD IN ACCORDANCE WITH CE CODE, PARTI

CAUTION

To reduce the risk of electric shock, connectonly to properly grounded outlets.
Do not use this product if there is any damage to the unit.
Risk of electric shock, Do not remove cover or attempt toopen the enclosure. No user serviceable parts inside. Refer servicing toqualified service personnel.



AVERTISSEMENT

Pour les véhicules électriques
véhicules électriques.
Ventilation non requise.
Pour éviter tout risque d'incendie ou de choc électrique, n'utilisez pas cet appareil avec une rallonge.
Cet appareil est destiné uniquement à la charge de véhicules ne nécessitant pas de ventilation pendant la charge.
LA PERTINENCE DE L'UTILISATION DE CORDONS FLEXIBLES CONFORMÉMENT AU CODE CE, PARTIE

ATTENTION

Pour réduire le risque de choc électrique, ne branchez l'appareil que sur des prises correctement mises à la terre.
N'utilisez pas ce produit si l'appareil est endommagé.
Risque d'électrocution, ne pas retirer le couvercle ou tenter d'ouvrir le boîtier. Aucune pièce réparable par l'utilisateur ne se trouve à l'intérieur. Confier l'entretien à un personnel qualifié.



Standard

▶ Safety Standard

Complies with UL 2594 UL 2231 UL 1998 UL991

▶ Radio Frequency Standard

47CFR Part 15 (2020)

ANSI C63.4 (2014)

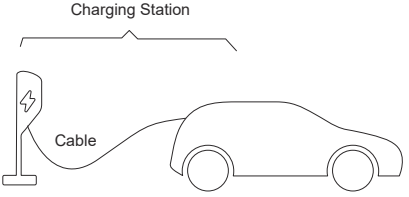
ICES-003 Issue 7: October 2020+

▶ Energy Star Standard

ENERGY STAR® Program Requirements for Electric Vehicle Supply Equipment (EVSE) Version 1.0, 1.1 and 1.2

▶ Charging Connection

The Connections for Charging are Shown Below



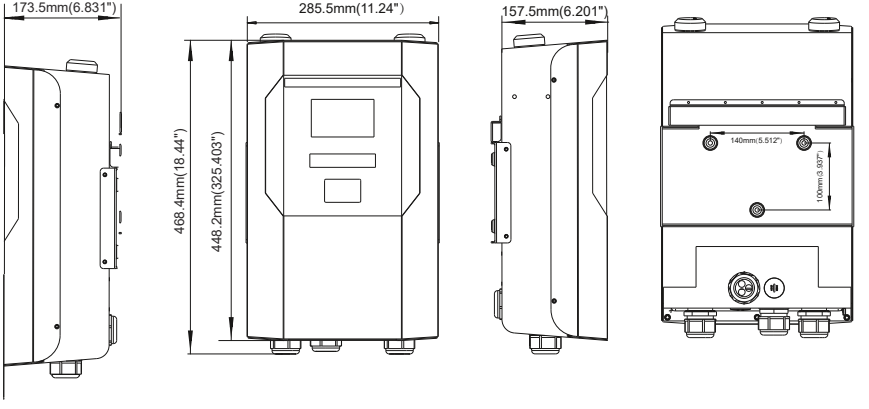
1 Product Information

1.1 Type

Welcome to our AC EVSE

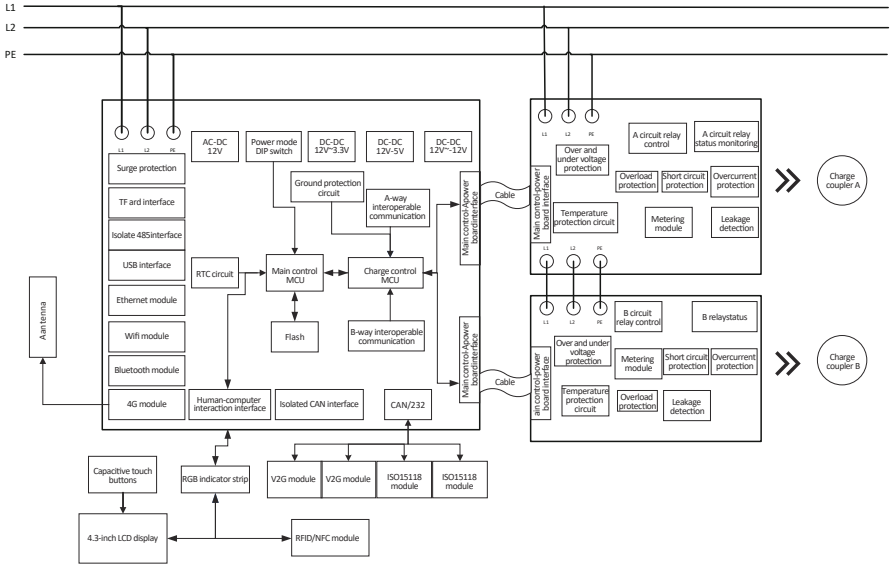
1.1.1 Shape and Size

The shape and size of the AC EVSE is shown in the figure below:



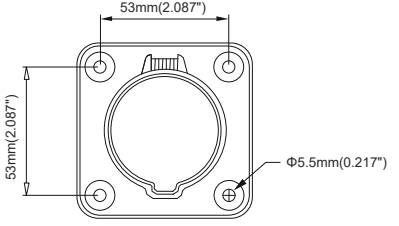
1.1.2 Block Diagram

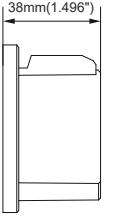
The block diagram of EVSE is as follows:.

