



USER MANUAL

SEC 160KW DC INTEGRATED CHARGER



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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS



WARNING:

This manual contains important instructions for installation and use.

When install and use, always follow basic precautions, including the following.

Safety instructions for operation

- Before using for the first time you must read this document carefully, make sure that the equipment is installed and commissioned according to the instructions in the installation manual.
- For the safety of personnel, the tips, safety, and warning instructions contained in this manual must be strictly followed.
- The SEC is a high power and high voltage electric equipment. Only qualified professionals are allowed to install and maintenance it.
- Do not perform maintenance operations when the device is not powered off. When repairing the device, turn off the upper switch of the charger, hang the maintenance sign, and check for dangerous voltage to ensure that the charger is completely powered off. Test before touching.
- Even if all switches in the charger are disconnected, there is still a dangerous voltage in the copper bar of the device. Capacitor stores hazardous energy. Do not remove cover until 1 minutes after. Please pay attention to safety.
- The device must be grounded at all times. Poor or ungrounded grounding can lead to electric shock or fire. To reduce the risk of electric shock and fire. Do not connect to a circuit operating at more than 150 volts to ground.
- In case of any abnormal condition, press the emergency button immediately, which will cut input and output to ensure safety. It is forbidden to use the emergency button in non-emergency situations.
- Properly lock the door after installation or maintenance operations to prevent rainwater from entering the equipment.
- Installation conditions should be far away from fire hazards or other dangerous environment.

CONSIGNES DE SÉCURITÉ IMPORTANTES

CONSERVEZ CES INSTRUCTIONS



AVERTISSEMENT:

Ce manuel contient des instructions importantes pour l'installation et l'utilisation.

Lors de l'installation et de l'utilisation, respectez toujours les précautions de base, notamment les suivantes.

Consignes de sécurité pour le fonctionnement

- Avant la première utilisation, vous devez lire attentivement ce document, vous assurer que l'équipement est installé et mis en service conformément aux instructions du manuel d'installation.
- Pour la sécurité du personnel, les conseils, consignes de sécurité et avertissements contenus dans ce manuel doivent être strictement respectés
- Le SEC est un équipement électrique de forte puissance et de haute tension. Seuls des professionnels qualifiés sont autorisés à l'installer et à l'entretenir.
- N'effectuez pas d'opérations de maintenance lorsque l'appareil n'est pas hors tension. Lors de la réparation de l'appareil, éteignez l'interrupteur supérieur du chargeur, accrochez le panneau de maintenance et vérifiez qu'il n'y a pas de tension dangereuse pour vous assurer que le chargeur est complètement hors tension. Testez avant de toucher.
- Même si tous les interrupteurs du chargeur sont déconnectés, il existe toujours une tension dangereuse dans la barre de cuivre de l'appareil. Le condensateur stocke de l'énergie dangereuse. Ne retirez pas le couvercle avant 1 minute après. Veuillez faire attention à la sécurité.
- L'appareil doit être relié à la terre en permanence. Une mise à la terre défectueuse ou non reliée à la terre peut entraîner un choc électrique ou un incendie. Pour réduire le risque de choc électrique et d'incendie, ne connectez pas à un circuit fonctionnant à plus de 150 volts à la terre.
- En cas de situation anormale, appuyez immédiatement sur le bouton d'urgence, ce qui coupera l'entrée et la sortie pour assurer la sécurité. Il est interdit d'utiliser le bouton d'urgence dans des situations non urgentes.
- Bien verrouiller la porte après les opérations d'installation ou de maintenance pour éviter que l'eau de pluie ne pénètre dans l'équipement
- Les conditions d'installation doivent être éloignées des risques d'incendie ou d'autres environnements dangereux.

Foreword





Reader Object

This document (Guide) is mainly applicable to the following engineers:

- Technical Support Engineer
- Maintenance Engineer
- Engineering installation team





Symbol Conventions

The following symbols may appear in this document, and they have the following meanings.

| SYMBOL | DESCRIPTION |
|---|---|
|  | DANGER Dangerous Voltage Dangerous voltages can cause death or injury |
|  | WARNING Hazard Warning May cause equipment damage and personal injury |
|  | WARNING Heat warning May cause scald when touch the special parts |
|  | ATTENTION Cause of Hazard Failure to comply may result in equipment damage or functional failure |

Conventions relatives aux symboles

Les symboles suivants peuvent apparaître dans ce document et leur description est la suivante.

| SYMBOLE | DESCRIPTION |
|---|---|
|  | DCOLÈRE DTension en colère Les tensions dangereuses peuvent entraîner la mort ou des blessures |
|  | LAPPRENTISSAGE Avertissement de danger Peut endommager l'équipement et causer des blessures corporelles |
|  | AVERTISSEMENT Avertissement de chaleur Mpeut provoquer des brûlures en touchant les pièces spéciales |
|  | UNattention Cause du danger Le non-respect de cette consigne peut entraîner des dommages matériels ou une défaillance fonctionnelle. |










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1. SAFETY PRECAUTIONS

1.1. SPECIAL SYMBOLS FOR WARNINGS AND DANGERS

| SYMBOL | SYMBOL WORD | DESCRIPTION |
|---|------------------|---|
|  | Danger | Since some parts of this power system are under high voltage during operation, it is fatal for direct contact or indirect contact with these parts |
|  | Danger | Construction operation of high voltage lines may cause fire or electric shock. The wiring area and the area where the line passes through for AC cables must comply with local regulations and laws. Only personnel who are qualified to work with high DC and AC voltage are allowed to install and maintain the DC Charger. |
|  | Danger | It is strictly forbidden to carry out installation and maintenance work during thunderstorms. |
|  | Danger | The DC Charger is a high voltage DC power supply, and short circuits may cause damage to the DC Charger and personal safety hazards. |
|  | Warning | Special tools must be used during various operations of high DC and AC voltages. |
|  | Warning | Avoid touching specific parts of the charger (E.g., air outlet) to prevent high temperature scald. |
|  | Attention | Make sure that the cable label is correct before the connection of cables. |
|  | Attention | Signal cables shall be kept away from power cables to avoid interference. |
|  | Attention | The device will release heat during operation. Ensure that the area around the device is well ventilated |

SYMBOLES SPÉCIAUX POUR LES AVERTISSEMENTS ET LES DANGERS

| SYMBOLE | MOT SYMBOLE | DESCRIPTION |
|---|-----------------------|--|
|  | Dcolère | Étant donné que certaines parties de ce système électrique sont sous haute tension pendant le fonctionnement, tout contact direct ou indirect avec ces parties est mortel. |
|  | Dcolère | Les travaux de construction sur des lignes à haute tension peuvent provoquer un incendie ou une électrocution. La zone de câblage et la zone de passage des câbles CA doivent être conformes aux réglementations et lois locales. Seul le personnel qualifié pour travailler avec des tensions CC et CA élevées est autorisé à installer et à entretenir le chargeur CC. |
|  | Dcolère | Il est strictement interdit d'effectuer des travaux d'installation et de maintenance pendant les orages. |
|  | Dcolère | Le chargeur CC est une alimentation CC haute tension et les courts-circuits peuvent endommager le chargeur CC et présenter des risques pour la sécurité personnelle. |
|  | Lapprentissage | Des outils spéciaux doivent être utilisés lors de diverses opérations sous hautes tensions continues et alternatives. |
|  | Lapprentissage | Évitez de toucher des parties spécifiques du chargeur (par exemple, la sortie d'air) pour éviter les brûlures à haute température. |
|  | UNattention | Assurez-vous que l'étiquette du câble est correcte avant la connexion des câbles. |
|  | UNattention | Les câbles de signal doivent être éloignés des câbles d'alimentation pour éviter les interférences. |
|  | UNattention | L'appareil dégage de la chaleur pendant son fonctionnement. Assurez-vous que la zone autour de l'appareil est bien ventilée. |


1.2. DISCLAIMERS

Sinexcel shall not be liable for any consequence caused by any of the following events:

- Warranty expiration of the warranty service;
- Failure to follow the operation instructions and safety precautions in this document, and the resulting equipment malfunction, component damage, personal injuries, or property damage are beyond the warranty scope;
- Installation or use in environments which are not specified in related international standards.
- Incorrect transportation, removal, storage, installation, or use.
- Unauthorized modifications to the product or software code or removal of the product;
- Device damage due to force majeure (such as lightning, earthquakes, fire, and storms);
- Unauthorized modifications to the product nameplate or serial number or product appearance;
- Storage conditions that do not meet the requirements specified in this document, unused products should be stored in packing cases and placed in a dry, (After delivery shall be started and test equipment operation status within 6 months, otherwise it shall be return to Sinexcel for aging test and payable the shipping cost.);
- Ensure that the area required for heat dissipation, Otherwise, the equipment may become faulty, and the resulting equipment malfunction, component damage, personal injuries, or property damage are beyond the warranty scope;
- Installation or use by unqualified personnel;
- This document content here is for indicative purpose only. If there is any inconsistency between the content and the actual product, it should base on the actual product.

2. DECLARATION OF CONFORMITY

2.1. FCC

| Supplier's Declaration of Conformity | |
|--|---|
| To whom it may concern: | |
| It is hereby to declare that SINEXCEL INC. do hereby attest that we have made measurements or completes other procedures found acceptable to the FCC part 15B, and ensure that the equipment complies with the appropriate technical standards. The Supplier's Declaration of Conformity are only for the product below, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. | |
| 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. | |
| Responsible party Type: | Importer |
| Responsible party: | SINEXCEL INC. |
| Responsible party Address: | 9383 Charles Smith Ave, Rancho Cucamonga, CA 91730 |
| Responsible party telephone number or Internet contact information: | +1 818 747 8687 |
| Test Report Number: | No. 64.793.24.31098.01 |
| Product Description: | SEC 160kW Series DC Fast Charger |
| Trade Mark: |  |
| Relevant Standard(s): | FCC Part 15 Subpart B(10-1-2021 Edition) |

Model List

SEC1000/160Y-H-U,SEC1000/160Y-C-U, SEC1000/160Y-H-U,SEC1000/160Y-C-U,
SEC1000/160Y-HH-U,SEC1000/160Y-HT-U,SEC1000/160Y-HS-U,SEC1000/160Y-HC-U,
SEC1000/160Y-HJ-U,SEC1000/160Y-TT-U,SEC1000/160Y-TS-U,SEC1000/160Y-TC-U,
SEC1000/160Y-TJ-U,SEC1000/160Y-CC-U,SEC1000/160Y-CS-U,SEC1000/160Y-CJ-U,
SEC1000/160Y-SS-U,SEC1000/160Y-SJ-U.

SEC1000/150Y-H-U,SEC1000/150Y-C-U, SEC1000/150Y-H-U,SEC1000/150Y-C-U,
SEC1000/150Y-HH-U,SEC1000/150Y-HT-U,SEC1000/150Y-HS-U,SEC1000/150Y-HC-U,
SEC1000/150Y-HJ-U,SEC1000/150Y-TT-U,SEC1000/150Y-TS-U,SEC1000/150Y-TC-U,
SEC1000/150Y-TJ-U,SEC1000/150Y-CC-U,SEC1000/150Y-CS-U,SEC1000/150Y-CJ-U,
SEC1000/150Y-SS-U,SEC1000/150Y-SJ-U.

SEC1000/120Y-H-U,SEC1000/120Y-C-U, SEC1000/120Y-H-U,SEC1000/120Y-C-U,
SEC1000/120Y-HH-U,SEC1000/120Y-HT-U,SEC1000/120Y-HS-U,SEC1000/120Y-HC-U,
SEC1000/120Y-HJ-U,SEC1000/120Y-TT-U,SEC1000/120Y-TS-U,SEC1000/120Y-TC-U,
SEC1000/120Y-TJ-U,SEC1000/120Y-CC-U,SEC1000/120Y-CS-U,SEC1000/120Y-CJ-U,
SEC1000/120Y-SS-U,SEC1000/120Y-SJ-U.

SEC1000/100Y-H-U,SEC1000/100Y-C-U, SEC1000/100Y-H-U,SEC1000/100Y-C-U,
SEC1000/100Y-HH-U,SEC1000/100Y-HT-U,SEC1000/100Y-HS-U,SEC1000/100Y-HC-U,
SEC1000/100Y-HJ-U,SEC1000/100Y-TT-U,SEC1000/100Y-TS-U,SEC1000/100Y-TC-U,
SEC1000/100Y-TJ-U,SEC1000/100Y-CC-U,SEC1000/100Y-CS-U,SEC1000/100Y-CJ-U,
SEC1000/100Y-SS-U,SEC1000/100Y-SJ-U.

SEC1000/80Y-C-U,SEC1000/80Y-S-U,SEC1000/80Y-CC-U,SEC1000/80Y-CS-U,
SEC1000/80Y-CJ-U,SEC1000/80Y-SS-U,SEC1000/80Y-SJ-U.

SEC1000/60Y-C-U,SEC1000/60Y-S-U,SEC1000/60Y-CC-U,SEC1000/60Y-CS-U,
SEC1000/60Y-CJ-U,SEC1000/60Y-SS-U,SEC1000/60Y-SJ-U.

