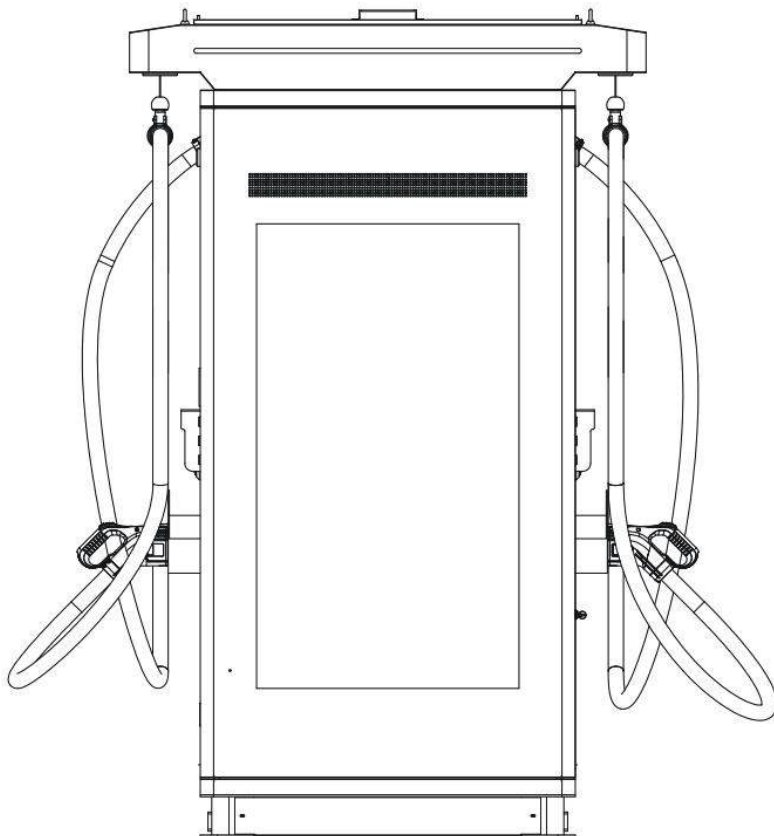


## HBE-DC120~240KW02ST-U-A55 series

### Instruction Manual





# Charging Pile Instruction Manual

## Catalogue

Features.....	2
IMPORTANT SAFETY INSTRUCTIONS.....	3
CONCERNANT LA SÉCURITÉ CONSERVER CES.....	4
Federal Communication Commission Interference Statement.....	5
Industry Canada Statement .....	6
1. Interface.....	8
2. Dimensions.....	10
3. Specifications.....	11
4. Status Description.....	12
5. Installation Instructions.....	13
5.1 Before Installation.....	13
5.2 Contractor Safety Guide.....	14
5.3 Grounding and Safety Requirement.....	14
5.4 Ground Connection.....	18
6. Packing List.....	19
6.1 Main Unit.....	19
6.2 Cable Management .....	19
6.3 Unpack the charger.....	20
6.4 Recommended Tools for Installation and Inspection.....	21
6.5 Basic Requirements for Installation.....	21
6.6 DC Charging Pile Installation Requirements.....	22
6.7 Installing & Commissioning.....	26
6.8 Inspection Cable.....	27
7. Charging operation.....	29
7.1 Charging operation flowchart.....	39
7.2 Charging Mode Startup operation interface.....	30
7.3 Troubleshooting.....	33
8. Maintenance.....	34
8.1 General Maintenance.....	34
8.2 Replacement Kits and Accessories.....	37
9. Instruction of Packing, Handling, Transportation and Storage.....	37
10. Limited Product Warranty.....	38

## Features

- DC fast charging capacity for rapid charging of electric vehicles.
- Compatible with a wide range of electric vehicle models for versatile usage.
- High-efficiency power conversion for faster and more energy-efficient charging.
- Intelligent charging algorithms to optimize charging speed without compromising battery health.
- Intuitive touch-screen interface for easy operation.
- User-friendly design for both experienced EV users and beginners.
- Seamless integration with mobile app for remote monitoring and control.
- Wi-Fi and cellular connectivity for software updates and real-time monitoring.
- Large 55" HD display for dynamic advertising and promotional content.
- Customizable content management system for easy updating of advertisements.
- Integrated payment system for charging sessions, providing a revenue stream for station owners.
- Advertising revenue potential through the 55" screen for businesses and partners.
- Robust construction for outdoor use and durability in various weather conditions.
- Modular design for easy scalability, allowing for the expansion of charging infrastructure.
- Energy-efficient design to minimize environmental impact.
- Compliance with industry standards for sustainability and eco-friendly practices.
- Compliance with industry standards and safety regulations.
- Accessibility features for compliance with ADA (Americans with Disabilities Act) standards.

## Applications

- Public and Private Parking Areas
- Community Parking Areas
- Parking Areas of Hotels, Supermarkets and shopping malls
- Workplace Parking Areas
- Charging Stations
- Highway Rest Areas
- Gas Stations

## IMPORTANT SAFETY INSTRUCTIONS



**WARNING** – When using electric products, basic precautions should always be followed, including the following

- a) Read all the instructions before using this product.
- b) This device should be supervised when used around children.
- c) Do not put fingers into the electric vehicle connector.
- d) Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- e) Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- f) This charging pile cannot be dismantled, repaired or modified by the customer.
- g) To reduce the risk of fire, connect only to a circuit provided branch circuit over-current protection in accordance with the CSA C22.1-15 Canadian Electrical Code, Part I (Canada) or NOM-001-SEDE Electrical installations (utility) (Mexico) or ANSI/ NFPA70 National Electrical Code (USA).
- h) WARNING

## GROUNDING INSTRUCTIONS

This product must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

- i) When any fault occurs, the product is prohibited to use, the user is prohibited to repair, must be sent to the after-sales maintenance or call the after-sales service for help.
- j) Risk of electric shock.



**SAVE THESE INSTRUCTIONS**

## CONCERNANT LA SÉCURITÉ CONSERVER CES



**AVERTISSEMENT:** Des mesures de précautions de base devraient être utilisées avec tous les produits électriques, y compris les mesures indiquées ici.