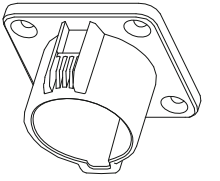


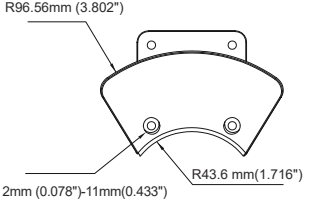
1.2 Cable Holder and Hook

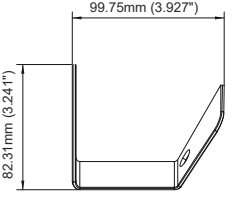
AC EVSE is equipped with an American standard car-side charging connector.
When the EVSE is in standby mode, insert the car end charging connector into an empty seat to protect the car end charging connector.
Use the mounting screws to fix this empty socket in place next to the EVSE.

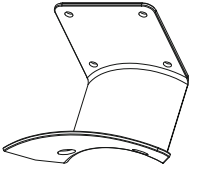




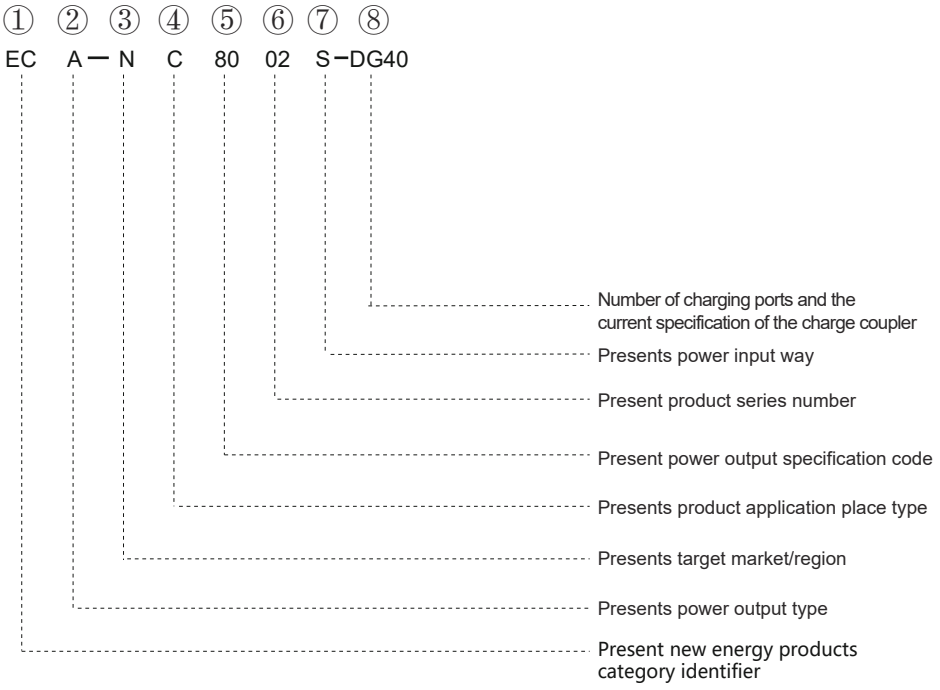








1.3 Model definition



Description of Model Number

1. Two capital letters XX stands for: New energy product line category identification..

Products category	New energy electrical vehicle charger equipment	New energy storage equipment	New energy photovoltaic equipment
Code	EC	ES	EP

2.One capital X for the type of power output that can be supported.

Power output type	AC Power	DC power	Multi-mode: AC & DC compatible
Code	A	D	M

3. One capital X represents the market area code where the product can be placed.

Market/ Region	Europe	Americas	UK	China	Japan	Korea	Russia
Code	E	N	U	C	J	K	R

4. One X capital letter represents the product product application place type.

Application type	Household/Home-use	Commerical- use	Multi-use: household &commercial
Code	H	C	M

5. Two-digit XX/three-digit XXX digital representation: product power output specification.

Power output	AC mode are marked by maximum output current	
	40A	80A
Code	40	80

6. two-digit XX stands for: product series number, following the following principles.

Upgrade from 01-99 according to product development plan.

7. One uppercase X for supported power input methods.

Power input method	Single Phase	Three phases	Multi- input: Single-phase & three-phase co-existence
Code	S	T	M

8. Two capital letter XX + Two number XX, means the number of charging ports and the current specification of the charge coupler, which are defined as follows.

SG80	Single charge coupler 80A 1*80A
DG40	Charge coupler 40A 2*40A
DG80	Both charge coupler 80A 1*80A/2*40A

1.4 Specification

RD03 American Standard AC EV Charger Series							
Category	Specifications & Parameters						Option
	Model	Rated input/ output voltage	Rated input current	Rated output current	Max power	Charge Coupler	
Power Specification	ECA-NC8002S-SG80	Level 2, 208/240VAC 60Hz	80A	80A	19.2kW	SAE J1772 TYPE1 /80A	Optional
	ECA-NC8002S-DG40	Level 2, 208/240VAC. 60Hz	80A	2*40A	2*9.6kW	SAE J1772 TYPE1 /40A	Optional
	ECA-NC8002S-DG80	Level 2, 208/240VAC 60Hz	80A	1*80A/2*40A Load Balancing	19.2kW	SAE J1772 TYPE1 /80A	Optional
Power Wiring	LAN (RJ-45)						
Communication	4G cat. 4						
	WiFi 2.4G						
	BLE 5.0						
	RFID						
	USB (type A)						
	RS-485						
	CAN						
OCPP Version	OCPP 1.6J(Upgradeable to 2.0)						
User Interface & Control	LCD screen size:4.3-inch;/pixels resolution:800*480/262K colors/No touch function.						
	RGB LED light bar						
	Capacitive touch buttons						
	Power option switch						