SEC1000/50Y-C-U,SEC1000/50Y-S-U,SEC1000/50Y-CC-U,SEC1000/50Y-CS-U,
SEC1000/50Y-CJ-U,SEC1000/50Y-SS-U,SEC1000/50Y-SJ-U.

Representative's Name (printed)

Signature

Date

February 21, 2024



Attention:

NOTE: This equipment is 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Attention:

REMARQUE : Cet équipement est conforme aux limites imposées aux appareils numériques de classe A, conformément à la partie 15 des règles de la FCC. Cet équipement génère, utilise et peut émettre des fréquences radio et, s'il n'est pas installé et utilisé conformément au manuel d'instructions, il peut causer des interférences nuisibles aux communications radio. L'utilisation de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles, auquel cas l'utilisateur devra corriger les interférences à ses propres frais.

Contains FCC ID: ZUA-AUTO-NACS02
2BFID-13EA2BFID
2BD3RNACSUHF434
2AANY-IR315
V5PIM30
XMR201906EG21G

2.2. ISED

Supplier's Declaration of Conformity

To whom it may concern:

It is hereby to declare that SINEXCEL INC. do hereby attest that we have made measurements or completes other procedures found acceptable to ICES-002, and ensure that the equipment complies with the appropriate technical standards. The Supplier's Declaration of Conformity are only for the product below, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with ICES-002 .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.

| | |
|--|---|
| Responsible party Type: | Importer |
| Responsible party: | SINEXCEL INC. |
| Responsible party Address: | 9383 Charles Smith Ave, Rancho Cucamonga, CA 91730 |
| Responsible party telephone number or Internet contact information: | +1 818 747 8687 |
| Test Report Number: | No. 64.713.24.31784.01 |
| Product Description: | SEC 160kW Series DC Fast Charger |
| Trade Mark: |  |
| Relevant Standard(s): | ICES-002(CAN ICES-002(A) / NMB-002(A)) |

Model List

SEC1000/160Y-H-U,SEC1000/160Y-C-U, SEC1000/160Y-H-U,SEC1000/160Y-C-U,
SEC1000/160Y-HH-U,SEC1000/160Y-HT-U,SEC1000/160Y-HS-U,SEC1000/160Y-HC-U,
SEC1000/160Y-HJ-U,SEC1000/160Y-TT-U,SEC1000/160Y-TS-U,SEC1000/160Y-TC-U,
SEC1000/160Y-TJ-U,SEC1000/160Y-CC-U,SEC1000/160Y-CS-U,SEC1000/160Y-CJ-U,
SEC1000/160Y-SS-U,SEC1000/160Y-SJ-U.

SEC1000/150Y-H-U,SEC1000/150Y-C-U, SEC1000/150Y-H-U,SEC1000/150Y-C-U,
SEC1000/150Y-HH-U,SEC1000/150Y-HT-U,SEC1000/150Y-HS-U,SEC1000/150Y-HC-U,
SEC1000/150Y-HJ-U,SEC1000/150Y-TT-U,SEC1000/150Y-TS-U,SEC1000/150Y-TC-U,
SEC1000/150Y-TJ-U,SEC1000/150Y-CC-U,SEC1000/150Y-CS-U,SEC1000/150Y-CJ-U,
SEC1000/150Y-SS-U,SEC1000/150Y-SJ-U.

SEC1000/120Y-H-U,SEC1000/120Y-C-U, SEC1000/120Y-H-U,SEC1000/120Y-C-U,
SEC1000/120Y-HH-U,SEC1000/120Y-HT-U,SEC1000/120Y-HS-U,SEC1000/120Y-HC-U,
SEC1000/120Y-HJ-U,SEC1000/120Y-TT-U,SEC1000/120Y-TS-U,SEC1000/120Y-TC-U,
SEC1000/120Y-TJ-U,SEC1000/120Y-CC-U,SEC1000/120Y-CS-U,SEC1000/120Y-CJ-U,
SEC1000/120Y-SS-U,SEC1000/120Y-SJ-U.

SEC1000/100Y-H-U,SEC1000/100Y-C-U, SEC1000/100Y-H-U,SEC1000/100Y-C-U,
SEC1000/100Y-HH-U,SEC1000/100Y-HT-U,SEC1000/100Y-HS-U,SEC1000/100Y-HC-U,
SEC1000/100Y-HJ-U,SEC1000/100Y-TT-U,SEC1000/100Y-TS-U,SEC1000/100Y-TC-U,
SEC1000/100Y-TJ-U,SEC1000/100Y-CC-U,SEC1000/100Y-CS-U,SEC1000/100Y-CJ-U,
SEC1000/100Y-SS-U,SEC1000/100Y-SJ-U.

SEC1000/80Y-C-U,SEC1000/80Y-S-U,SEC1000/80Y-CC-U,SEC1000/80Y-CS-U,
SEC1000/80Y-CJ-U,SEC1000/80Y-SS-U,SEC1000/80Y-SJ-U.

SEC1000/60Y-C-U,SEC1000/60Y-S-U,SEC1000/60Y-CC-U,SEC1000/60Y-CS-U,
SEC1000/60Y-CJ-U,SEC1000/60Y-SS-U,SEC1000/60Y-SJ-U.

SEC1000/50Y-C-U,SEC1000/50Y-S-U,SEC1000/50Y-CC-U,SEC1000/50Y-CS-U,
SEC1000/50Y-CJ-U,SEC1000/50Y-SS-U,SEC1000/50Y-SJ-U.

Representative's Name (printed)

Signature

Date

February 21, 2024

**Attention:**

NOTE: This equipment is comply with the limits for a Class A digital device, pursuant to ICES-002 of the ISED Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Attention:**

Note : Cet équipement est conforme aux limites d'un appareil numérique de Classe A, conformément à la norme ICES-002 des règles ISED. Ces limites sont conçues pour offrir une protection raisonnable contre les interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre de l'énergie de fréquence radio et, s'il n'est pas installé et utilisé conformément au manuel d'instructions, il peut causer des interférences nuisibles aux communications radio. L'utilisation de cet équipement dans une zone résidentielle risque de causer des interférences nuisibles, auquel cas l'utilisateur devra corriger les interférences à ses propres frais.

Contains ISED IC: 31215-AUTONACS02
32722-13EA2BFID
AN24I3464
1594A-IR315
11689A-IM30
10224A-201906EG21G



3. PRODUCT OVERVIEW

3.1. SHORT DESCRIPTION

SEC series charger adopts modular design, and has multiple protections, flexible power distribution and charging control system, which has high efficiency, stable outputs and high reliability.

The SEC is an integrated DC fast charger featuring high efficiency and flexible configure solution. It supports CCS1 & NACS & CHAdeMO dual connector to charge at the same time. Used in centralized fast charging station, the product adopts 40kW charging power module, satisfying the capacity demand as well as flexibility demand on the market.

3.2. SEC SERIES PRODUCTS MODEL

| | |
|---|--|
|  | WARNING: This manual contains important instructions for Models that shall be Followed during installation, operation and maintenance of the unit. |
|  | AVERTISSEMENT: Ce manuel contient des instructions importantes pour les modèles, qui doivent être suivies lors de l'installation, de l'exploitation et de la maintenance de l'unité. |

S E C 1000/160 Y - HH - U



| NO. | MEANING |
|-----|--|
| 1 | Sinexcel |
| 2 | Electric Vehicle |
| 3 | Charger |
| 4 | Rated output Voltage 1000Vdc |
| 5 | Rated output power 160kW, here can choose 150/120/100/80/60/50kW |
| 6 | Integrated charger |

| | |
|---|--|
| 7 | <p>Types of charging connectors to distinguish between different charging standards;</p> <p>C: CCS1 normal charging connector for 200A</p> <p>H: CCS1 high charging connector for 350A</p> <p>S: NACS normal charging connector for 200A</p> <p>T: NACS high charging connector for 350A</p> <p>J: CHA, Japan standard charging connector for 125A</p> <p>Blank:None</p> |
| 8 | <p>System type, used to distinguish application scenarios, here the default is U for UL certified models, this parameter will be replaced later if the model is certified for other regions;</p> <p>U: stands for UL certified model</p> |

3.3. PRODUCT TYPES DESCRIPTION

| SPECIFICATION | POWER DISTRIBUTION | | MAXIMUM CURRENT | |
|-------------------|--------------------|--------------------|-----------------|-------------|
| | Connector A | Connector B | Connector A | Connector B |
| SEC1000/160Y-H-U | CCS1:160kW | / | 350A | / |
| SEC1000/160Y-C-U | CCS1:160kW | / | 200A | / |
| SEC1000/160Y-T-U | NACS: 160kW | / | 350A | / |
| SEC1000/160Y-S-U | NACS: 160kW | / | 200A | / |
| SEC1000/160Y-HH-U | CCS1:80kW or 160kW | CCS1:80kW or 160kW | 350A | 350A |
| SEC1000/160Y-HT-U | CCS1:80kW or 160kW | NACS:80kW or 160kW | 350A | 350A |
| SEC1000/160Y-HS-U | CCS1:80kW or 160kW | NACS:80kW or 160kW | 350A | 200A |
| SEC1000/160Y-HC-U | CCS1:80kW or 160kW | CCS1:80kW or 160kW | 350A | 200A |
| SEC1000/160Y-HJ-U | CCS1:80kW or 160kW | CHA:62.5kW | 350A | 125A |
| SEC1000/160Y-TT-U | NACS:80kW or 160kW | NACS:80kW or 160kW | 350A | 350A |
| SEC1000/160Y-TS-U | NACS:80kW or 160kW | NACS:80kW or 160kW | 350A | 200A |
| SEC1000/160Y-TC-U | NACS:80kW or 160kW | CCS1:80kW or 160kW | 350A | 200A |
| SEC1000/160Y-TJ-U | NACS:80kW or 160kW | CHA:62.5kW | 350A | 125A |
| SEC1000/160Y-CC-U | CCS1:80kW or 160kW | CCS1:80kW or 160kW | 200A | 200A |
| SEC1000/160Y-CS-U | CCS1:80kW or 160kW | NACS:80kW or 160kW | 350A | 200A |
| SEC1000/160Y-CJ-U | CCS1:80kW or 160kW | CHA:62.5kW | 350A | 125A |
| SEC1000/160Y-SS-U | NACS:80kW or 160kW | NACS:80kW or 160kW | 200A | 200A |