- a) lisez toutes les instructions avant d'utiliser ce produit.
- b) Ce dispositif devrait être supervisé lorsqu'il est utilisé autour des enfants.
- c) Ne mettez pas les doigts dans le connecteur du véhicule électrique.
- d) N'employez pas ce produit si le cordon d'alimentation flexible ou le câble Ev est effiloché, a N'isolation cassée, ou tout autre signe de dommages.
- e). N'utilisez pas ce produit si le boîtier ou le connecteur EV est cassé, fissuré, ouvert, ou montre toute autre indication de dommages.
- f) Cette pile de charge ne peut être démontée, réparée ou modifiée par le client.
- g) Pour réduire le risque d'incendie, branchez uniquement un circuit pour une protection contre les surintensités de circuit de branche conformément à la norme CSAC22.1-15 du Code canadien de l'électricité, partie 1 (Canada) ou à la norme NOM-001-SEDE Electrical installations (utility)(Mexique) ou à la norme ANSI/NFPA 70 du Code National de l'électricité (Etats-Unis).
- h) **CONSIGNES DE MISE À LA TERRE** Ce produit doit être raccordé à un réseau de câblage mis à la terre, métallique et permanent, ou un conducteur de mise à la terre de l'appareil doit être ajouté au circuit et raccordé à la borne de terre de l'appareil ou au conducteur d'alimentation de l'appareil.
- i) Quand n'importe quel défaut se produit, le produit est interdit pour employer, l'utilisateur est interdit pour réparer, doit être envoyé à l'entretien après-vente ou appeler le service après-vente pour l'aide.
- J) Risque de choc électrique



**CONSERVER CES INSTRUCTIONS**

## Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. 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.

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 particular 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## Industry Canada Statement:

This device complies with ISED's license-exempt RSSs. 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'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

### Radiation Exposure Statement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body

### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps

This device is intended only for OEM integrators under the following conditions: (For module device use)

- 1) The antenna must be installed and operated with greater than 20cm between the antenna and users, and
- 2) the transmitter module may not be co-located with any other transmitter or antenna.

As long as the 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.



Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes: (Pour utilisation de dispositif module)

- 1) L'antenne doit être installée et exploitée avec plus de 20 cm entre l'antenne et les utilisateurs, et
- 2) Le module émetteur peut ne pas être coimplanté avec un autre émetteur ou antenne.

Tant que les 2 conditions ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

**IMPORTANT NOTE:**

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

**NOTE IMPORTANTE:**

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considérée comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

# 1. Interface





**LED Decorative Light**

**Cable Management**

**Speaker**

**LED Indicator**

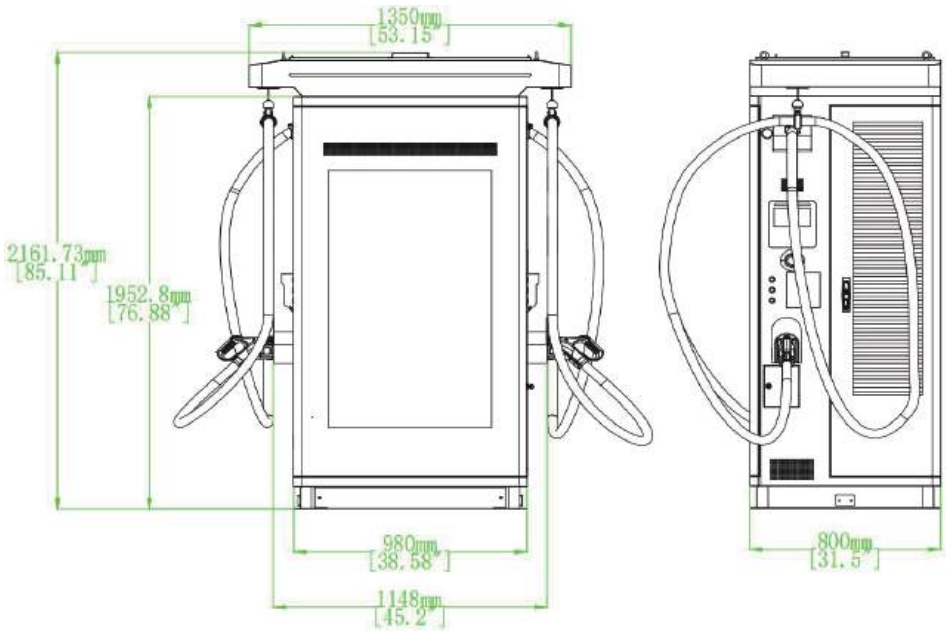
**7" Interactive Screen**

**Emergency Stop**

**Auto Cable Management  
Operational Buttons**

**Door Lock**

## 2. Dimensions



### 3. Specifications

Model		Specifications		
<b>AC INPUT</b>	Voltage Rating	380V - 480V		
	Max. Input Current	120KW	180KW	240KW
		144A	216A	288A
	Electrical Distribution	L1,L2,L3, N, PE (Wye configuration)		
	Power Grid System	TN-S		
	Frequency	60Hz		
	Power Factor	> 0.99		
	Efficiency	>95%, at optimize V/ point		
<b>DC OUTPUT</b>	Output Voltage Range	200Vdc~1000Vdc		
	Maximum Output Current	120KW	180KW	240KW
		200A	300A	300A
	Maximum Output Power	120-240KW		
	Simultaneously output mode	0%, 50%, 100% *Each connector will get 50% output power when plugged in simultaneously; And one connector will get 100% when another connector finishes the charging session or only this connector is plugged in.		
	Voltage Accuracy	±0.5%		
	Current Accuracy	±1%		
Communication	External	Ethernet, Wi-Fi, and 4G		
	Internal	CAN/RS485/RS232		
Load Management	Via OCPP			
Input Protection	OVP,OCP,OPP,UVP, SPD			
Output Protection	OCP, OVP, LVP, OTP, IMD			
Internal Protection	OTP,DC Contactor Detection, Fuse Detection			
Electrical Isolation	Isolation between Input and Output			
Standby Power	<100W			
User Interface & Control	Display	7-inch touchscreen LCD(1024 x 600)		
	Button	Emergency shut off		
	User Authentication	App, WebApp, ISO 15118, RFID, Credit Card (Optional)		
	Backend Support	OCPP 1.6 JSON (Upgradeable to 2.1)		
<b>Advertisement Environmental Conditions</b>	Display	55-inch LCD Screen		
	Resolution	TFT-LCD Panel (1080 x 1920 pixels)		
	Operation Temperature	-22°F to 131°F(-30°C to 55°C)		
	Storage Temperature	-22°F to 158°F(-30°C to 70°C)		
	Relative Humidity	5%~95% RH, non-condensing		
	Altitude	≤6560 f(2000m)		