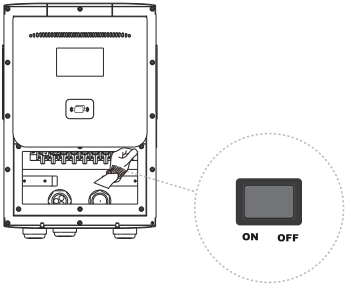
User Authentication	Swipe card	
	QR Code /APP	
	ISO 15118 (Plug & Play)	Optional
Meter	On-board power meter Measurement error accuracy less than 1%	Optional
Power Management	V2G	Optional
	Load balancing:single device	
	Load balancing:operating stations	
Memory	Flash rom (128M bit)	
	TF card memory expansion (No TF card)	
Real Time Clock	Over-current protection	
Protection Function	CCID20	
	Over voltage protection	
	Under voltage protection	
	Over-current protection	
	Over load protection	
	Over load protection	
	Short circuit protection	
	Ground protection	
	Over-temp protection	

Protection Function	Surge protection 6 kV @ 3,000A	
	Fault self-test	
Environmental	Enclosure Protection: Type 4, IK10	
	Operating Temperature: -30 ~ 50℃	
	Storage Temperature: -40 ~ 75℃	
	Humidity: Up to 95%, non-condensing	
	Altitude: <2000m	
	Cooling Method: Natural Cooling	
Mechanical	Net Weight: ECA-NC8002S-SG80(14.7kg) ECA-NC8002S-DG40(16kg) ECA-NC8002S-DG80(21kg)	
	Product Outline Size:TBD	
	Cable Length:18ft or Customization	
Regulation	Safety Regulations:ETL（UL2231 UL2594 UL1998 UL991）	
	Metering & Billing:CTEP	
	Energy Efficiency:Energy Star	
	Wireless Certificate:FCC/IC	
Warranty	2 Years	

2 Operations

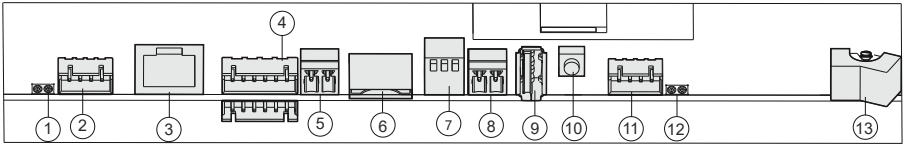
2.1 Power Switch

1. Check and make sure the mainboard power switch is off and that the fuse is there and installed. As shown below.



2. Turn off the power of this product, turn on the power switch of the mainboard; observe whether the boot interface of the product is normal.

2.2 About the Interface



NO.	Name	Function	Specification
1	Charge coupler A meter PF pulse output port.	Power pulse signal output interface	
2	Charge coupler A line Interface	CP signal, temperature signal, CC signal and power supply	
3	Ethernet Interface	10/100M ethernet network	
4	Download Interface	Debug port	Firmware burn-in port
5	485 Interface	M-bus protocol	
6	TF Interface	TF card interface	Micro SD
7	Power mode selection	Refer power mode setup instructions	
8	CAN Interface		
9	USB Interface	USB 2.0	
10	WIFI reset button		
11	Charge coupler B line Interface	CP signal, temperature signal, CC signal and power supply	
12	Charge coupler A meter PF pulse output port	Power pulse signal output interface	
13	Power switch	Charging pile control power switch	

Charging with single pot version ECA-NC8002S-DG80 updates the rated current according to the DIP switch status, no reboot required

□□□	□□ □	□ □□	□ □□	□ □□	□ □□	□ □□	□□□
16A+16A	24A+24A	32A+32A	40A+40A	48A+48A	1*80A/2*40A		

Charging with dual pot version ECA-NC8002S-SG80 updates the rated current according to the DIP switch status, no reboot required

□□□	□□ □	□ □□	□ □□	□ □□	□ □□	□ □□	□□□
16A	24A	32A	40A	48A	80A		

3 Function Introduction

3.1 User Interface & Control



1. The electrical parameters are displayed in the upper left corner of the status bar. The order from left to right is: charging power, voltage level, and rated current. Charging power is calculated by multiplying the grid voltage and the rated current. The voltage level is automatically detected as "208VAC " or "240VAC" when turned on. The rated current can be set by dial switch. For details on dial settings, please refer to the interface introduction and instructions.

2. The upper right corner of the status bar displays network communication parameters. From left to right, there are Bluetooth, 4G, WIFI, Ethernet, and Fahrenheit icons in the charger. The Bluetooth icon only appears when the Bluetooth module is installed. If the 4G module is not installed, it will be a gray low-light icon. If the 4G module is installed normally, it will be a white high-light icon. If there is no connection, WIFI is a gray low-light icon. When WIFI is correctly set up and successfully connected, WIFI is a white high-light icon. If communication with the router is not established, Ethernet is a gray low-light icon, and when successfully established, a white high-light icon appears. The temperature inside the pile has a white highlight icon, it is dynamic, and it is displayed in degrees Fahrenheit.

3. This language switching prompt is unique to the "Ready" interface. When you touch the button below, you can switch between English and French. Currently, these are the only two languages available.

4. Status prompts vary as per different language and different status.

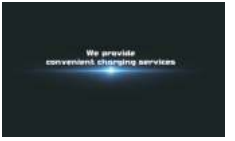
5. The operation status of charge coupler A is displayed on the left, and the operation status of charge coupler B is displayed on the right. After swiping the card, the user can choose which charge coupler to activate for operation through the touch button at the bottom of the screen.

6. The main interface displays different content under each status.

7. Charging pile CID code - a unique code assigned at the time of shipment. The client can modify it through the server, and the uniqueness after modification is not guaranteed.

8. After-sales service phone number.

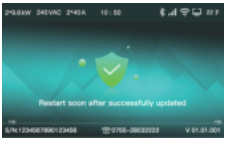
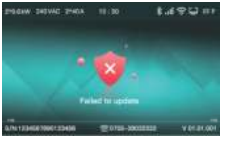
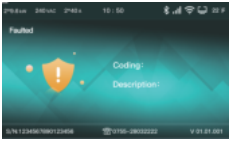
9. Software Version No.