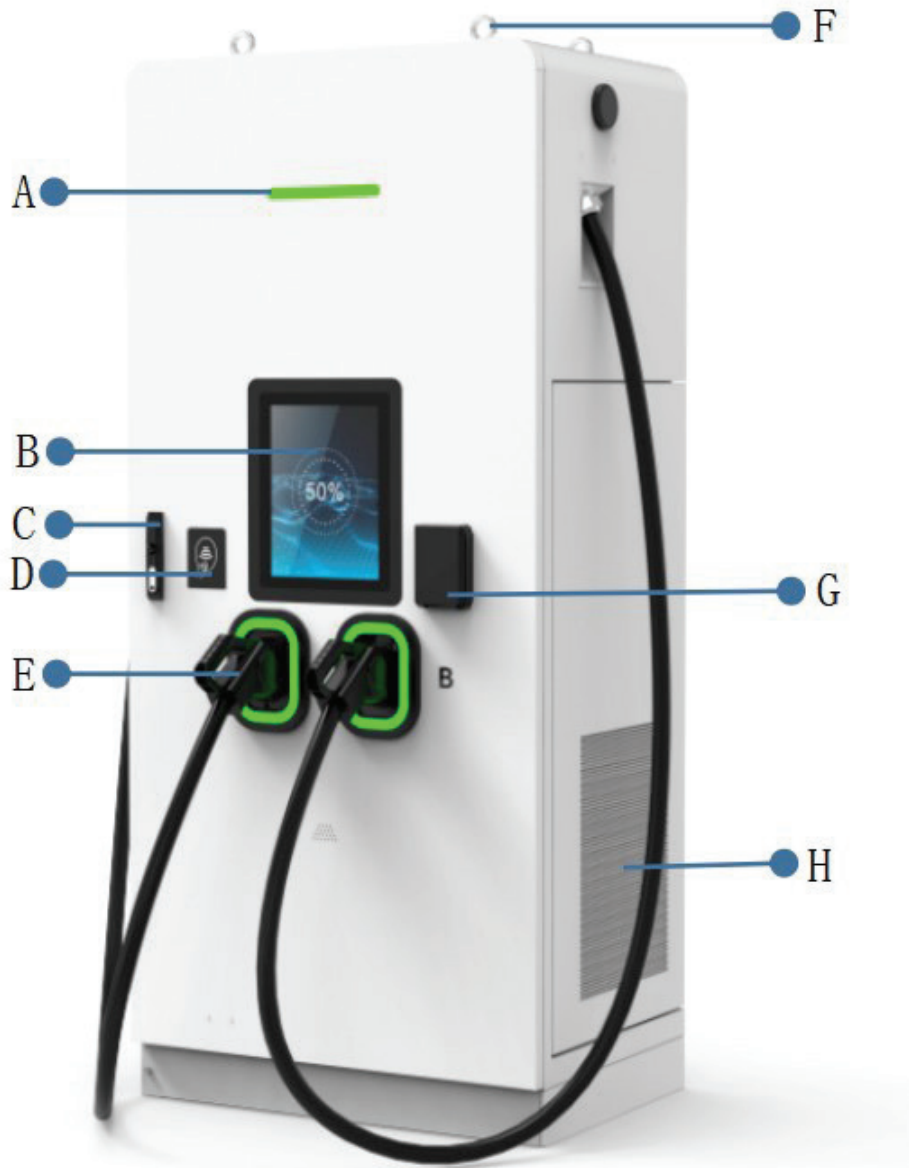
| SPECIFICATION | POWER DISTRIBUTION | | MAXIMUM CURRENT | |
|-------------------|--------------------|--------------------|-----------------|-------------|
| | Connector A | Connector B | Connector A | Connector B |
| SEC1000/160Y-SJ-U | NACS:80kW or 160kW | CHA:62.5kW | 200A | 125A |
| SEC1000/150Y-H-U | CCS1:150kW | / | 350A | / |
| SEC1000/150Y-C-U | CCS1:150kW | / | 200A | / |
| SEC1000/150Y-T-U | NACS: 150kW | / | 350A | / |
| SEC1000/150Y-S-U | NACS: 150kW | / | 200A | / |
| SEC1000/150Y-HH-U | CCS1:75kW or 150kW | CCS1:75kW or 150kW | 350A | 350A |
| SEC1000/150Y-HT-U | CCS1:75kW or 150kW | NACS:75kW or 150kW | 350A | 350A |
| SEC1000/150Y-HS-U | CCS1:75kW or 150kW | NACS:75kW or 150kW | 350A | 200A |
| SEC1000/150Y-HC-U | CCS1:75kW or 150kW | CCS1:75kW or 150kW | 350A | 200A |
| SEC1000/150Y-HJ-U | CCS1:75kW or 150kW | CHA:62.5kW | 350A | 125A |
| SEC1000/150Y-TT-U | NACS:75kW or 150kW | NACS:75kW or 150kW | 350A | 350A |
| SEC1000/150Y-TS-U | NACS:75kW or 150kW | NACS:75kW or 150kW | 350A | 200A |
| SEC1000/150Y-TC-U | NACS:75kW or 150kW | CCS1:75kW or 150kW | 350A | 200A |
| SEC1000/150Y-TJ-U | NACS:75kW or 150kW | CHA:62.5kW | 350A | 125A |
| SEC1000/150Y-CC-U | CCS1:75kW or 150kW | CCS1:75kW or 150kW | 200A | 200A |
| SEC1000/150Y-CS-U | CCS1:75kW or 150kW | NACS:75kW or 150kW | 350A | 200A |
| SEC1000/150Y-CJ-U | CCS1:75kW or 150kW | CHA:62.5kW | 350A | 125A |
| SEC1000/150Y-SS-U | NACS:80kW or 160kW | NACS:80kW or 160kW | 200A | 200A |
| SEC1000/150Y-SJ-U | NACS:80kW or 160kW | CHA:62.5kW | 200A | 125A |
| SEC1000/120Y-H-U | CCS1:120kW | / | 350A | / |
| SEC1000/120Y-C-U | CCS1:120kW | / | 200 | / |
| SEC1000/120Y-T-U | NACS:120kW | / | 350 | / |
| SEC1000/120Y-S-U | NACS:120kW | / | 200 | / |
| SEC1000/120Y-HH-U | CCS1:120kW or 60kW | CCS1:120kW or 60kW | 350A | 350A |
| SEC1000/120Y-HT-U | CCS1:120kW or 60kW | NACS:120kW or 60kW | 350A | 350A |
| SEC1000/120Y-HS-U | CCS1:120kW or 60kW | NACS:120kW or 60kW | 350A | 200A |
| SEC1000/120Y-HC-U | CCS1:120kW or 60kW | CCS1:120kW or 60kW | 350A | 200A |
| SEC1000/120Y-HJ-U | CCS1:120kW or 60kW | CHA:62.5kW | 350A | 125A |
| SEC1000/120Y-TT-U | NACS:120kW or 60kW | NACS:120kW or 60kW | 350A | 350A |
| SEC1000/120Y-TS-U | NACS:120kW or 60kW | NACS:120kW or 60kW | 350A | 200A |
| SEC1000/120Y-TC-U | NACS:120kW or 60kW | CCS1:120kW or 60kW | 350A | 200A |

| SPECIFICATION | POWER DISTRIBUTION | | MAXIMUM CURRENT | |
|-------------------|--------------------|--------------------|-----------------|-------------|
| | Connector A | Connector B | Connector A | Connector B |
| SEC1000/120Y-TJ-U | NACS:120kW or 60kW | CHA:62.5kW | 350A | 125A |
| SEC1000/120Y-CC-U | CCS1:120kW or 60kW | CCS1:120kW or 60kW | 200A | 200A |
| SEC1000/120Y-CS-U | CCS1:120kW or 60kW | NACS:120kW or 60kW | 200A | 200A |
| SEC1000/120Y-CJ-U | CCS1:120kW or 60kW | CHA:62.5kW | 200A | 125A |
| SEC1000/120Y-SS-U | NACS:120kW or 60kW | NACS:120kW or 60kW | 200A | 200A |
| SEC1000/120Y-SJ-U | NACS:120kW or 60kW | CHA:62.5kW | 200A | 125A |
| SEC1000/100Y-H-U | CCS1:100kW | / | 333A | / |
| SEC1000/100Y-C-U | CCS1:100kW | / | 200A | / |
| SEC1000/100Y-T-U | NACS: 100kW | / | 333A | / |
| SEC1000/100Y-S-U | NACS: 100kW | / | 200A | / |
| SEC1000/100Y-HH-U | CCS1:50kW or 100kW | CCS1:50kW or 100kW | 333A | 333A |
| SEC1000/100Y-HT-U | CCS1:50kW or 100kW | NACS:50kW or 100kW | 333A | 333A |
| SEC1000/100Y-HS-U | CCS1:50kW or 100kW | NACS:50kW or 100kW | 333A | 200A |
| SEC1000/100Y-HC-U | CCS1:50kW or 100kW | CCS1:50kW or 100kW | 333A | 200A |
| SEC1000/100Y-HJ-U | CCS1:50kW or 100kW | CHA:50kW | 333A | 125A |
| SEC1000/100Y-TT-U | NACS:50kW or 100kW | NACS:50kW or 100kW | 333A | 333A |
| SEC1000/100Y-TS-U | NACS:50kW or 100kW | NACS:50kW or 100kW | 333A | 200A |
| SEC1000/100Y-TC-U | NACS:50kW or 100kW | CCS1:50kW or 100kW | 333A | 200A |
| SEC1000/100Y-TJ-U | NACS:50kW or 100kW | CHA:50kW | 333A | 125A |
| SEC1000/100Y-CC-U | CCS1:50kW or 100kW | CCS1:50kW or 100kW | 200A | 200A |
| SEC1000/100Y-CS-U | CCS1:50kW or 100kW | NACS:50kW or 100kW | 333A | 200A |
| SEC1000/100Y-CJ-U | CCS1:50kW or 100kW | CHA:50kW | 333A | 125A |
| SEC1000/100Y-SS-U | NACS:50kW or 100kW | NACS:50kW or 100kW | 200A | 200A |
| SEC1000/100Y-SJ-U | NACS:50kW or 100kW | CHA:50kW | 200A | 125A |
| SEC1000/80Y-S-U | NACS:80kW | / | 200A | / |
| SEC1000/80Y-C-U | CCS1:80kW | / | 200A | / |
| SEC1000/80Y-CC-U | CCS1:80kW or 40kW | CCS1:80kW or 40kW | 200A | 200A |
| SEC1000/80Y-CS-U | CCS1:80kW or 40kW | NACS:80kW or 40kW | 200A | 200A |
| SEC1000/80Y-CJ-U | CCS1:80kW or 40kW | CHA:62.5kW | 200A | 125A |
| SEC1000/80Y-SS-U | NACS:80kW or 40kW | NACS:80kW or 40kW | 200A | 200A |
| SEC1000/80Y-SJ-U | NACS:80kW or 40kW | CHA:62.5kW | 200A | 125A |

| SPECIFICATION | POWER DISTRIBUTION | | MAXIMUM CURRENT | |
|------------------|--------------------|-------------------|-----------------|-------------|
| | Connector A | Connector B | Connector A | Connector B |
| SEC1000/60Y-C-U | CCS1:60kW | / | 200A | / |
| SEC1000/60Y-S-U | NACS:60kW | / | 200A | / |
| SEC1000/60Y-CC-U | CCS1:60kW or 30kW | CCS1:60kW or 30kW | 200A | 200A |
| SEC1000/60Y-CS-U | CCS1:60kW or 30kW | NACS:60kW or 30kW | 200A | 200A |
| SEC1000/60Y-CJ-U | CCS1:60kW or 30kW | CHA:62.5kW | 200A | 200A |
| SEC1000/60Y-SS-U | NACS:60kW or 30kW | NACS:60kW or 30kW | 200A | 200A |
| SEC1000/60Y-SJ-U | NACS:50kW or 30kW | CHA:62.5kW | 200A | 125A |
| SEC1000/50Y-C-U | CCS1:50kW | / | 167A | / |
| SEC1000/50Y-S-U | NACS:50kW | / | 167A | / |
| SEC1000/50Y-CC-U | CCS1:50kW or 25kW | CCS1:50kW or 25kW | 167A | 167A |
| SEC1000/50Y-CS-U | CCS1:50kW or 25kW | CCS1:50kW or 25kW | 167A | 167A |
| SEC1000/50Y-CJ-U | CCS1:50kW or 25kW | CHA:50kW | 167A | 125A |
| SEC1000/50Y-SS-U | NACS:50kW or 47kW | NACS:50kW or 25kW | 167A | 167A |
| SEC1000/50Y-SJ-U | NACS:50kW or 25kW | CHA:50kW | 167A | 125A |

3.4. PRODUCT VIEWS

Outside view of the SEC series three-connector type DC integrated charger



A Status LED

B Human machine interface

C Door handle/ lock

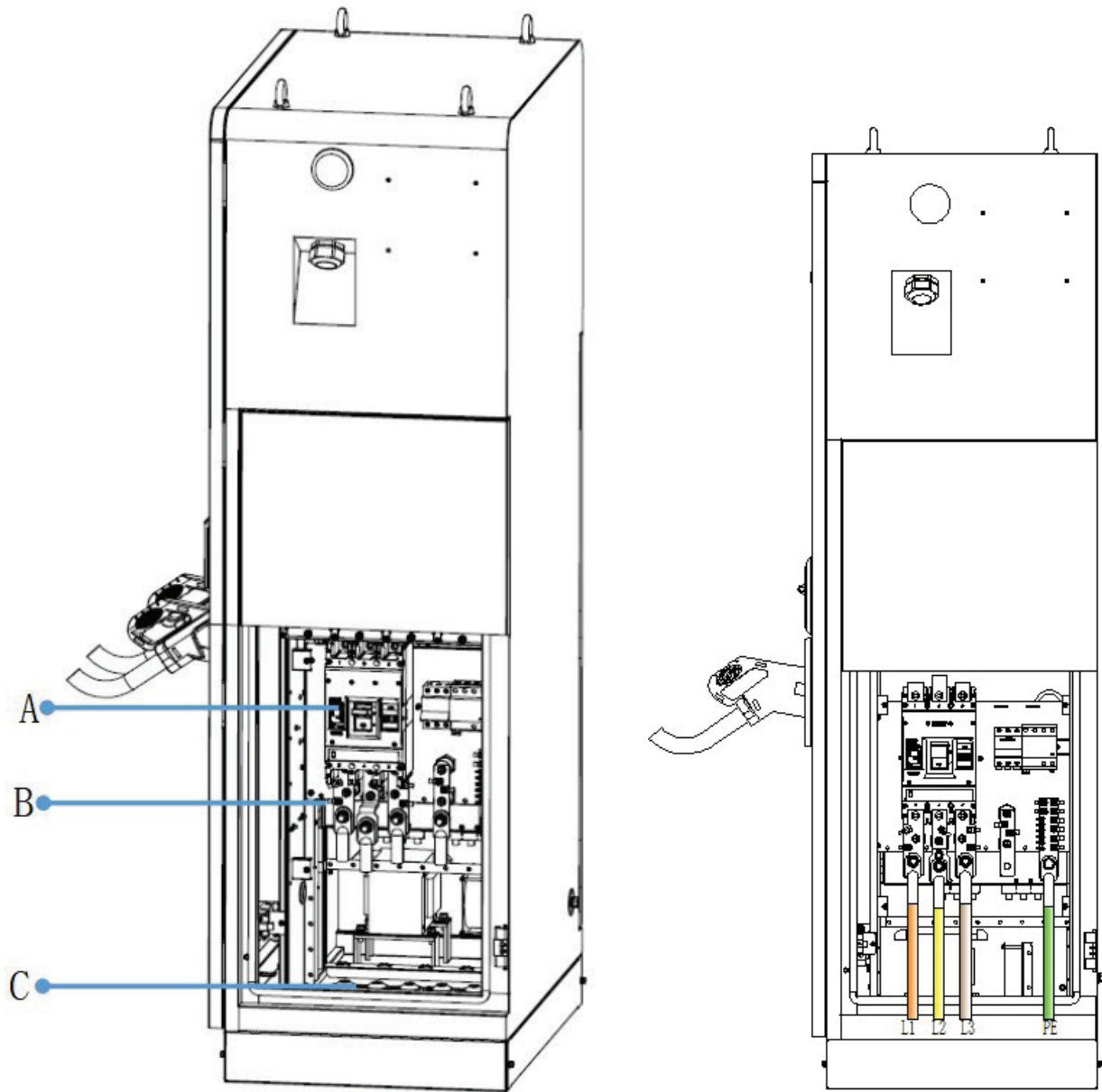
D RFID card reader

E Charging connector

F Lifting lugs

G Bank card reader

H Air inlet



Internal wiring area view of the SEC series three-connector DC integrated charger