<b>Regulations</b>	Safety	UL2202,UL2231
	EMUEMC	UL2231
	Charging Interface	DIN 70121/ISO15118
	Certification	ETL, Energy Star, FCC
<b>Mechanical Specifications</b>	Dimensions (WxDxH)	53.15x31.5 x85.11 inches (1350 x800 x2162 mm)
	Weight (typ.)	<1543 lbs.(700 kg), includes two charging connectors
	DC Charging Connector	CCS1
	Cooling	Fan cooling
	Ingression Protection	Type 3R
	Anti-vandalism	IK10, excludes LCD & RFID cover

#### 4. Status Description



**STANDBY**

Green light stays steady in standby mode



**CHARGING**

Flashing Green Light



**FAULT**

Steady red light when fault occurs

## 5. Installation Instructions

### 5.1 Before Installation

Read all the instructions before using and installing this product.

- Do not use this product if power cable or charging cable have any damage.
- Do not use this product if the enclosure or charging connector are broken or open or if there is damage.
- Do not put any tool, material, finger or other body part into the charging connector or EV connector.
- Do not twist, swing, bend, drop or crush the charging cable. Never drive over it with a vehicle.



Warning: The product should be installed only by a licensed contractor and/or licensed technician in accordance with all building codes, electrical codes and safety standards.



Warning: The product should be inspected by a qualified installer prior to initial use. Under no circumstances will compliance with the information in this manual relieve user of his /her responsibilities to comply with all applicable codes and safety standards.

- Power feed must be 3 Phase Wye configuration with TN(-S)/ TT grounding systems.
- In the installation of TN(-S) system: the neutral (N) and the PE of the power distribution are directly connected to the earth. The PE of the charger equipment is directly connected to the PE of power distribution and separate conductor for PE and neutral (N).
- In the installation of TT system: the neutral (N) and the PE of the power distribution are directly connected to the earth. The PE of the charger equipment is isolated to the PE of power distribution to the earth.
- The capacitance should be higher than the table below to work properly.

120KW	180KW	240KW
129k VA	194k VA	258k VA

- The product should be installed in free air area and keep at least 30cm (12 inches) clearance distance to all air vent of the product.
- Recommend to keep not less than 107cm (42 in.) clearance distance from all around the product following NEC table 110.26 condition 2.151-600V.



#### NOTICE

It is recommended to conduct Wi-Fi and 4G signal strength while charger installation. The RSSI (Received Signal Strength Indication) value is considered as good as higher than -65dBm. Poor connection quality might interrupt charging process or data transaction.

## 5.2 Contractor Safety Guide

- A safe work environment for everyone - participants, installation and demolition crews, contractors and subcontractors.
- Ultimately, it is the responsibility of contractors to ensure the safety and safe work practices of the employees and subcontractors who may be working at the site on their behalf.
- This guide provides a simple reference guide with basic rules for implementation. This guide does not outline every single safety standard: it is designed to be a supplement to participants, contractors and subcontractors.
- Contractors, subcontractors and employees should cooperate with their employers and other persons in complying with safety regulations and instructions.
- In particular, employees should:
  - Obtain the qualified authorization of the responsible unit in the construction area.
  - Work safely
  - Do not do anything to endanger themselves or other persons.
  - Use personal protective equipment as required and take reasonable care of it when it is not in use
  - Report unsafe activities immediately to supervisors or the responsible person in control of the workplace, and
  - Report all accidents and dangerous occurrences to the supervisor immediately.



## 1- Reference standards



Adhere to the following codes:

- NFPA-70E-2021 Sec 110.3 (Electrical Safety in the Workplace)
- NFPA-70E -2021 Sec 130.4 (Shock Risk Assessment)
- NFPA-70E -2021 Sec 130.5 (Arc Flash Risk Assessment)

## 2- Requirements for workplace conditions



- Set up suitable fencing to isolate the construction area from outside
- Close and secure all entrances when the site is unattended
- Hang warning notices nearby which show the following information: warning icon and phone number of people in charge
- Install sufficient lighting fixtures

## 3- Cleaning up



- Keep work areas (including accessways) free from debris and obstructions
- Keep ground surfaces tidy and flat, to avoid people tripping or being hurt by tools or other objects
- Stack and store equipment and materials in a tidy and stable manner
- Regularly clean up and dispose of waste
- Remove all surplus materials and equipment after completion of work

## 4- Fire hazards

- Beware of flammable materials and goods. Keep them away from work areas.

## 5- Protection against high temperatures on the worksite



- Erect a sunshade or shed to shelter workers from the heat and sun
- Set up cooling equipment, such as exhaust fans
- Make water dispensers available
- Provide suitable protective clothing such as hat, sunglasses and long sleeves to protect workers from heat stroke and UV rays

## 6-Inclement weather



- Secure all scaffoldings, temporary structures, equipment, and loose materials
  - Check and implement SOP to ensure disconnection of gas supplies, electrical circuits and equipment
  - Inspect worksites to ensure protection against ingress of water or dust
  - Inspect the drainage system for blockages and remove if found
- Stop all outdoor works except for emergency works

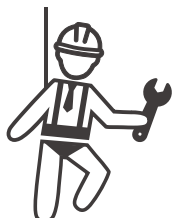
## 7- Ladders



- Only use ladders that meet local safety regulations
- When working at height, it is recommended to use platforms instead of ladders
- If using a platform is not practicable, a supervisor should assess the potential risk and provide safety
- protection equipment for workers
- use non-conductive ladders made of glass-fiber or reinforced plastic when carrying out electrical work
- Assign assistants to provide support when working on ladders
- Check all ladders for broken rungs or other defects before use and periodically
- Fully open stepladders when in use
- Do not overreach when working on a ladder
- Beware of overload restrictions

Country	Standards
USA	ANSI A 14.1, ANSI A 14.2, ANSI A 14.5
Canada	CSA Z11 M81

## 8- Working at height



- Avoid working at height by using alternative tools and methods as far as practicable
- It is strongly recommended to build suitable scaffolding or work platforms
- Provide fall arrest systems for workers if it is impracticable to use working platforms
- Secure all materials and tools to prevent them falling from height

### 9- Lifting operations



- Have lifting gear and apparatus regularly inspected and tested by qualified persons
- Isolate and cordon off lifting areas to keep out non-construction personnel
- Ensure that lifting routes do not cross buildings or people, and avoid collision with objects
- Do not exceed safe working load limits

### 10-For on-site workers



- Plan all work
- Turn off power (work with live parts de-energized whenever possible)
- LOTO (Lock Out, Tag Out)
- Live electrical work permit (input terminals with HV after door open)
- Use personal protective equipment (PPE)
- Safe workplace conditions and space
- Adhere to other occupational health, safety and security codes, such as those published by OSHA

## 5.3 Grounding and Safety Requirement

- The product must be connected to a grounded, metal, permanent wiring system, Connections shall comply with all applicable electrical codes. Recommend the ground resistance be less than 10Ω.
- Ensure no power is connected at all times when installing, servicing, or maintaining the charger.
- Use appropriate protection when connecting to main power distribution network.
- Use appropriate tools for each task.