Status	LED Description		Current Status Interactive Functions
Power On	After the red, green and blue colors flash once, yellow slow flash twice		No operation is recommended.
Available	Green always on		1. Enter to the available page after the bootup finished; 2. Touch the left and right keys to switch A and B cable languages respectively; 3. If there is no operation, the screen brightness will drop to 50% after 3 minutes; 4. There is cable insertion, card tapping platform interactive action screen and press any key brightness is 100%.
Charge Coupler Selection (Unplugged)	Green flash		1. If you tap the card in standby mode without plugging the cable, you will enter the cable selection (unplugged) interface; 2. Touch the left and right buttons to select A and B cables respectively, and enter the cable insertion interface after selection.
Charge Coupler Selection (Plugged)	Green flash		1. If you tap the card in standby mode with plugging the cable, you will enter the cable selection (plugged) interface; 2. Touch the left and right buttons to select A and B cables respectively, and enter the vehicle not ready interface after selection.

Connect the Charge Coupler to the Vehicle	Green flash		1. When a cable is not plugged in the standby state, and the user selects the cable for charging by tapping the card, APP activation, platform activation, etc. it jumps to the page that prompts the cable to be plugged; 2. The interface will stay for 1 minute, if the user does not insert the plug within 1 minute, it will return to the standby mode.
Vehicle not Ready	Blue slow flash		1. After inserting the coupler and charging, the S2 switch inside the car is not closed, and it is not ready for charging, will jumps to the car not ready page; 2. Enter the charging page when the car is ready; 3. If you unplug the charging cable at this time, the screen will return to the standby page.
Charging	Blue is always on		1. Enter the charging settlement page after successfully starting charging; 2.You'll be prompted to select a cable after the card is tapped; 3. Enter the charging completion interface after APP or platform stops charging; 4. Return to standby page with plugging out the cable.
Charging (Busy Electric Piles)	Blue is always on		1. After the charging is completed normally, enter the charging completion settlement page; 2. Unplug the charging cable or wait 1 minute to return to the standby page.

Complete	Purple is always on		1. After the charging is completed normally, enter the charging completion settlement page; 2. Unplug the charging cable to return to the standby page.
Fault Causes Charging to Stop	Unrecoverable fault: red is always on Recoverable fault: slow flashing red		1. If an abnormality occurs in the charging state, jump to the fault prompt page; 2. Return to standby page after unplugging charging cable.
Charge Coupler Disconnected	Purple slow flash		1. The plug is abnormally loose in the charging state, jumping to abnormal settlement page; 2. Hold for 1 minute and return to the standby page.
Reserved	Green slow flash		1. The user selects the electric pile in the APP, and enters the reserved page after operating the scheduled charging; 2. Only reserved users can start charging; 3. When non-reserved users start charging, it will prompt that the electric pile has been reserved; 4. After the scheduled time is exceeded, if the customer is not present for use, it will automatically return to the standby page.

Reminder to be Reserved	Green slow flash		1. Plugging in the cable in the booked state will prompt the device number have been booked; 2. The prompt disappears after unplugging the cable.
Charge Coupler Failure	Unrecoverable fault: red is always on Recoverable fault: slow flashing red		1. Pile body abnormality occurs in charging pile in non-charging state, jumping to the system fault interface; 2. Return to the standby page after the fault is resolved.
Out of Service	Yellow always on		1. In the standby state, will enter to out of service state when receive "stop use" command from the server; 2. Return to the standby state when receive "recover to use"command from server.
System Update	Yellow slow flash		1. Perform remote OTA in standby state, it will enter the upgrade page; 2. When the download is complete and the verification is successful, it will enter the upgrade success state; 3. During the download process, if the network is disconnected or the verification fails after the download is complete, it will enter to upgrade failure state; 4. After the upgrade is complete, the firmware version number in the bottom right corner will be updated.

System Update Succeeded	Yellow slow flash		1. After the update is successful, jump to the upgrade success page; 2. Wait for the device to reboot automatically, do not reboot manually.
System Update Failed	Red slow flash		1. If the upgrade fails, enter the upgrade failure prompt page; 2. Wait for 10 seconds and return to the state before the firmware upgrade.
System Fault	Unrecoverable fault: steady red Recoverable fault: slow flashing red		1. Pile body abnormality occurs in charging pile in non-charging state, jumping to the system fault interface; 2. Return to the standby page after the fault is resolved.

3.2 Configure WIFI Network

Internet configuration via WIFI and OCPP Authpass.
Take the laptop configuration charger parameters as an example, the introduction is as follows. (The method of setting parameters with a mobile phone is similar and will not be repeated)

Step 1: Connect to WIFI Hotspot
Keep your laptop in a state where it can connect to a WIFI hotspot. Turn on the charger, find the hotspot- named "ECA-NH", and connect to it without a password. (If you do not find a hotspot named "ECA-NH", please restart the power of the charging station).

Step 2: Log in to Settings
Open a web browser, preferably Google Chrome or Microsoft Edge, and fill in the - IP address "192.168.4.1" in the browser's address bar. Press the Enter key to enter the page of EVSE CONFIGURA- TION LOGIN. (Note: Microsoft IE browser cannot visit)

Step 3: Configure Your EV Charger
Fill in the default password "1000" to enter this page. When you log in to this page for the first time, please change to a new login password,The new password can only be a 4-digit number.
Fill in the name of the hotspot and the password of your WIFI router on the web page, click the "SAVE" button to save the settings, and click the "RESTART" button to restart the charging pile to make the settings take effect. Once it takes effect, the charging pile can be accessed through your WIFI router the Internet.

3.3 Operation Guide

1. Charging Preparation:

A. Find the available charging pile: Product, park the car, turn off the vehicle, and make the electric car in a chargeable state.



B. If choose to use APP:
You can download the APP according to the prompts, and register an account according to the prompts.

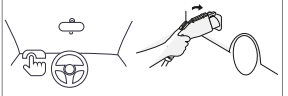


C. If choose to use an RFID card: Contact the operator to obtain an RFID card; the private pile is equipped with an RFID card in the box.