A Main Circuit Breaker

C Inlet hole

B AC inlet copper row

3.5. PRODUCT CHARACTERISTICS

- A variety of power configurations from 50kW to 160kW can meet the customized requirements of customers. And more flexible power distribution, the model with dual DC connectors can automatically switch the power according to the vehicle demand, which can meet the rapid charging of two vehicles at the same time.
- The constant current and constant power charging methods have the advantages of high charging efficiency, simple operation and reliable performance.
- Ultra wide output voltage range, with the highest output voltage can reach DC1000V. It can not only meet the low-voltage charging of small cars, but also meet the charging requirements of buses and high-voltage vehicles.
- With overload, short circuit, leakage, lightning protection, overcharge, over voltage, under voltage, reverse connection, over temperature and other multiple protection functions.
- Multiple supporting functions integrated: standard connector homing detection function; and supports optional functions such as flooding detection, smoke detection, tilt detection, etc. provides protection for the installation and use of charger; also supports optional heaters to support the use of charger installed in cold areas.
- The intelligent standby mode can effectively reduce the operation cost of customers in the whole project life cycle, and improve the return rate of station charging.
- The cabinet shell is made of stainless steel with protection grade of IP55, which can be applied to various outdoor environments. At the same time, the overall new design of the cabinet is smaller and more compact, which can save floor space, thus more suitable for the arrangement of charger in operating stations.

3.6. PARAMETER TABLE OF PRODUCT SPECIFICATIONS

| SPECIFICATION | | |
|------------------------------|------------------------|--|
| Category | Item | Parameter |
| Input Characteristic | Input | 3P+PE |
| | Input Voltage | AC 480V |
| | Frequency | 60Hz |
| | Power Factor | 0.99 |
| | THDi | ≤5% |
| Output Characteristic | Output Voltage | CCS1/NACS : 200-1000 Vdc CHA : 200-500 Vdc |
| | Rated power | 160kW (DC connector output is compatible up to 40kW) |
| | Max Current | CCS1/NACS : 350A / CHA : 125 A |
| | Efficiency | 96% |
| | Connector Type | UL 2251/ CSA C22.2 NO. 282-17 |
| Standards | System Standards | UL 2231-2 UL 2202 CSA C22.2#281.2 CSA C22.2#107.1 |
| Others | Energy meter | High precision meter |
| | Number of connectors | 1(CCS1) /1(NACS)/2(CCS1+CCS1)/ 2(NACS+NACS)/2(CCS1+NACS)/ 2(CCS1+CHA)/2(NACS+CHA) |
| | Network Interface | Wi-Fi/Ethernet/GSM,4G(Support for U.S. Carriers) |
| | Size | W33.46 * D22.83 * H74.80 inches (W850 * D580 * H1900 mm) |
| | Protection degree | IP55 (enclosure) / 3R / Rainproof |
| | Weight | ≤800.27lbs(363 kg) |
| | Cable length | Maximum overall length 295-9/32 inches(7.5 m)(In Canada,the maximum overall length is 196-27/32 inches(5 m)) |
| | Communication protocol | OCP1.6/2.0(Upgrade) |
| | Display Screen | 15 inches |
| | Method of payment | QR Code/Rfid/Mobile phone (Optional) |
| | Language | English |

| | | |
|---------------------------------|----------------------------------|---|
| Environmental conditions | Cooling method | Forced air cooling |
| | Full power operating temperature | -86 ~ 122 °F (-30 ~ 50 °C) |
| | Humidity | 5%~95% |
| | Altitude | ≤6561.67 ft(2000 m) |
| Protection | | DC Over current protection Surge Protection Device Overload protection Short circuit protection Electric leakage protection Overcharge protection Over voltage protection Under voltage protection Reverse connect protection Over temperature protection Flood detection Connector Homing Check |

4. INSTALLATION INSTRUCTIONS

4.1. EQUIPMENT DIMENSIONS

1. The shape and dimension of the charger are shown in **Figure 4.1-A**.

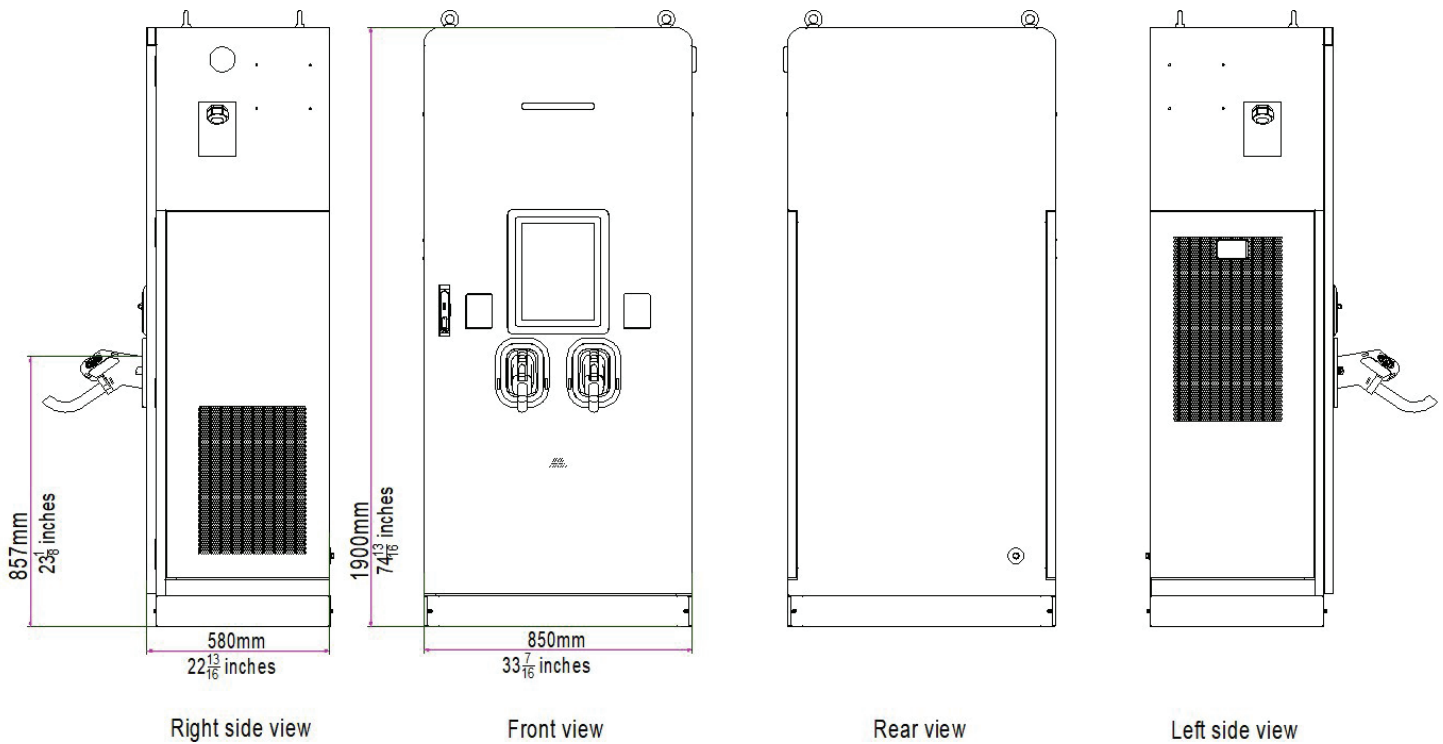


Figure 4.1-A Outline and dimension of charger

2. The hole size of charger base is shown in **Figure 4.1-B**.

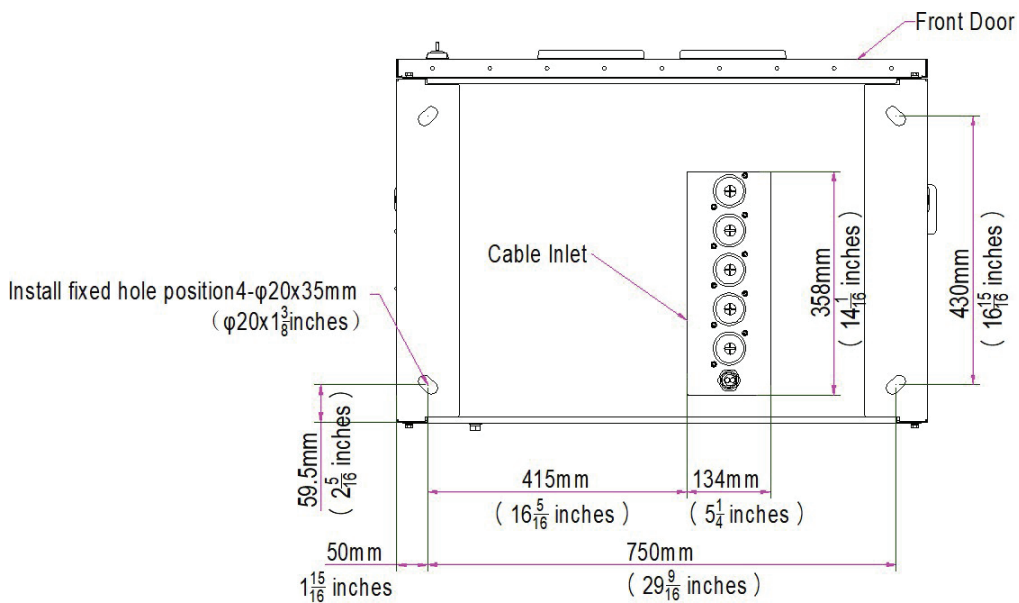




Figure 4.1-B Hole size of charger base

4.2. EQUIPMENT INSTALLATION REQUIREMENTS

| | |
|---|--|
|  | <p>WARNING:</p> <p>Ensure that you comply with the following installation requirements. Otherwise, the normal operation and ventilation of the cabinet may be affected!</p> |
|  | <p>AVERTISSEMENT:</p> <p>Assurez-vous de respecter les exigences d'installation suivantes, sinon le fonctionnement normal et la ventilation du cabinet pourraient être affectés !</p> |

1. The charger is opened in front, left and right, and the connectors are used from both sides. Space should be reserved around. See Figure 4.2-A for the reserved size;
2. Installation on the foundation of channel steel or concrete;
3. The cable shall be embedded in advance, the reserved length of Ethernet cable should not be less than 118-7/64 inches(3000 mm); the length of power cable reserved shall be 23-5/8 inches \pm 25/32 inch(600 mm \pm 20 mm), and the protruding of the base through which 5 wires pass shall be less than 1-3/16 inches(30 mm), as shown in Figure 4.2-B;
4. The height of the installation foundation is recommended to be 7-7/8 inches \pm 25/32 inch(200 mm \pm 20 mm), and the vertical inclination of the installation shall not exceed 5 °. See Figure 4.2-B for details;
5. Install 4 stainless steel M15/32*3-5/32 inches(M12*80mm) expansion bolts between the base and the cabinet. Note that the bolts need to be equipped with M15/32 inch(M12) stainless steel flat gasket.
6. These requirements do not cover DC charging equipment for EV intended to be used in hazardous locations, such as near fuel dispensing stations.