**CAUTION:** The disconnect switch for each ungrounded conductor of AC input shall be provided by installation contractor or technician in accordance with the National Electric Code, ANSI/NFPA 70.



**CAUTION:** A cord extension set or second cable assembly shall not be used in addition to the cable assembly for connection of the EV to the EVSE.

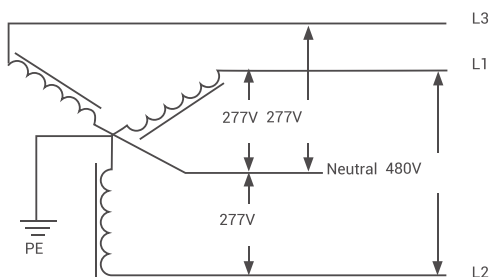
## 5.4 Ground Connection

Always connect the Neutral at the service to Earth Ground. If ground is not provided by the electrical service then a grounding stake must be installed nearby. The grounding stake must be connected to the ground bar in the main breaker panel and Neutral connected to Ground at that point. 480Vac (Line to Line) Three-Phase

### CAUTION!



This is feed from Wye-connection power grid, the Standalone DC Fast Charger can connect to L1, L2 or L3, and Neutral, Earth ground must be connected to neutral at only one point, usually at the breaker panel.



480V Three-Phase five-wire Wiring Connection



### DANGERS

Be Aware of High Voltage!

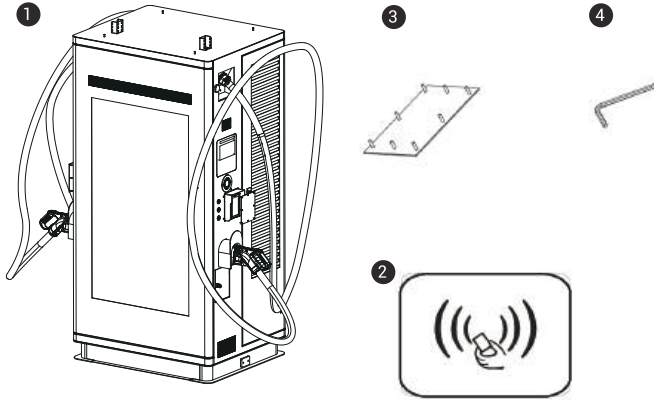


### WARNING!

Earth Connection is Essential!

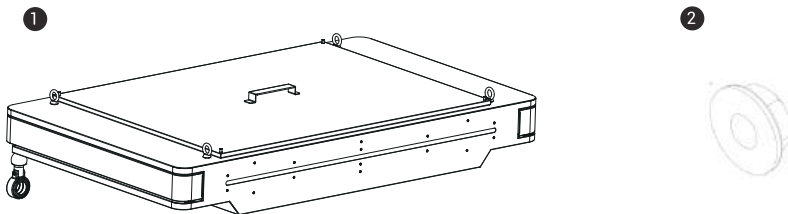
## 6. Packing List

### 6.1 Main Unit



No.	Product Name	Qty	Notes
1	DC Charger (With Charging Cables)	1	
2	RFID card (RFID Version Only)	2	
3	POS Cover Plate	2	
4	Opposite side 3mm HEX Wrench	2	The cable puller clamp uses a fixed charging gun cable

### 6.2 Cable Management



No.	Product Name	Qty	Notes
1	Cable Management	1	
2	M8 Flange nut	6	

### 6.3 Unpack the charger

- The product is direct current (DC) charger and the packing design passed the packaging simulation test. If the packaging damage caused by overturning, falling or external impact during transportation, it may cause the product damage or defects. If there is any serious damage to the packaging when receiving the goods, please notify the supplier about your findings.
- The product is delivered by transport company to warehouse or specified location where it will be handed over. Transporting the charger to its final location (last mile service) is not standard included in the order.
- NOTICE: The delivery truck unloads the pallet carrying the charger. The movement of the charger to its final location is the responsibility of the customer / contractor.

If the packaging or charger is damaged

- Do not refuse the shipment / receipt.
- Make a notation on the delivery receipt and inspect cabinet for damage.
- If damage is discovered, leave cabinet in original package and request immediate inspection from carrier within 3 days of delivery.
- Contact the supplier by mail or phone to address your findings.



#### **WARNING!**

Charger weight might be 1543 lbs. (700 kg). Charger with package might be 1653 lbs. (750 kg).  
Be careful during unpack process.

6.4 Recommended Tools for Installation and Inspection

Recommended Tools for Installation

Type	Description
Cross Screwdriver	PH1 or PH2 L=100~200mm
Adjustable wrench	17 mm metric sleeve (for M10 screw securing 480V input line) 14 mm metric sleeve (for M8 screw ground and M8 nut on top) 17 mm metric wrench (for base M10 expansion screw fixation)
Socket screwdriver	No
Electrical tape	Black/15mm (0.6inch) Width
AC input cable	Cable: 2*(2/0AWG*4)
Electric drill	One manual electric drill (Diameter $\phi 14$ )
Current drain	400A/4p (Leakage switch)
Wire nipper	One
Needle-nose pliers	One
Heavy duty copper lug joint heat shrink sleeve copper lug hydraulic pliers	Copper DTS-70(6pcs)、Hydraulic tongs YQK-120