2. To Connect The Charging Connector

Open the cover of the car charging socket, and connect the charging cable to the car socket stably. Make sure the connection is successful.



3. Start Charging

A. Plug and charge
The charging mode is configured as plug and charge, when step 2 is completed, the car is ready to start charging.



B. Tap card to start
Put the RFID card close to the card-tapping. Select the charging cable to be activated according to the prompts to start charging, after the charging process taps the card again, selecting the corresponding charging cable will end the charging.



C. APP start and stop
Use the APP to scan the QR code, select the charging cable number according to APP prompts, start charging, and after charging, click to stop charging according to the APP prompts.



4. Charging:

During the charging process, the charging pile screen will display the charging voltage, charging current, charging time.



5. End Charging:

A. Through charging, the car owner can take initiative to end the charging, plug-and-play charging situation can be stopped through the car terminal; To start by tapping the card, you can stop by selecting the corresponding charging charge coupler after tapping the card; APP startup can be controlled and stopped in APP.



B. After the car is fully charged and the charging current is less than 1A for 15 minutes, the pile will automatically stop charging.



C. After the charging is completed, please pull out the charging coupler and put it back to the empty coupler-holder and hang the cables back on the hook.



6. Order Settlement:

After the charging is completed, the display screen will display the charging power and charging cost. The order settlement will be completed on the APP or plat form.



7. Abnormal Situation:

In any state, if there is abnormal prompt on the screen and the light bar, please stop charging and disconnect the charging cable from the socket on the car.



3.4 Troubleshooting

When a fault occurs, the charger will automatically protect. The fault information and processing methods are as follows.

Fault Code	Handling Method
20 Flash Fault	The memory chip is damaged, you need to contact the after-sales service.
21 EEPROM Fault	The memory chip is damaged, you need to contact the after-sales service.
22 Emergency Stop Failure	Check that the emergency stop button is not pressed. Resolve the fault after restoring the emergency stop button.
23 Power Failure	Check whether there is any problem with the input power supply. Resolve the fault after restoring the power supply.
24 Ground Fault	The charging pile is not grounded, so the circuit needs to be tested.
25 Motherboard Over Temperature Alarm	The equipment temperature is too high. Resolve the fault after the temperature drops.
30/40 A/B Cable Meter Communication Fault	Internal communication line failure, need to contact the after-sales service.
31/41 A/B A/B Cable Input Undervoltage Alarm	Check whether the input cable is connected correctly; whether the grid voltage is abnormal.
32/42 A/B Cable Input Overcurrent Alarm	Check that the charging adapter is properly connected to the car and that the car charger is working properly.
33/43 A/B Cable Input Overvoltage Alarm	Check whether the input cable is connected correctly; whether the grid voltage is abnormal.
34/44 A/B Cable L1 On RLY Closure Fault	Damaged relay, need to contact after-sales service.
35/45 A/B Cable L2 On RLY Closure Fault	Damaged relay, need to contact after-sales service.
36/46 A/B Cable L1 On RLY Normal Opening Fault	Damaged relay, need to contact after-sales service.
37/47 A/B Cable L2 On RLY Normal Opening Fault	Damaged relay, need to contact after-sales service.
38/48 A/B Cable Relay NTC Alarm	The temperature measuring element is damaged, need to contact the after-sales service.
39/49 A/B Cable L1L2 NTC Alarm	Temperature measuring element is damaged, need to contact the after-sales service.

3A/4AA/B Cable Relay Over-Temperature Alarm	The relay temperature is too high. The fault will be resolved after the temperature drops.
3B/4B A/B Cable L1L2 Over-Temperature Alarm	L1L2 line temperature is too high. The fault will be resolved after the temperature drops.
3C/4C A/B Cable Leakage Current Fault	Check the charging adapter and its cable for damaged or wet. Recovery after fault. removal.
3D/4D A/B Cable Leakage Current Device Self-test Fault	Leakage detection equipment is damaged, need to contact the after-sales service.
3E/4EA/B Cable Input Overload Alarm	Check whether the charging adapter is correctly connected to the car and check whether the car charger is normal.

4 Installation

4.1 Labels

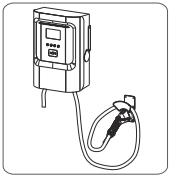
ADVERTENCIA
Para uso con vehículos eléctricos.
No se requiere ventilación.
Para evitar el riesgo de incendio o descarga eléctrica, no use este dispositivo con un cable de extensión.
Este dispositivo está destinado únicamente para cargar vehículos que no requieran ventilación durante la carga.
IDONEIDAD DEL USO DE CORDÓN FLEXIBLE DE ACUERDO CON EL CÓDIGO CE. PARTE I.
PRECAUCIÓN
Para reducir el riesgo de descarga eléctrica, conéctelo sólo a enchufes con toma de tierra.
No utilice este producto si la unidad presenta daños.
Riesgo de descarga eléctrica. No retire la tapa ni intente abrir la carcasa. El interior no contiene piezas que el usuario pueda reparar. Encargue el mantenimiento a personal cualificado.
WARNING
For use with Electric Vehicles. Ventilation Not Required.
To avoid a risk of fire or electric shock, do not use this device with an extension cord.
This device is intended only for charging vehicles not requiring ventilation during charging.
THE SUITABILITY OF THE USE OF FLEXIBLE CORD IN ACCORDANCE WITH CE CODE, PARTI.
CAUTION
To reduce the risk of electric shock, connectonly to properly grounded outlets.
Do not use this product if there is any damage to the unit.
Risk of electric shock. Do not remove cover or attempt toopen the enclosure. No user serviceable parts inside. Refer servicing toqualified service personnel.

AVERTISSEMENT
Pour les véhicules électriques véhicules électriques. Ventilation non requise.
Pour éviter tout risque d'incendie ou de choc électrique, n'utilisez pas cet appareil avec une rallonge.
Cet appareil est destiné uniquement à la charge de véhicules ne nécessitant pas de ventilation pendant la charge.