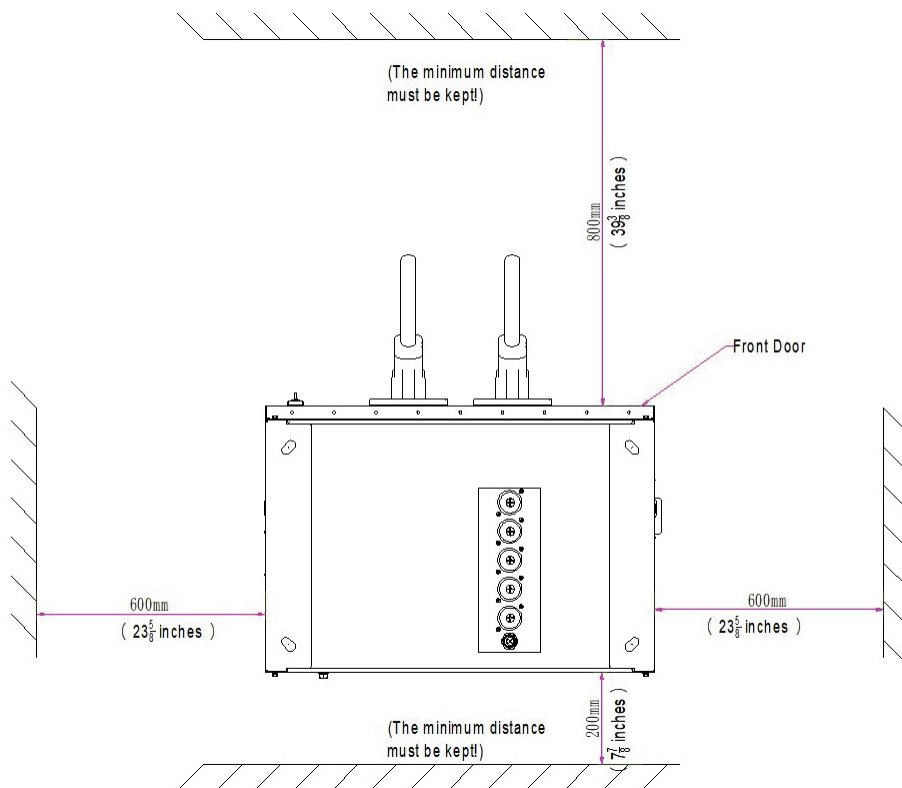




Figure 4.2-A Requirements for charger placement

| | |
|---|--|
|  | <p>Attention:</p> <p>The reserved cable length cannot be lower than the value shown in the picture; otherwise, the installation may fail!</p> <p>These requirements do not cover DC charging equipment for EV intended to be used in hazardous locations, such as near fuel depot.</p> |
|  | <p>Attention:</p> <p>La longueur de câble réservée ne peut être inférieure à la valeur indiquée dans l'image ; sinon, l'installation risque d'échouer !</p> <p>Ces exigences ne s'appliquent pas aux équipements de recharge en courant continu des véhicules électriques destinés à être utilisés dans des lieux dangereux, par exemple à proximité d'un dépôt de carburant.</p> |

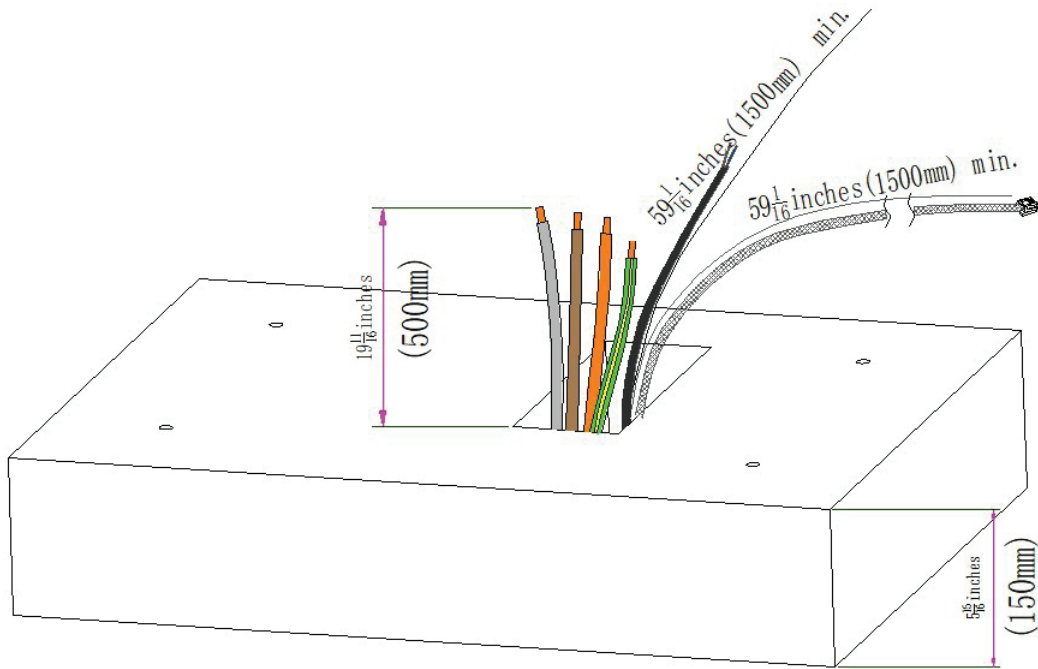


Figure 4.2-B Base and cable reservation requirements

4.3. CONSTRUCTION OF DISTRIBUTION CABLES

4.3.1. LAYOUT REQUIREMENTS OF DISTRIBUTION CABLES

1. The input cable of the system is introduced from the inlet hole at the bottom of the charger, and the cable shall be laid through the cable trench.
2. The AC cable adopts copper core wire, and the cross-sectional area of the cable shall adapt to the load.
3. The outdoor power cable shall be laid according to the power specification. The power cable and the signal cable must be separated, and the signal cable should be put through the tube separately to avoid the pressure loss and interference of the communication signal.
4. The cable shall not be laid in the area easily damaged by mechanical damage, corrosive medium emission, humidity, strong magnetic field and strong electrostatic field interference. If necessary, please take corresponding protection or shielding measures.
5. The AC input cable starts from the user's distribution switch and connects to the copper bar of the charger's inlet cable switch. Protection devices shall be provided at the user's power distribution.

4.3.2. PROCESS REQUIREMENTS OF DISTRIBUTION CABLES

1. Cable laying shall be free from external force, distortion and damage of insulation layer.
2. It is strictly forbidden to twist, flatten, break the protective layer and wear the protective layer seriously.
3. The protective pipe shall be cleaned before the cable passes through the pipe, and the wire shall not be damaged.
4. The cable arrangement shall be tidy. The binding should be neat and should not be crossed.
5. Sufficient allowance (no less than 23-5/8 inches(600 mm)) shall be reserved for each wire of the cable, and the bending degree shall be consistent.
6. Crimp the terminal of the cable head, and there should be no gap on the penetration surface of the terminal after crimping.
7. When pressing the lug of inlet cable, the heat shrinkable tube should be set between the cable and the lug, and the inside and outside of the tube should be smooth without damage and crack. Before setting the heat shrinkable tube, the sundries on the cable shall be removed, and there shall be no burr and iron filings on the surface to prevent damage to the tube. The color of the tube shall be in accordance with the phase sequence. When the tube is heat shrinkable, the flame should be avoided to spray on the inside of the cabinet to prevent burning the internal components and cables of the cabinet. The appearance of heat shrinkable casing should be flat, smooth, uniform shrinkage, no dust and crack.
8. Attention should be paid to the wiring sequence when pressing RJ45 connector for Ethernet cable. Check whether the pressing is qualified after pressing.

4.3.3. CABLE SPECIFICATIONS FOR AC INPUT (RECOMMENDED)

| CAPACITY (KW) | CABLE SPECIFICATION (USE COPPER CONDUCTORS ONLY) | CAPACITY OF SUPERIOR DISTRIBUTION SWITCH | SCREW SPECIFICATION (DIAMETER: MM) | SPECIFICATION |
|---------------|--|--|--|--------------------------------------|
| 160kW | L1/L2/L3: 300 kcmil(150 mm ²) PE: 2/0 AWG(70 mm ²) | 350A | L1/L2/L3: M12{376.36~438.80in-lbs (434~506kgf.cm)} PE: M12{376.36~438.80in-lbs (434~506kgf.cm)} | L1/L2/L3: DT150-12 PE:DT70-12 |
| 150 kW | L1/L2/L3: 300 kcmil(150 mm ²) PE: 2/0 AWG(70 mm ²) | 350A | L1/L2/L3: M12{376.36~438.80in-lbs (434~506kgf.cm)} PE: M12{376.36~438.80in-lbs (434~506kgf.cm)} | L1/L2/L3: DT150-12 PE:DT70-12 |
| 120 kW | L1/L2/L3: 4/0 AWG(120 mm ²) PE: 1/0 AWG(50 mm ²) | 250A | L1/L2/L3: M12{376.36~438.80in-lbs (434~506kgf.cm)} PE: M12{376.36~438.80in-lbs (434~506kgf.cm)} | L1/L2/L3: DT120-12 PE:DT50-12 |
| 100 kW | L1/L2/L3: 4/0 AWG(120 mm ²) PE: 1/0 AWG(50 mm ²) | 250A | L1/L2/L3: M12{376.36~438.80in-lbs (434~506kgf.cm)} PE: M12{376.36~438.80in-lbs (434~506kgf.cm)} | L1/L2/L3: DT120-12 PE:DT50-12 |
| 80kW | L1/L2/L3: 1/0 AWG(50 mm ²) PE: 3 AWG(25 mm ²) | 160A | L1/L2/L3: M10{202.95~225.84in-lbs (234~286kgf.cm)} PE: M10{202.95~225.84in-lbs (234~286kgf.cm)} | L1/L2/L3/N: DT50-10 PE:DT25-10 |
| 60kW | L1/L2/L3: 1/0 AWG(50 mm ²) PE: 3 AWG(25 mm ²) | 100A | L1/L2/L3: M10{202.95~225.84in-lbs (234~286kgf.cm)} PE: M10{202.95~225.84in-lbs (234~286kgf.cm)} | L1/L2/L3: DT50-10 PE:DT25-10 |
| 50kW | L1/L2/L3: 1/0 AWG(50 mm ²) PE: 3 AWG(25 mm ²) | 100A | L1/L2/L3: M10{202.95~225.84in-lbs (234~286kgf.cm)} PE: M10{202.95~225.84in-lbs (234~286kgf.cm)} | L1/L2/L3: DT50-10 PE:DT25-10 |

4.3.4. INTERNAL WIRING DIAGRAM OF EQUIPMENT

The internal AC input cables are L1, L2, L3 and PE from left to right. The cabinet grounding is divided into two parts, one is the grounding bar inside the cabinet, and the other is the grounding of cabinet shell, as shown in **Figure 4.3-A**.

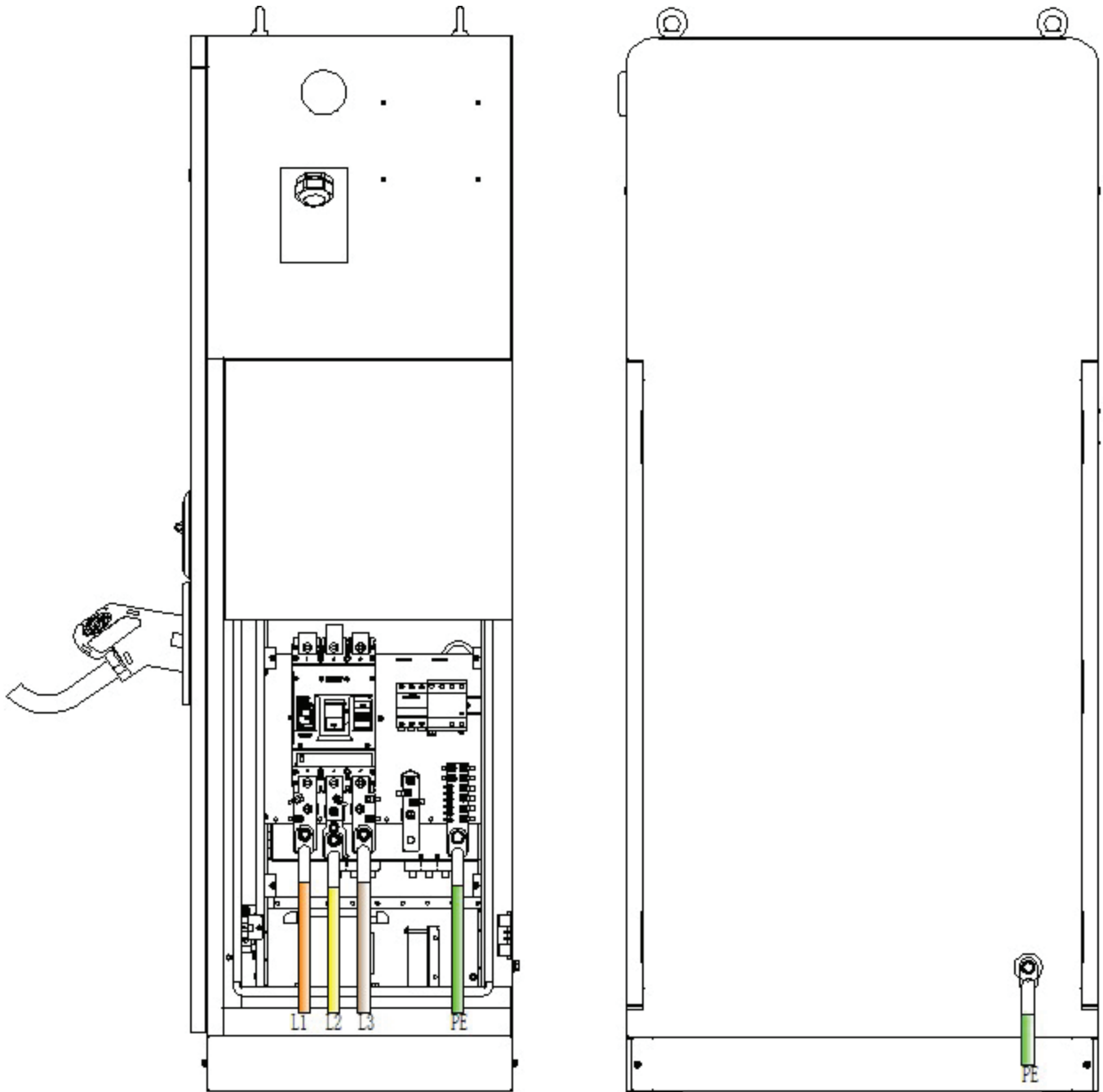


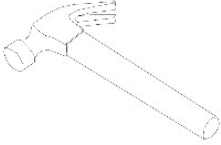
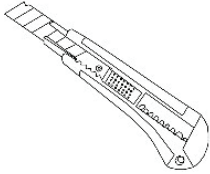
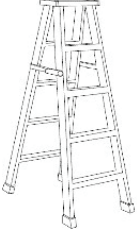