6.5 Basic Requirements for Installation

6.5.1 Reserve not less than 1 meter space around for the charger

6.5.2 Chargers must be installed on customized concrete

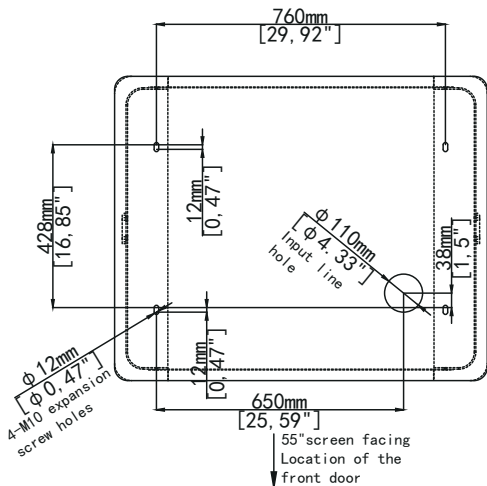
6.5.3 The height of concrete should be 200MM above the horizontal ground mounting holes in the cement base must be > 100mm to the edge of the base and the vertical inclination should not exceed 5 degrees. Drill  $\phi 14$  holes in the cement base according to the drawing spacing and install M10 expansion screws

6.5.4 Place the body into the corresponding hole on the base and tighten the screws

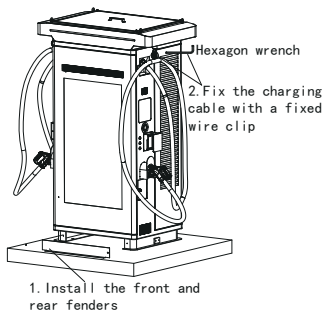
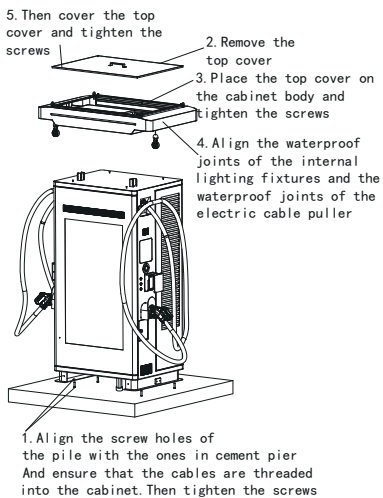
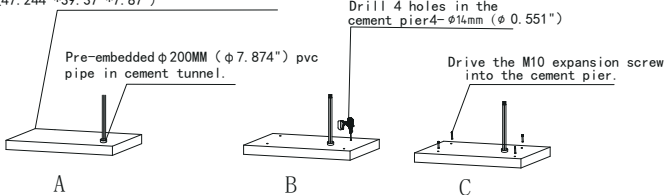
6.5.5 The charging pile and cement base should have reliable grounding connection, the grounding resistance must be less than  $10 \Omega$

Attention: Rat control measures must be taken inside the pile body

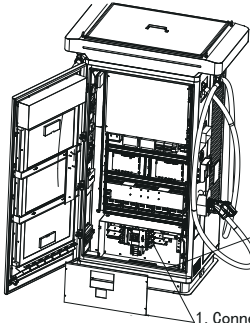
### 6.6 DC Charging Pile Installation Requirements



Build a cement pier on the ground 1200\*1000\*200mm (47.244"\*39.37"\*7.87")



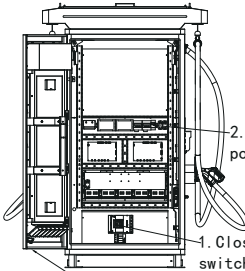
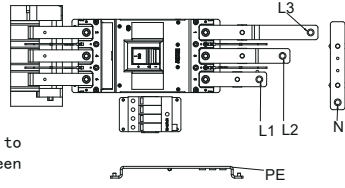




1. Connecting input line then install the board back

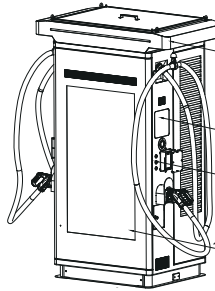
2. Use rubber putty to block the gap between the cable and the cabinet

F



1. Close the 480V main switch
2. Close the 277V power supply switch
3. Close the front door

G



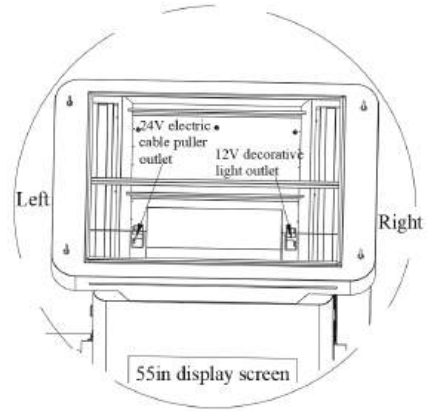
1. Test display screen
2. Testing electric cable pullers
3. Test if it can be charged
4. Check if the top light is on

H

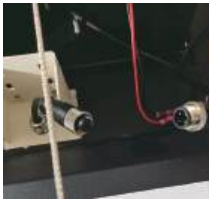
I

Wiring LED Lights on the Cable Management:

Securely fasten the waterproof connector from the main body located on the left, to the corresponding waterproof connector in the cable management system. Similarly, ensure the waterproof connector of the main LED light on the right is tightly secured to the corresponding connector in the cable management for the LED light.



Cable Management Wiring:



Pull out the waterproof connector



Splice waterproof connector



Tighten the screw on connector

Note: The connector of the CM is 4 cores, reinsert it under rotary connection if initial insertion is successful.

LED Light wiring:



Pull out the waterproof connector



Splice waterproof connector

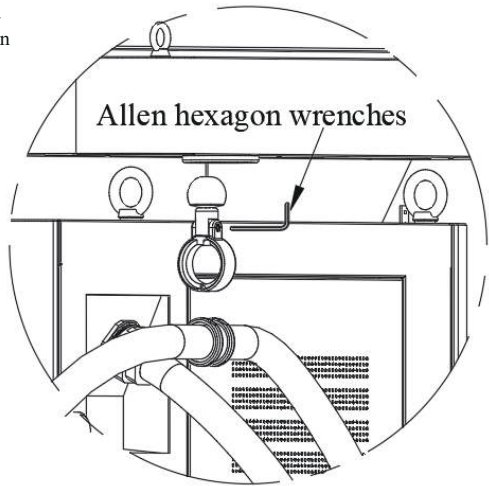


Tighten the screw on connector

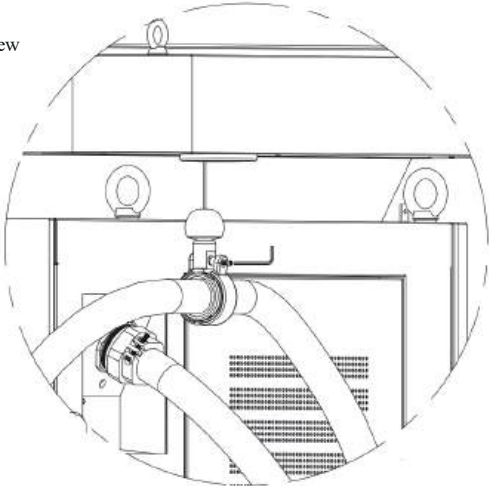
Note: The connector of the Lights is 2 cores, reinsert it under rotary connection if initial insertion is successful.