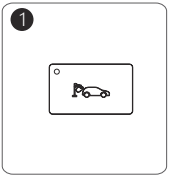
LA PERTINENCE DE L'UTILISATION DE CORDONS FLEXIBLES CONFORMÉMENT AU CODE CE. PARTIE..
ATTENTION
Pour réduire le risque de choc électrique, ne branchez l'appareil que sur des prises correctement mises à la terre.
N'utilisez pas ce produit si l'appareil est endommagé.
Risque d'électrocution, ne pas retirer le couvercle ou tenter d'ouvrir le boîtier. Aucune pièce réparable par l'utilisateur ne se trouve à l'intérieur. Confier l'entretien à un personnel qualifié.

Longhorn
EV Charger
Model: ECA-NC8002S-DG80
Input/Output: 208/240VAC
60Hz
Max 1*80A/2*40A
Max 19.2kW
MMQ: 0.5kWh
Enclosure Type: TYPE 4
Operating Temp: -30~50°C
-22~122°F
Storage Temp: -40~75°C
-40~167°F
4912888535269720090
Date Code
ECA2315RD030001
Longhorn Intelligent Tech Co.,Ltd
FOR USE WITH ELECTRIC VEHICLES.
FOR INDOOR OR OUTDOOR USE.
Intertek
5014466
Conforms to UL Std.2594
Certified to CSA Std.C22.2#280
CAN ICES(A)/NMB(A)
CTEP COA:
FCC ID: 2APP2-ECA03
IC: 27568 -ECA03
Contains FCC ID: 2AFOS-WT32C3-SX
Contains IC:27481-WT32C3S1S2
Contains FCC ID: XMR202008EC25AFXD
Contains IC:10224A-022EC25AFXD

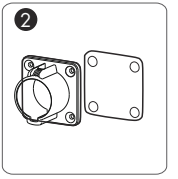
4.2 Packing List



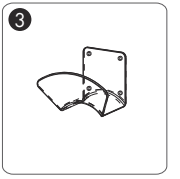
AC charger



RFID card
(2pcs)



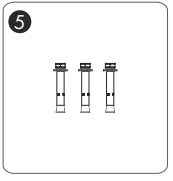
Coupler holder
(1pcs)



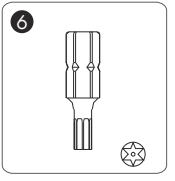
Cord holder
(1pcs)



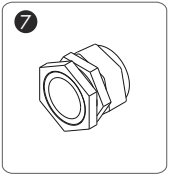
Torx self-tapping screws (8pcs)
Rubber Plug Expansion Tube (8pcs)



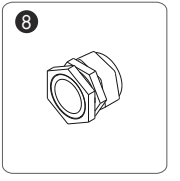
Expansion screw
(3pcs)



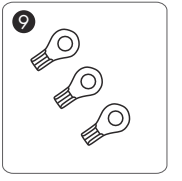
Electric drill bit
(1pcs)



3-hole waterproof connector
BN-M32-25 (1pcs)



3-hole waterproof connector
BN-M25-18 (1pcs)



VE tube terminal
(3pcs)

4.3 Check and Confirm

When unpacking, please carefully confirm the following points:

- According to the packaging list, whether the accessories are missing.
- Whether there is any damage during transportation.
- Whether the model and specification on the name plate of the machine are consistent with the order requirements.
- If any damaged or missing parts are found, do not start the machine and contact the supplier as soon as possible.
- Please keep the box and packaging materials for 1 month for future disposal. Paper packaging is recyclable.

4.4 Preparation

In order to ensure long-term stable operation of the product, it is recommended to avoid the following installation problems:

- This product is an electrical device. Handle with care and avoid severe vibration and shock.
- EVSE cannot be transported by dragging the charging connector and charging cable.
- EVSE cannot be used in extreme weather, especially when the ambient temperature is too low or too high, which will affect the use of EVSE.

It is recommended to install EVSE in a ventilated and cool place away from direct sunlight and rain. To ensure good ventilation, you should install the EVSE vertically with enough space. Installation tools before installing AC EVSE, you should prepare at least the following tools:


Multimeter


Electric Impact Drill(D8mm+D6mm)