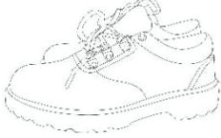
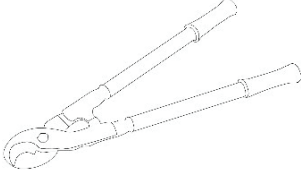
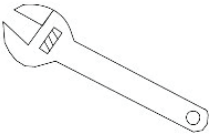
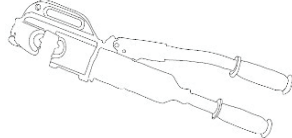


Figure 4.3-A Internal wiring diagram of charger



4.4. INSTALLATION STEPS OF CHARGING EQUIPMENT

| | |
|---|---|
|  | <p>Attention:</p> <p>The following tools should be included as far as possible, but are not limited to those listed in the following table.</p> |
|  | <p>Attention:</p> <p>Les outils suivants doivent être inclus dans la mesure du possible, mais ne sont pas limités à ceux énumérés dans le tableau suivant.</p> |

Tools required

| S/N | Tools | Num | Drawing | S/N | Tools | Num | Drawing |
|-----|--------------------|-----|---|-----|--|-----|---|
| 1 | Claw hammer | 1 |  | 6 | Art knife | 1 |  |
| 2 | Herringbone ladder | 1 |  | 7 | Cross screwdriver | 1 |  |
| 3 | Insulating gloves | 1 |  | 8 | Electric drill Equipped with ϕ 16mm drill bit | 1 |  |
| 4 | Insulation shoes | 1 |  | 9 | Cable clipper | 1 |  |
| 5 | Adjustable wrench | 1 |  | 10 | Hydraulic clamp | 1 |  |

4.4.1. UNPACKING THE OUTER PACKAGE OF THE CABINET

| | |
|---|--|
|  | Attention: Proper movement and installation are necessary to ensure the proper operation of the equipment, and it is necessary to follow the operation instructions in the manual! |
|  | Attention: Un déplacement et une installation corrects sont nécessaires pour assurer le bon fonctionnement de l'équipement, et il est nécessaire de suivre les instructions d'utilisation contenues dans le manuel ! |

Tools required: herringbone ladder, claw hammer, art knife, protective gloves

1. With the help of the herringbone ladder, straighten the metal card on the top of the packing material with a claw hammer, and remove the upper cover plate. As shown in **Figure 4.4.1-A**.

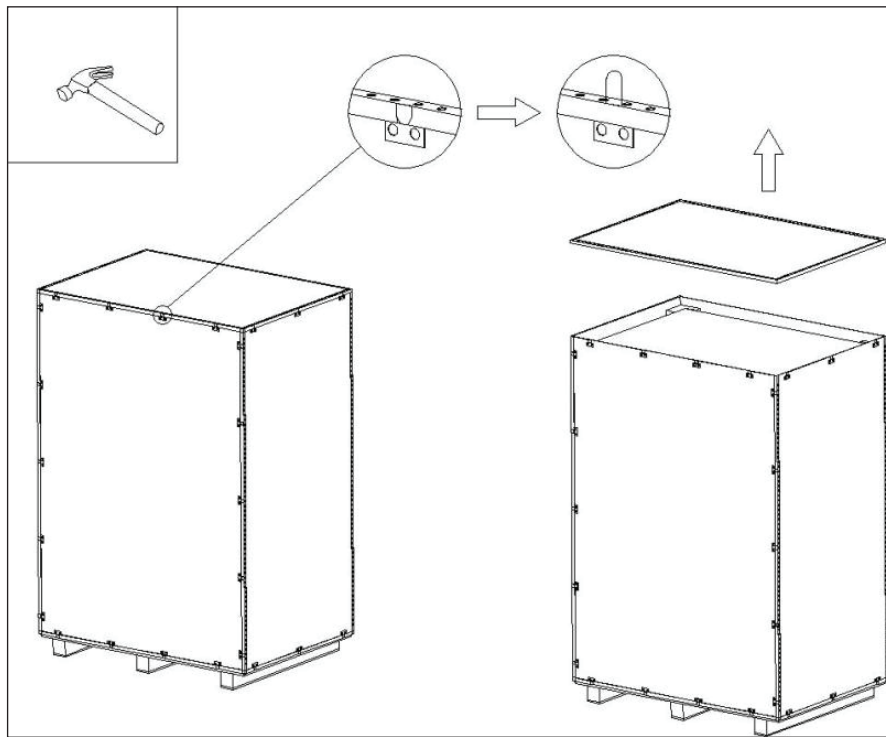


Figure 4.4.1-A

2. Straighten all metal cards with a claw hammer, remove the surrounding wood boards, cut the PE bags wrapped around the cabinet with the art knife, and remove the PE bags and foam. As shown in **Figure 4.4.1-B**.

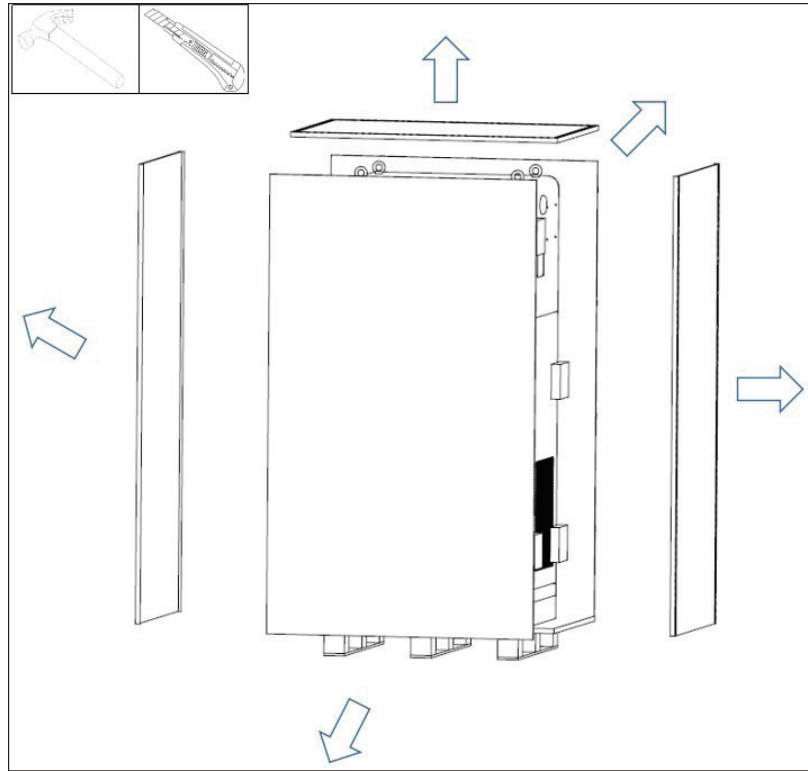


Figure 4.4.1-B

3. Remove the left and right sealing plates first, and then use a wrench to remove the four M15/32 inch(M12 mm) bolts around the base, as shown in **Figure 4.4.1-C**.

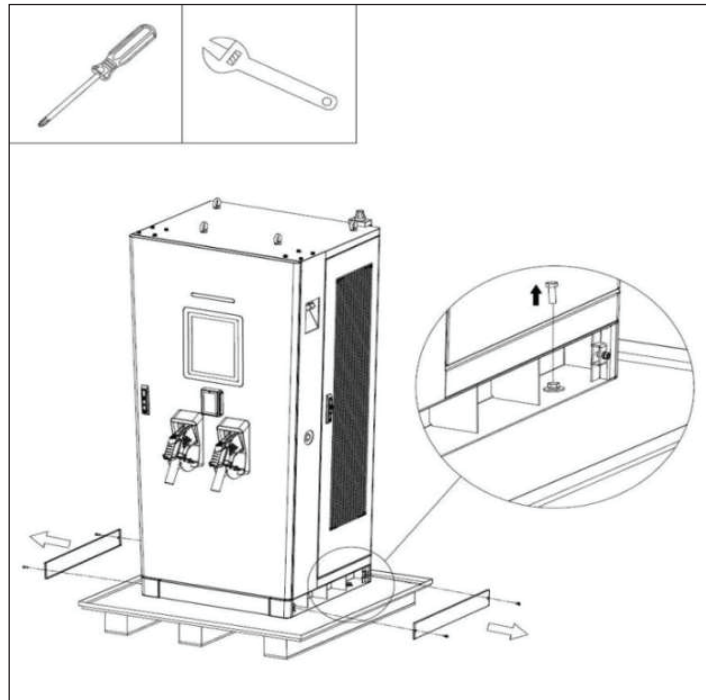


Figure4.4.1-C

4.4.2. FOUNDATION DRILLING

Tools required: electric drill, ϕ 5/8 inch (ϕ 16 mm) drill bit, protective gloves

1. The hole size is shown in **Figure 4.4.2-A**.

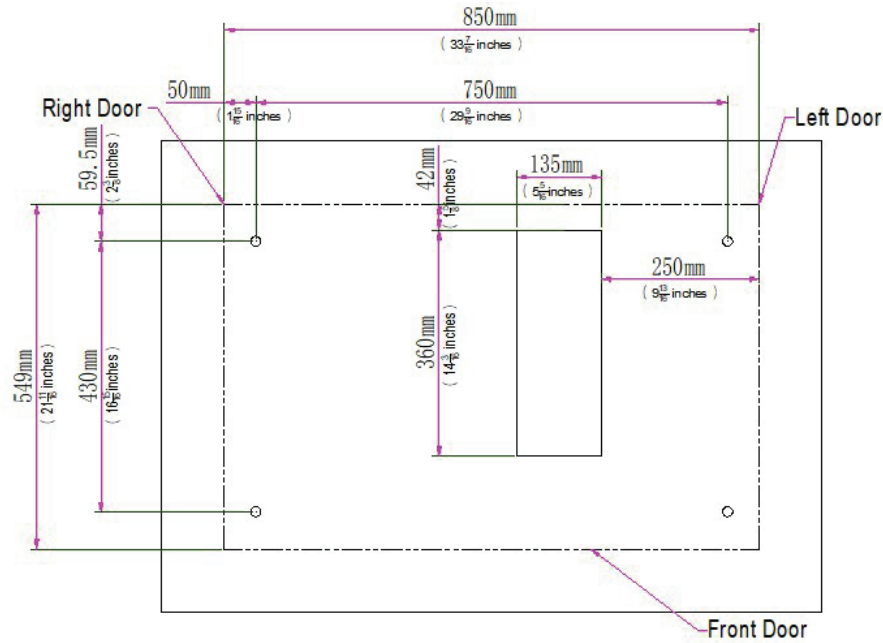


Figure 4.4.2-A

2. Drill four mounting holes with a diameter of ϕ 5/8 inch (16 mm) and a depth of 3-5/32~3-11/32 inches (80-85 mm) on the cement mounting base
3. Knock four M15/32 * 3-5/32 inches (M12 * 80) expansion bolts into the holes with a claw hammer, and then screw out the screw part, so that the expansion bolt casing is embedded in the base mounting hole. As shown in **Figure 4.4.2-B**.