**J**

Use a hex wrench to loosen the screw of the cord coil and install the cord coil at a suitable length on the charging cable.

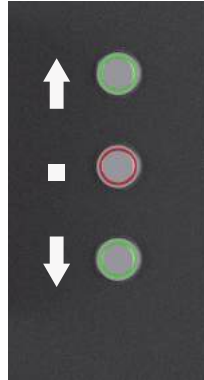


Replace the cover on the cable and fasten the screw to finish installation



## 6.7 Inspection & Commissioning

- When the “↑” button is pressed, the charging cable will move upward. at this time, the cable is in the process of retracting the cable. The reset will be completed when the retracting operation stops automatically.
- When the “↓” button is pressed, the charging cable will move downward. at this time, the cable is in the process of releasing the cable. Each cable release lasts about 30 seconds and the length of the cable is 2~3 meters.



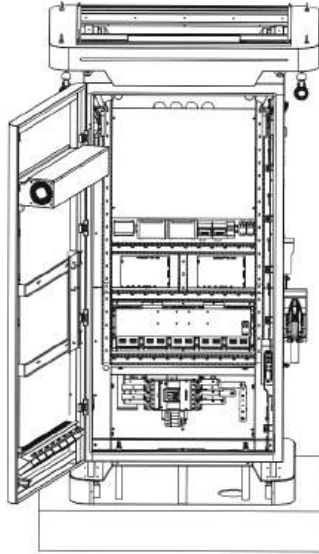
### Please note:

1. Press the “■” button for the first time to ensure that the cable moves upwards and repositioning is completed.
2. During the cable release operation, you can choose to stop or continue releasing the cable.
3. During the cable retracting process, as the main control board is resetting each time the cable is wound, please do not press any button to ensure the next operation can be smoothly into the cable. The “■” button should only be used in case of emergency.

## 6.8 Installing Cable

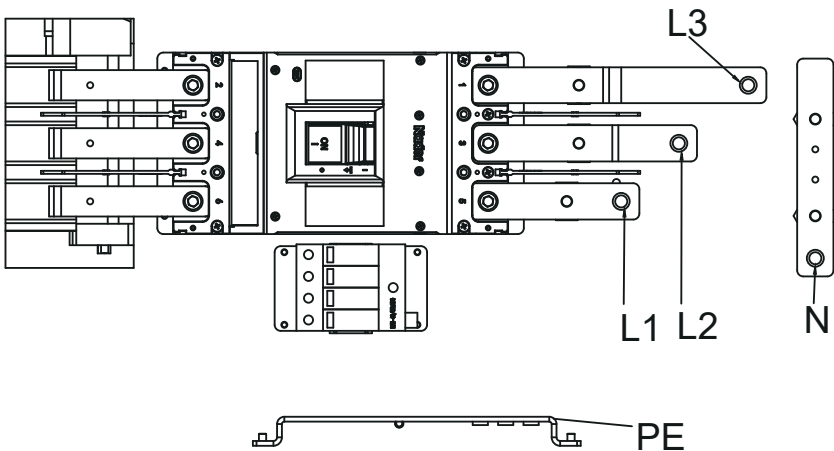
### STEP 1

Open front and right door and disassemble the protection cover for wiring



### STEP 2

Connect L1, L2, L3 and N of AC power to 4P terminal. Fasten each wire with proper screw and torque number -180Kgf.cm/5-15 secs. Connect the PE wire (green with yellow) to grounding position of charger and torque number -220Kgf.cm. Keep proper length of each wire then fasten cable grand.



### STEP 3

Pull AC power cables to power distribution box, connect the Protective Earth wire (Green/Yellow) to ground point of power distribution box. Neutral should be shorted with ground point to meet TN(-S) grounding system. Ethernet cable should be connected to charger RJ45 port and fixed with adhesive cable ties.

### STEP 4

Wiring installation of L1, L2, L3 and Neutral wire to an external breaker. Recommended breaker spec.: Max. input current shall be not less than 300A, B Curve type. Max residual leakage current (RCD) shall be 30mA.



A 300A NFB with 30mA RCD – Type A is recommended.

### STEP 5

Do Inspection as section 11.8.

Turn on the power source and be ready for operational testing. The power supply of the Standalone DC Fast Charger will be enabled and automatically drive the information screen. Information screen will turn to Supplier charging solution screen within 30 seconds.



Not following installation instruction will cause charger damage.

### STEP 6

Use adaptive flame retardants and electrical insulated foaming agent and far from conductive live parts at least 12mm or other method to seal the cable entry hole to assure the IP54 grade of the charger, and prevent insects enter the cabinet.