Wrench（10mm）


AWG23-7 Tube Terminal Crimping Pliers


Phillips Screwdriver（D5mm）


Electric Batch（With plum blossom hole T20.T25 bit）


Utility Knife


Anti-static bracelet


Heat Coupler


Wire Strippers


Marker Pen


Rubber Hammer

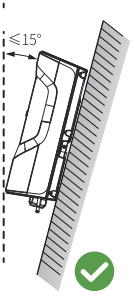
4.5 Installation Step

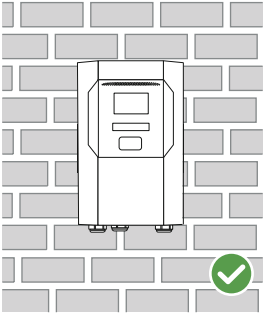
4.5.1 Wall Mount Installation

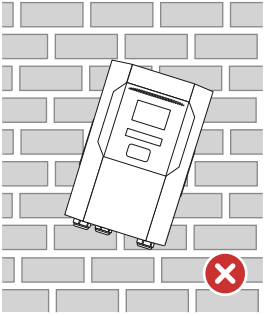
Location Requirements



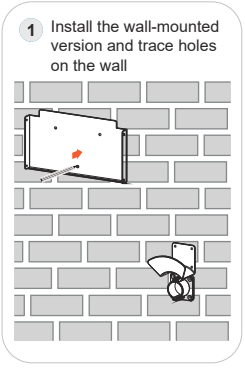
Angle Requirements

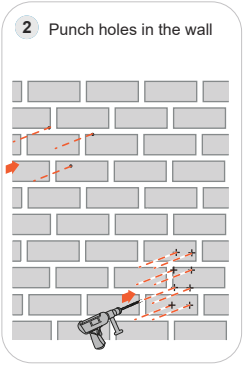


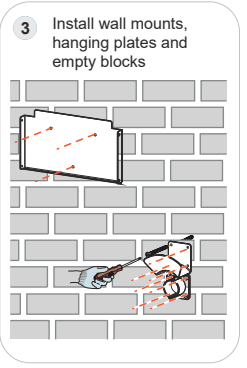




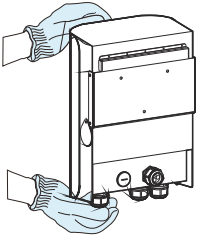
Angle Requirements



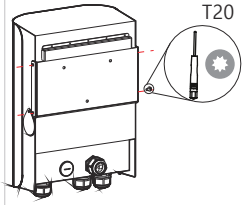




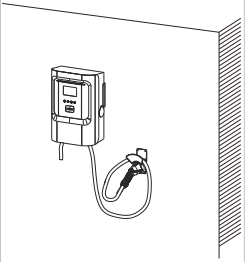
4 Install the pile body on the mounting plate



5 Set screw

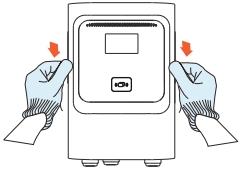


6 Installation pile completion diagram

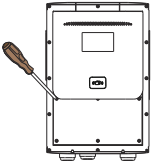


Product Wiring

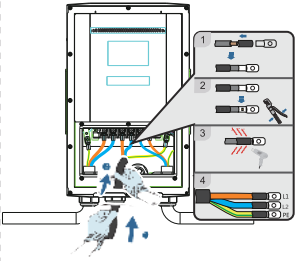
1 Remove the decorative shell



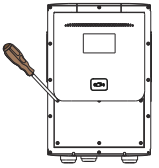
2 Remove the wiring cove



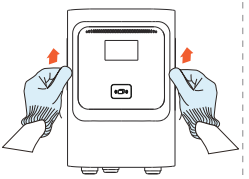
3 Wiring



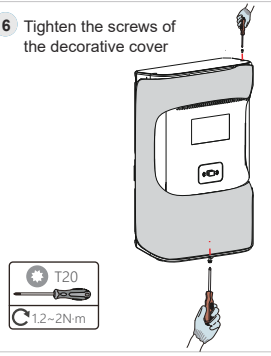
4 Lock wire cover



5 Reinstall the trim case

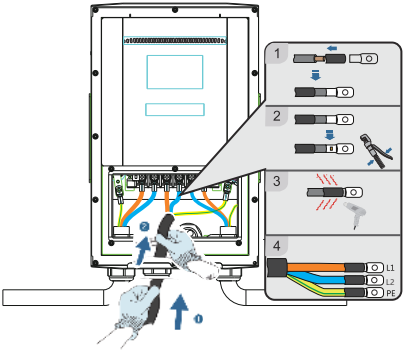


6 Tighten the screws of the decorative cover

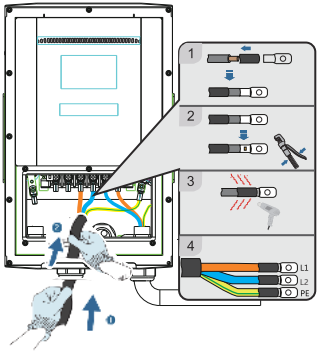


Product Wiring

Copper cable cross-section: 3*6 AWG
Step 1 push up the back cover plate with hand.



Dual Charge Coupler Input Wiring



Single Charge Coupler Input Wiring

Color	Terminal
Brown	L1
Blue	L2
Yellow-green	PE

DANGER

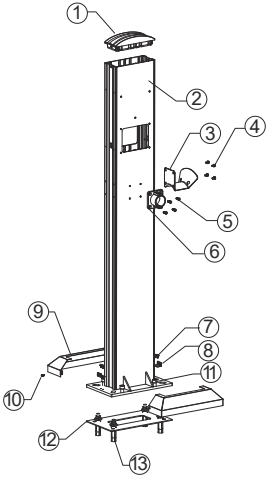
If L1,L2, PE are connected incorrectly, it will not only damage the machine, but also create a potential shock hazard.

DANGER

In the TT, TN-C and TN-S system, make sure that the ground cable is connected reliably.
Otherwise, it may cause electric shock.

4.5.2 Pedestal Mount

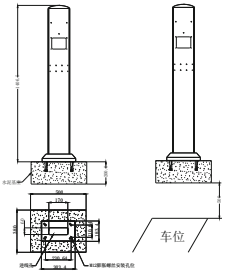
Schematic Diagram of Column Decomposition



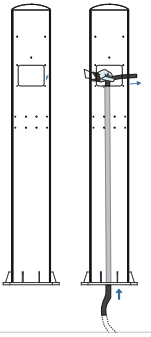
Number	Name	Material	Quantity
1	Column cap	Silica gel	1
2	Column boom	AL6063-T6+Oxidation 1	1
3	Hook up	SGCC+baking paint	1
4	M5*12 combination screw	Stainless steel	4
5	M5*20 countersunk head screw	Stainless steel	4
6	Coupler mount	Nylon	1
7	M4*10 combination screw	Stainless steel	4
8	Floor bracket	SGCC+baking paint	2
9	Base cover	SGCC+baking paint	2
10	M4*10 countersunk head screw	Stainless steel	2
11	M12*30 hexagon socket screw	Stainless steel	4
12	Leveling pad	Stainless steel	1
13	M12*120 expansion screw	Stainless steel	4