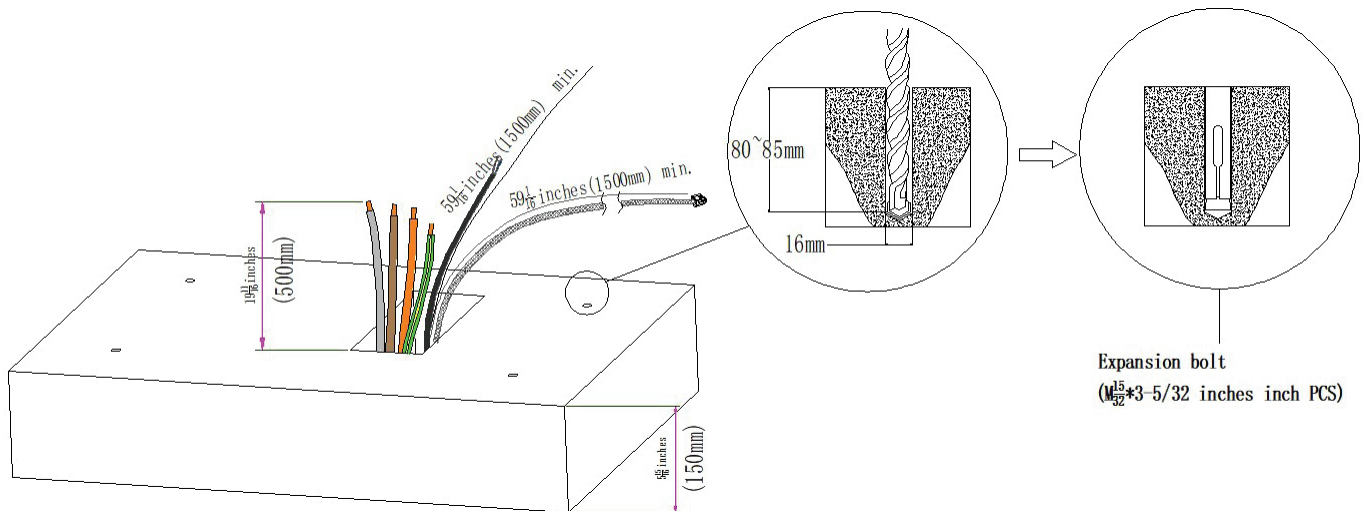


Figure 4.4.2-B

4.4.3. PLACING CHARGER

1. Use forklift to transport the cabinet to the installation base, and use the crane to lift the cabinet. It is shown in **Figure 3.4.3-A**.

| | |
|--|---|
| | WARNING: Select a forklift or crane whose load matches the weight of the cabinet! |
| | AVERTISSEMENT: Choisir un chariot élévateur ou une grue dont la charge correspond au poids de l'armoire ! |

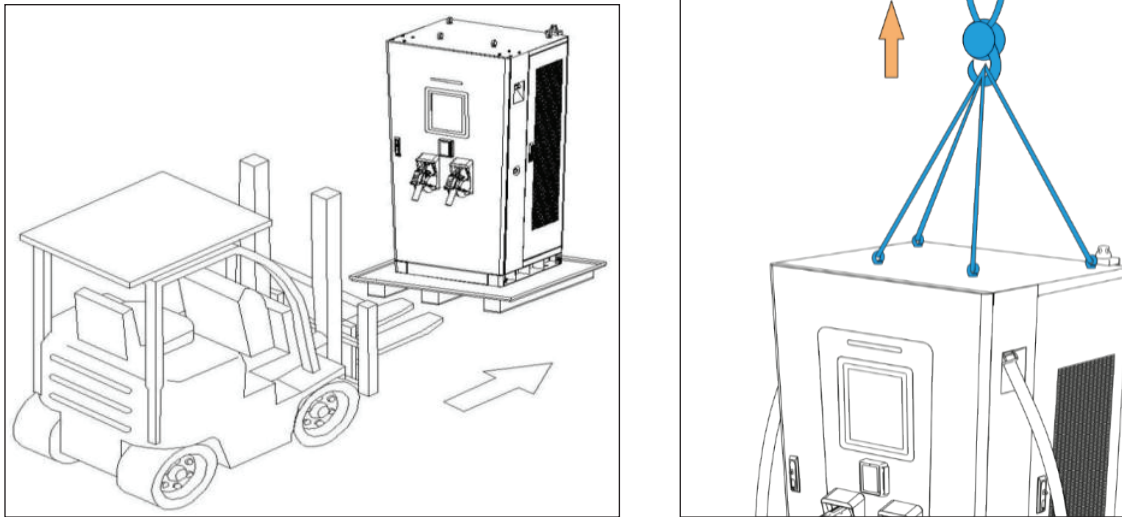


Figure 4.4.3-A

2. Suspend the cabinet above the cement base, open the right door of the cabinet, and extend the embedded cable from the bottom of the cabinet through the inlet hole (the rubber film of the inlet hole needs to be punctured). At this time, slowly lower the cabinet and pull the remaining cables out from the right door until the cabinet is completely placed on the base. As shown in Figure 4.4.3-B.

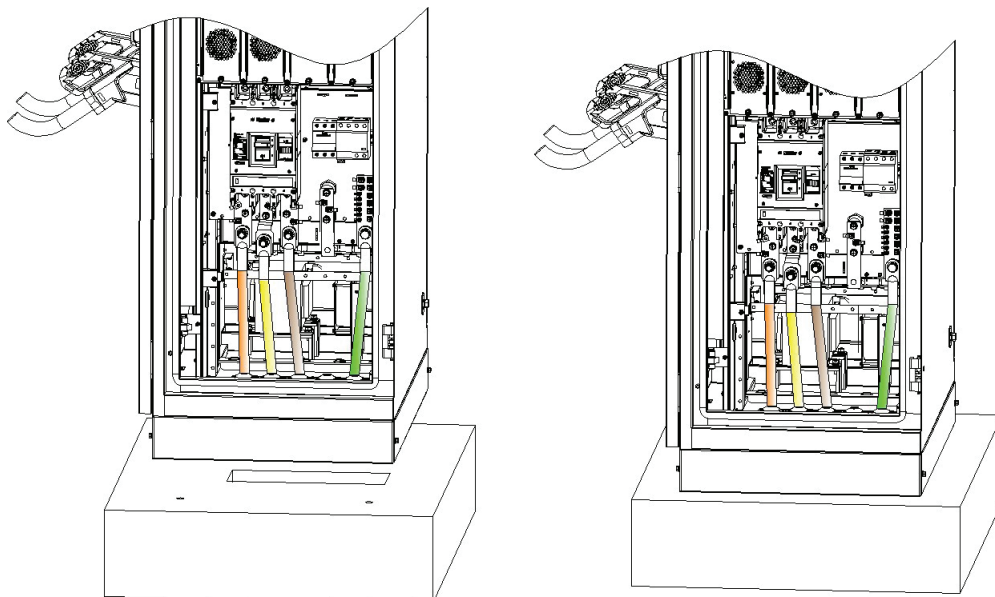


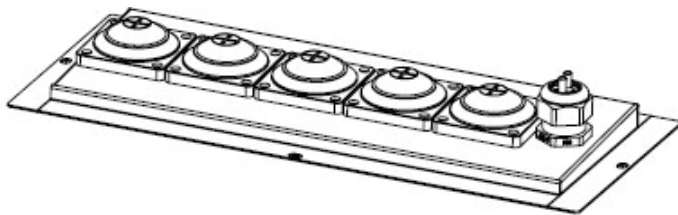


Figure 4.4.3-B

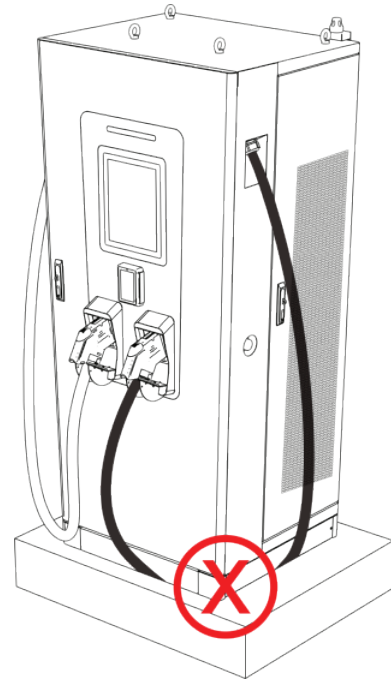
Note:

- i. It is necessary to match the mounting hole of the cabinet base with the hole on the cement base;
- ii. The inlet cable sealing plate of the cabinet can be removed, but the protection coil shall be avoided from damage during the removal process. The inlet cable sealing plate is shown in **Figure 4.4.3-C- (1)**.
- iii. During operation, please pay attention not to damage the cable and charging connector wire. As shown in **Figure 4.4.3-C-(2)**

| | |
|---|---|
|  | WARNING: Avoid damaging the charging connector during installation! |
|  | AVERTISSEMENT: Évitez d'endommager le connecteur de charge pendant l'installation ! |



(1)The inlet cable sealing plate is removable



(2)Do not press the charging connector cable

Figure 4.4.3-C

3. Install M15/32 * 3-5/32 inches(M12 * 80) (4 pcs)expansion bolts on the drilled installation holes around the base, and tighten the bolts to ensure the cabinet is fixed reliably, as shown in **Figure 3.4.3-D**.

| | |
|--|--|
| | <p>Attention: The torque of these bolts is 376.36 ~ 438.80 in-lbs(434~506 kgf.cm).</p> |
| | <p>Attention: Le couple de serrage de ces boulons est de 376,36 ~ 438,80 in-lbs (434~506 kgf.cm).</p> |

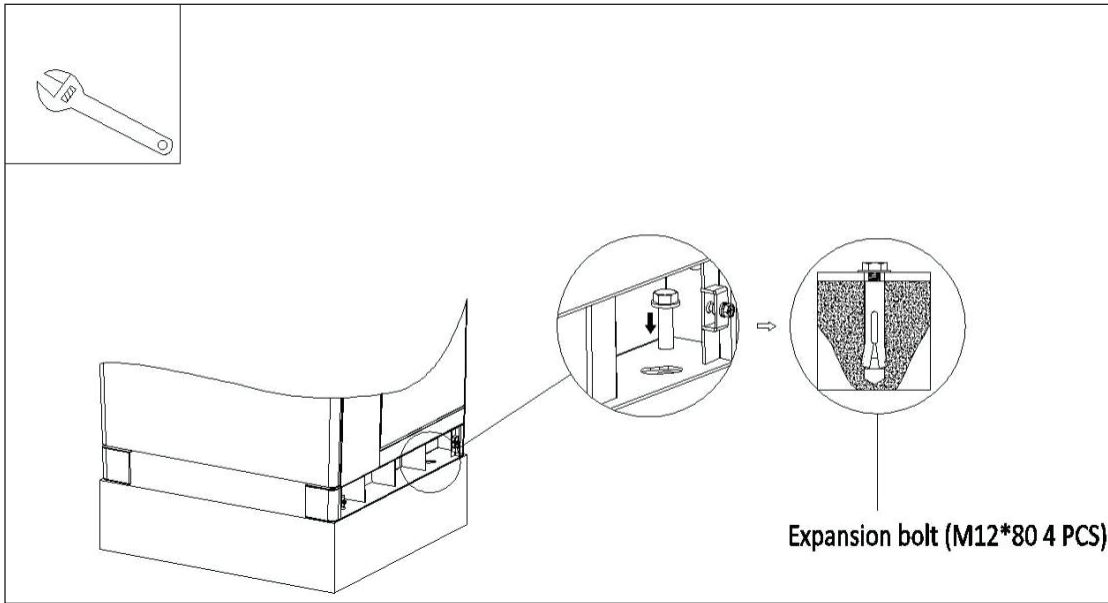


Figure 3.4.3-D

4. Install the left and right sealing plates as shown in Figure 3.4.3-E.

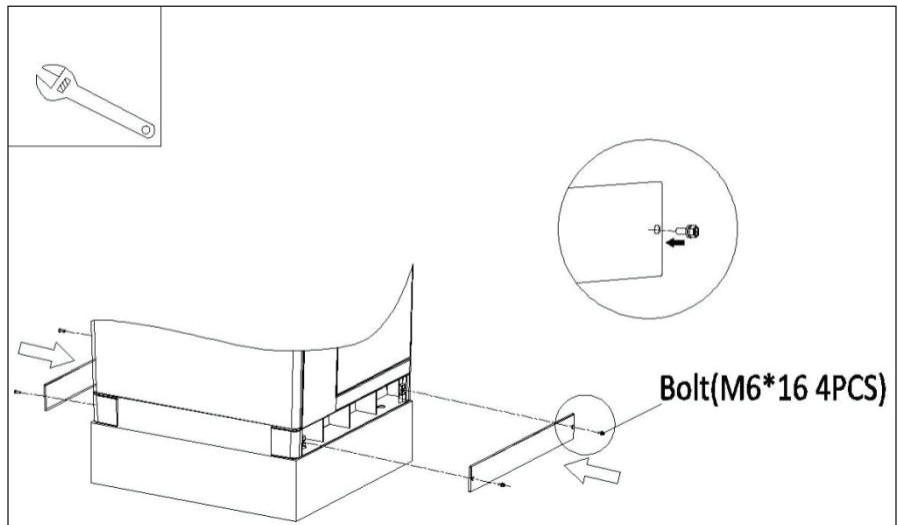


Figure3.4.3-E

4.4.4. INTERNAL WIRING DIAGRAM OF EQUIPMENT

1. Use the cable clipper to cut the cable to the appropriate wiring length, press the lug with hydraulic clamp and put on the heat shrinkable tube.
2. Fix the cable lug on the copper bar with the screw of M(25/64)/M(5/16) inch(M10/M8), the torque is 221-265.2 in·lbs(25-30N·m), and the force is calibrated, as shown in **Figure 4.4.4**.

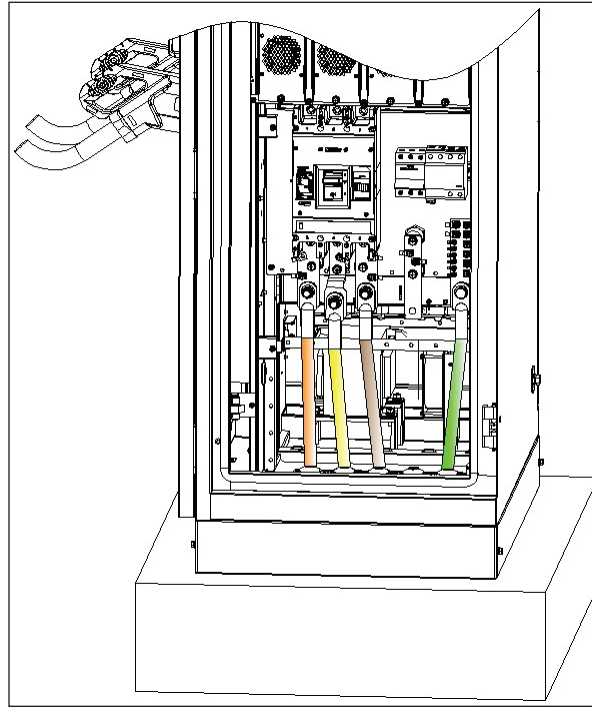


Figure 4.4.4

4.5. INSPECTION AFTER INSTALLATION

1. Tightness

According to the requirements of design and protection level, the junction between the inlet sealing plate and the inlet cable at the bottom of the cabinet must be sealed with fireproof mud to prevent insects or dirt from entering the cabinet.