### STEP 7

Decorative LED Light Control settings

Use these settings to set the functional timer for DC Charger LED Lights



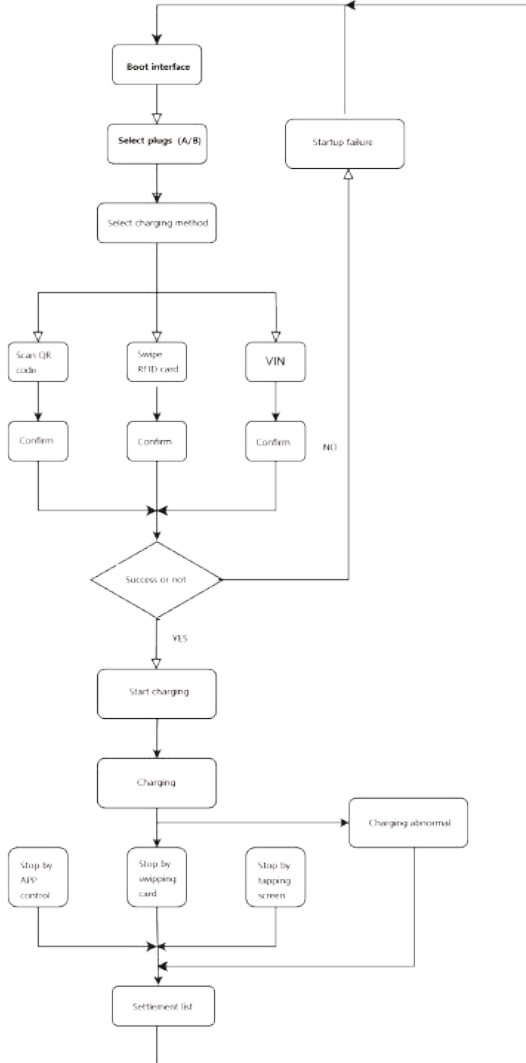
Light On Time:	1800	Light Off Time:	600
OCPP Addr:			
Charger No.:			
Wi-Fi SSID:			
Wi-Fi Password:			

Confirm Page up

Charger No.

# 7. Charging operation

## 7.1 Charging operation flowchart



## 7.2 Charging Mode Startup operation interface

This series of charger has three startup modes: VIN code, scanning QR code and swiping card (online card swiping/ offline card swiping) . Specific examples are as follows:

### a. VIN Code Chagering.

1. Main interface.




2. Click VIN code to charge.




3. After successfully identification, enter the charging interface.




4. Stop charging and enter the settlement interface.



5. Enter the settlement interface.



6. Thank you.





## b. Charging by Scanning QR Code.

Scan the QR code on the pile directly with APP

1. Main interface.



2. Charging by Scanning QR Code.



3. Wait for the user to scan code and confirm to start by using APP.




4. Scan the code and enter the charging interface.



5. Stop charging and enter the settlement interface.

Please return the plug to the organizer and drive away from the parking space to avoid taking up pile fees. Thank you for your cooperation.



6. Enter the settlement interface.



7. Thank you.



## C. Charging by Swiping Card(Online/ Offline Card Swiping)

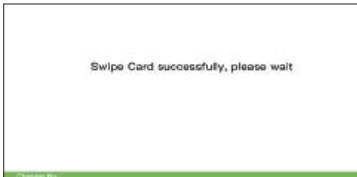
1. Main interface.



2. Charging by Swiping Card.



3. Select swipe RFID Card, then put the card to swipe.



4. Enter the charging interface.

Charging duration:	Demand current:
Consumer capacity:	Charging voltage:
Current SOC:	Charging current:
Remaining time:	Charging power:
Demand voltage:	

5. Swipe the card again to stop charging and enter the settlement interface.

Please return the plug to the organizer and drive away from the parking space to avoid taking up pile fees. Thank you for your cooperation.

Charging capacity bill (元):	Charging duration (min):
SOC(%)	
Stop reason:	

Confirm

6. Enter the settlement interface.

Account (RMB/元)	Order Amount(元)
Charging (RMB/元)	Charging Capacity (kWh)
Stop reason:	

Confirm

7. Thank you.



## 7.3 Troubleshooting

If the charging device is malfunctioning, the prompt light is always red , and the screen displays the cause of the malfunction, please follow the instructions in the table.

Description	Reason	Solution
Failure of electric meter!	Unable to communicate with the electricity meter	Check if the terminal is loose, otherwise contact customer service
Failure of insularion!	Unable to communicate with DC insulation tester	Check if the terminal is loose, otherwise contact customer service
Lightning protection fault!	Pile detected lightning protection signal	Check if the terminals are loose or if the lightning protection changes from green to red, otherwise contact customer service
Door fault!	The door is open.	Check that the door is closed, otherwise contact customer service
Emergency stop!	Emergency stop button pressed or broken button	Check that the emergency stop is pressed, otherwise contact customer service
Power module error!	Incorrect number of charging modules, or module failure	Open the side door to check if the module lights up red, otherwise contact customer service
PLC error!	Unable to communicate with PLC	Check if the terminal is loose, otherwise contact customer service

### Notes:

- If the above fault information occurs simultaneously in a large number of devices, it is highly likely to be a firmware error, and technical personnel need to be contacted to upgrade the pile
- Please pay attention to high voltage when dealing with the above related troubleshooting, and try to complete it under the guidance of professionals.

## 8 Maintenance

### 8.1 General Maintenance

- The DC Fast Charger is cooled by forced air. Please keep charger in a ventilated location and do not block the air vents of the DC Fast Charger.
- Please clean or replace the air filters regularly to ensure the DC Fast Charger works properly.
- The housing was made of welding process and surface painting. It is necessary to keep the exterior clean all the time. It's easy to get rusty if not keeping the exterior clean especially in corrosion sensitive environment. Slightly rusty will not affect charger performance, but if charger is serious rusty during or exceed the warranty period, please contact local vendor for instruction.
- Clean the DC fast Charger at least three times a year, keep the exterior clean at all times.
- Clean the outside of the cabinet with damp cloth or wet cotton towel, only use low-pressure tap water and cleaning agents with PH level between 6 to 8.
- Do not apply high-pressure water jets.
- Do not use cleaning agents with abrasive components and do not use abrasive tools. Improper cleaning agents might spoil coating, painting, surface, brightness and durability of all exterior parts.
- If there is water intruding into the DC Fast Charger then please cut off the power source immediately and contact the DC Fast Charger provider for repair.
- Please make sure the charging connector is returned to the holder of the charging connector after charging to prevent damage.
- If there is damage to the charging connector, charging cable or holder of the charging connector then please contact the DC Fast Charger provider.
- When using the DC Fast Charger please handle properly. Do not strike or scrape the cabinet or screen.
- If the enclosure or screen is broken, cracked, open or shows any other indication of damage then please contact the Standalone DC Fast Charger provider.



**WARNING:** Danger of electrical shock or injury. Turn OFF power at the panelboard or load center before working on the equipment or removing any component. Do not remove circuit protective devices or any other component until the power is turned OFF.

- Disconnect electrical power to the DC Fast Charger before any maintenance work to ensure it is separated

from the supply of AC mains. Failure to do so may cause physical injury or damage to the electrical system and charging unit.