Schematic Diagram of Column Installation

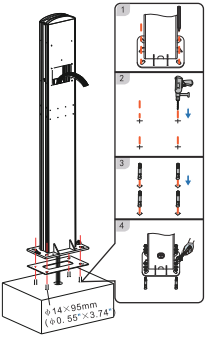
Cement foundation size chart



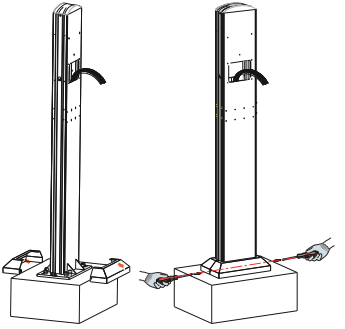
1 Pull wire



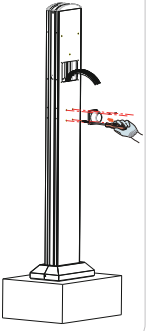
2 Fixed column



3 Fixed base cover

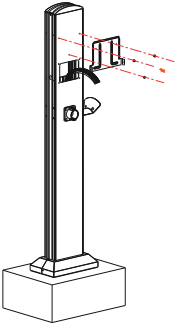


4 Install empty seat

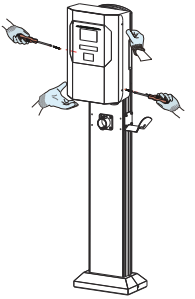


5 Install the hanging board

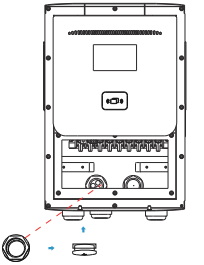
6 Install wall panel



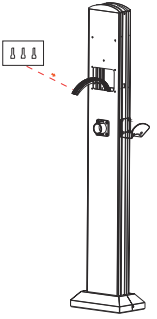
7 Install the pile



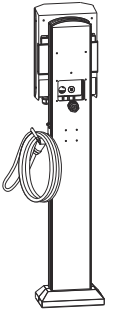
8 The input surface mounting holes are changed to surface mounting holes, and the wiring on the back



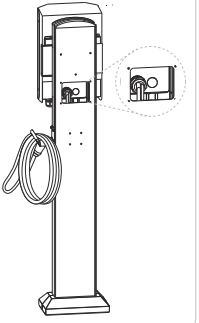
9 Input line terminal crimping tube type terminal



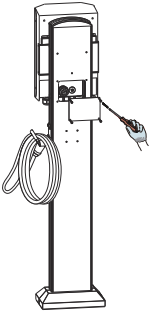
10 Concealed hole installation three-hole waterproof connector



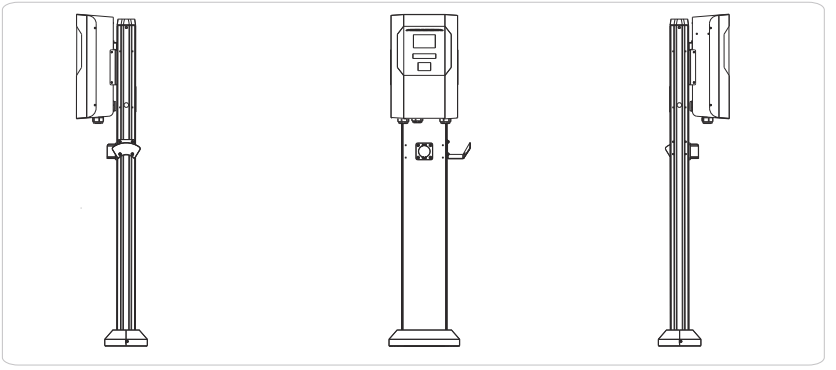
11 The input line passes through the three-hole waterproof connector



12 Lock the seat



After Installation



4.6 Grounding Instructions

This product must be connected to a grounded, metallic, permanent wiring system, or an equipment ground wire must be run with the circuit conductor and connected to the equipment ground terminal or conductor on the product.
The ground conductor must run with the circuit conductors and be connected to the equipment ground terminal or conductor on the product.

Wiring Port	PE L1 L1I L2I L1 L2 PE
Crimp Terminal Specifications	SC16-6
Installation Tool Specifications	Diameter 3mm (0.1181”) flat-blade screwdriver Diameter 5mm (0.1968”) flat-blade screwdriver Diameter 5mm-6mm Phillips screwdriver
Installation Tool Specifications	2～5 N.m

4.7 Maintenance

To ensure the long-term stable operation of the equipment, please perform regular (usually monthly) maintenance on the device according to the operating environment.

a) Equipment is maintained by professionals.

b) Check whether the equipment is well grounded and safe.

c) Check whether there are safety hazards around the charging pile, such as whether there are high temperatures, corrosion or flammable and explosive items near the charger.

d) Check whether the connection points of the input terminals are in good contact and whether there is any abnormality. Check other wiring points for looseness.

Warranty Agreement

1.The scope of the warranty refers to the product itself.

2.The warranty period is 24 months. During the warranty period, if the product fails or is damaged under normal use (determined by the company's technicians), the company will repair it free of charge.

3.The starting time of the warranty period is the production date of the product.

4.Even within the warranty period, if the following conditions occur, a certain maintenance fee will be charged.

Equipment failure caused by failure to operate according to the user manual.

Equipment damage caused by fire, flood, abnormal voltage, etc.

Equipment damage caused by the entry of foreign objects.

Equipment damage caused by other human-made external factors.

5.Service fees shall be calculated based on actual costs. If there is any other contract, this contract shall prevail.

6.During the warranty period, be sure to keep this card and show it to the maintenance personnel.

7.If you have any questions, please contact the agent or our after-sales service center directly.



For Both FCC & IC application:

This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a part installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

MPE Requirements

To satisfy FCC / IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.

Les antennes installées doivent être situées de facon à ce que la population ne puisse y être exposée à une distance de moin de 20 cm. Installer les antennes de facon à ce que le personnel ne puiss
cm ou moins de la position centrale de l’ antenne.
La FCC des éltats-unis stipule que cet appareil doit être en tout temps éloigné d’au moins 20 cm des personnes pendant son functionnement.