NOTE:

- Before switching off main breaker to begin maintenance, please record the status code number on the LCD monitor.
- After maintenance door opened or NFB of charger turned off the charger is still hazardous. Only visual inspection can be operated.
- Maintenance of the DC Fast Charger shall be conducted only by a qualified technician.
- After opening the front door of the DC Fast Charger, turn off the main breaker and auxiliary breaker before any maintenance work.
- Clean the ventilation filter every six to twelve months.
- Please confirm the main power junctions are tightened every month, and rotate cables testing when the power off. If any main power screw is loose will be resulted in damage on charger or smoke on the connections. Please confirm screw torque requirement table.
- Charging cable maintenance: Do not twist, bend the charging cable. The metal contact should not fade or be rusty.
- Please provide the EVSE information including serial number, model name, status code, failure behavior and timing, and also connect the EVSE to the Internet before remote diagnostics and upgrading

Screw Torque requirement table

Screw in Metric						
Screw size	Screw type	Steel Inch-Lbs.	Steel Kgf-Cm	Steel N-m	Aluminum Kgf-Cm	Aluminum N-m
M2*0.4	Machine	3~4.77	3.5~5.5	0.34~0.54	3~4.5	0.34~0.44
M2.5*0.45	Machine	3~4.77	3.5~5.5	0.34~0.54	3~4.5	0.34~0.44
M3*0.5	Machine	5.5~9	6.5~10.5	0.64~1.04	5.2~8.4	0.51~0.82
M3.5*0.6	Machine	8.5~13	10~15	0.98~1.47	8~12	0.78~1.18
M4*0.7	Machine	13~18	15~21	1.47~2.06	12~17	1.18~1.66
M5*0.8	Machine	25~34	29~39	2.84~3.82	23~32	2.26~3.14
M6*1.0	Machine	45~55	52~63.5	5.1~6.22	42~51	4.11~5
M6*1.0	Hex cap	85~112	98~129	9.6~12.65	78~103	7.65~10.1
M8*1.25	Machine	106~141	122~163	11.96~15.98	98~130	9.61~12.75
M8*1.25	Hex cap	205~274	237~316	23.24~30.98	190~253	18.63~24.8
M10*1.5	Hex cap	212~382	245~440	24.02~43.15	196~351	19.22~34.42
M12*1.75	Hex cap	372~668	430~770	42.17~75.49	343~615	33.63~60.3
Screw in Imperial						
2-56	Machine	1.5~2	1.7~2.3	0.17~0.22	1.4~1.8	0.14~0.18
4-40	Machine	3~4	3.5~4.5	0.34~0.44	2.8~3.6	0.27~0.35
6-32	Machine	6~10	7~11.5	0.68~1.13	5.6~9.2	0.55~0.9
8-32	Machine	10~15	11.5~17	1.13~1.66	9.2~14	0.9~1.37
10-32	Machine	16~24	18.5~28	1.81~2.74	15~22	1.47~2.16
1/4-20	Machine	35~46	40~53	3.92~5.2	32~42	3.14~4.11
1/4-20	Hex cap	57~77	66~89	6.47~8.73	53~71	5.2~6.96
5/16-18	Hex cap	119~158	137~182	13.43~17.85	110~145	10.77~14.21
3/8-16	Hex cap	205~274	237~316	23.24~30.99	190~253	18.63~24.82
7/16-14	Hex cap	338~451	390~521	38.24~51.09	312~416	30.59~40.79
1/2-13	Hex cap	515~686	595~792	58.35~77.66	476~634	46.68~62.17

## 8.2 Replacement Kits and Accessories

The DC EVSE offers the following replacement kits and accessories.

Replacement Kit List
7-inch LCD
CCS1 125Amp (or above) DC charging connector & Charging cable
Charging Cable Holder
Emergency Stop Button
30kW DC PSU U-1K0100
MW Aux. Power HEP-100-12V
MW Aux. Power HEP-600-24V
Control & Supervisory Unit (CSU3.0)
Surge Protection Device (SPD)
DC Fan
Air Filters
Door Key
Gland( PG48 )
Relay board
Fan board
LED board
4G/Wi-Fi board
DC Relay
AC Contactor
NFB & RCD

## 9.Instruction of Packing, Handing, Transportation and Storage

Package:

	Top	Body
Weight	80Kg	610Kg
Package Dimensions	1470*920*2335mm(57.87"*36.22"*91.93") (750Kg)	

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

## 10. Limited Product Warranty

The warranty period of this charger is according to purchasing contract; two years typically.

Any spare parts provided by Supplier and used as replacements for repair are covered by a two-year guarantee.

Replacement and repair parts manufactured by alternative manufacturers to those on the maintenance parts are only allowed if authorized by Supplier.

The housing was made of welding process and surface painting. It is necessary to keep the exterior clean all the time. It's easy to get rusty if not keeping the exterior clean especially in corrosion sensitive environment. Slightly rusty will not affect charger performance, but if charger is serious rusty during or exceed the warranty period, please contact local vendor for instruction.

Warranty Exclusions:

- Damage or rendered non-functional as a result of power surges, lighting, earthquake, fire, flood, pest damage, abuse, accident, misuse, negligence or failure to maintain the product or other event beyond Supplier's reasonable control or not arising from normal operating condition.
- Cosmetic or superficial defect, dents, marks or scratches after use.
- Components which are separate from the product, ancillary equipment and consumables, such as door key, RFID card, air filter, fuse, cable, wires, and connectors.
- Damage as a result of modifications, alterations, or disassembling that were not pre-authorized in writing by the Supplier.
- Damage due to the failure to observe the applicable safety regulations governing the proper use of the product.
- Installed or operated not in strict conformance with the documentation, including without limitation, not ensuring sufficient ventilation for the product as described in the Supplier installation instruction.

If a defect in the product arises and a valid claim is received within the warranty period, your sole and exclusive remedy will be for Supplier, at its sole discretion and to extent permitted by law, to

- Repair the defect in the product at no charge, using new or refurbished parts.
- Exchange the product with a new or refurbished product that is functionally equivalent to the original product.

Any remedy hardware product will be warranted for the remainder of the original warranty period or 90 days from delivery to the customer, whichever is longer.

To receive the remedy, set for above, you must contact the Supplier during the warranty period and provide the model number, series number, proof of purchase, and date of purchase.

This warranty does not cover the damages caused by adapter usage accidents or by other unauthorized operations/services.