2. Stability

After the pile is installed, shake the cabinet from different directions, and there should be no obvious loosening and shaking.

3. Clean up

- Dispose of all transportation and packaging materials in accordance with local regulations.
- Clean up the sundries inside and around the cabinet, such as small section of cable, binding tape, screw / nut, desiccant, etc. Do not leave installation tools on site or in the cabinet (record the type and quantity of tools to prevent omission).
- Wipe the insulation with anti-static cloth. Do not use any corrosive solvent.

4. Inspection

- Check whether the base is fixed and sealed.
- Check whether the internal components of the equipment are tight and reliable.
- Check whether the electrical connection and wiring are correct and complete, whether the connection is reliable, and whether the grounding is reliable.
- Check whether the cable terminal is loose, and calibrate the screw fixing the terminal.
- Check whether the cable is broken, damaged and scratched.
- Check whether the protection level of the equipment meets the requirements, especially the cable entrance at the bottom of the pile.
- Check appearance, marking, integrity, cleanliness.
- Check the installation of the equipment according to the foundation installation drawing.

4.6. SPECIAL INSTRUCTIONS

Need to place the charging connector on the storage device after charging is complete. As shown in **Figure3.6**.

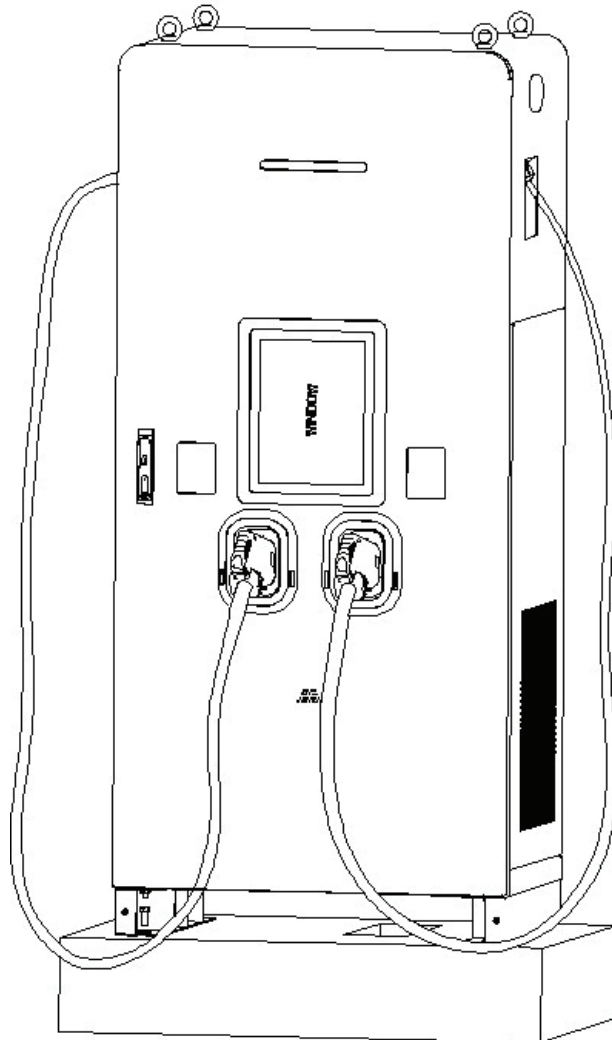










Figure 3.6

5. OPERATION INTERFACE

5.1. NOTES BEFORE CHARGING

| | |
|---|---|
|  | Before charging, make sure that the charger system is in a normal state. |
|  | Before charging, make sure that the charging cable is not damaged, and the charging connector is free of water. If the charging connector gets water, do not charge directly. |
|  | Before charging, the user should fully read the User Manual and be familiar with the safety operation instructions to prevent dangerous operations. |
|  | Before charging, the user should be familiar with the charging operation steps to prevent improper operation. |

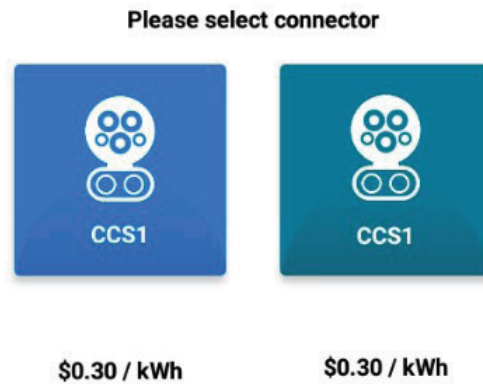
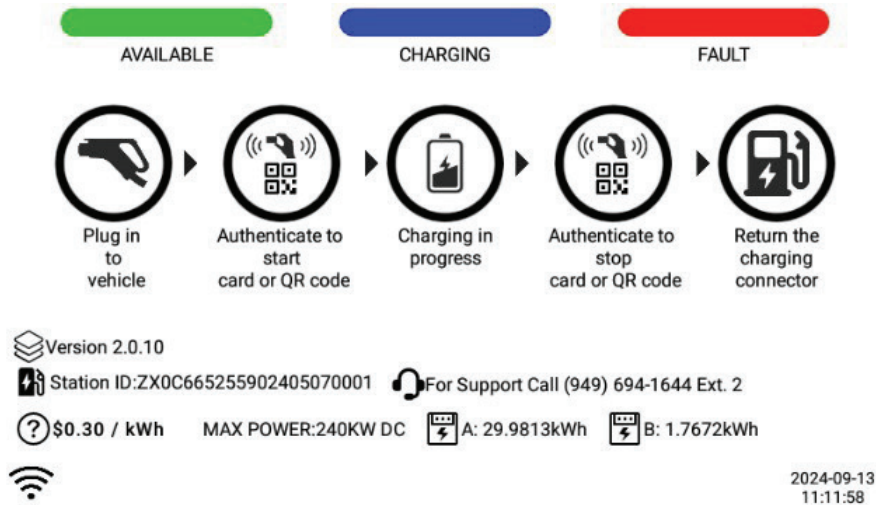
REMARQUES AVANT LA CHARGE

| | |
|---|--|
|  | Avant de procéder au chargement, assurez-vous que le système de chargement est dans un état normal. |
|  | Avant de procéder au chargement, assurez-vous que le câble de chargement n'est pas endommagé et que le connecteur de chargement ne contient pas d'eau. Si le connecteur de charge est imbibé d'eau, ne le chargez pas directement. |
|  | Avant de charger l'appareil, l'utilisateur doit lire entièrement le manuel d'utilisation et se familiariser avec les consignes de sécurité afin d'éviter toute opération dangereuse. |
|  | Avant de procéder au chargement, l'utilisateur doit se familiariser avec les étapes de l'opération de chargement afin d'éviter toute erreur de fonctionnement. |

5.2. CHARGING PROCESS















Note: when the charger is in standby mode, the screen is in the energy-saving mode. Before operation, touch the screen with your finger to light up the screen! The screen has been split, which can be used for advertising below the operation interface.

5.2.1. INTRODUCTION TO SCREEN ICONS AND CONNECTOR SPECIFICATIONS



Tip:

1. The meanings of the screen icons are shown in the table below:

| ICON | NAME | HIDDEN MEANING |
|---|--------------------------------------|---|
|  | Indicator status | Idle: green always on Connected: blue always on Charging: blue blinking Alarm: red always on |
|  | Charging process | Insert the connector - Swipe or scan the code - Charging - Swipe or scan the code - End charging and return the connector |
|  | software version | Charger Software Version Code |
|  | Station ID | Station ID |
|  | customer service hotline | Customer and maintenance calls |
|  | Tariff display | Displays the current charging tariff |
|  | A-connector, B-connector meter power | A-connector, B-connector meter power |
|  | network state |  : Network and platform are connected  : Network is connected, not connected to the platform  : Network and platform are not connected |
|  | Language Settings | Click to switch between Chinese/English/Korean, etc. |
|  | Connector Type | American Standard Charge Connector (CCS1) |
|  | Connector Type | Tesla Interface Charge Connector (NACS) |

- The picture is for reference only, the charging connector of the whole series of products has two specifications to choose from: CCS1, NACS. Please select the corresponding specification according to the type of socket of the car and the connector that the charger is actually equipped with, and the combination of the charging connector is shown in the table below:

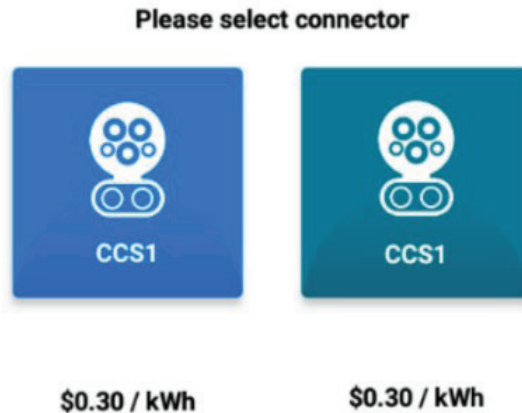
| Connector Type | CCS1 | NACS |
|----------------|-----------|-----------|
| CCS1 | CCS1+CCS1 | CCS1+NACS |
| NACS | CCS1+NACS | NACS+NACS |

Note: There are single-connector “CCS1” and single-connector “NACS” models, which are not included in the table!

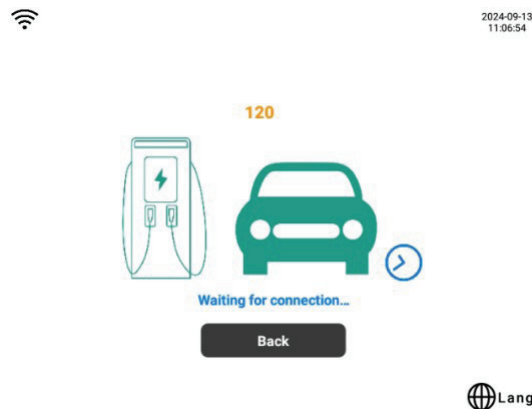
- Click on the lower right corner of the screen “Lang” to switch the interface language, currently supports Chinese, English, Korean and so on. Note: the latter steps no longer show the full screen, only show the operation part!

5.2.2. CHARGING PROCEDURE

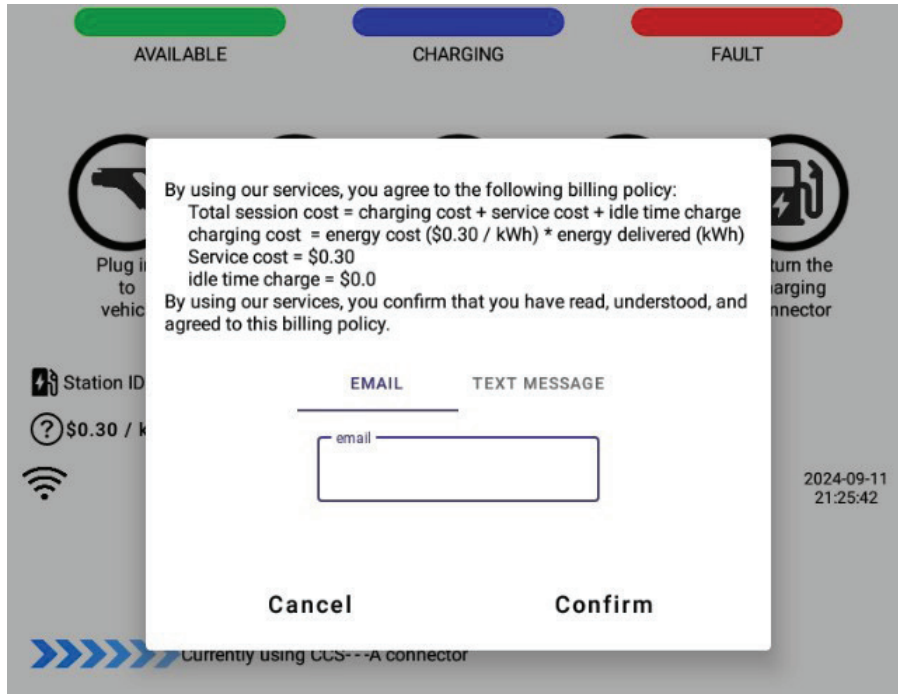
- Select the connector as shown below and click on the “CCS1” or “NACS” icon on the screen. Or do not select the connector type directly corresponds to the vehicle socket insert the correct connector, the system will automatically recognize the connector type, then directly jump to step 3. after completing the connection with the vehicle, the status indicator light from green to blue.



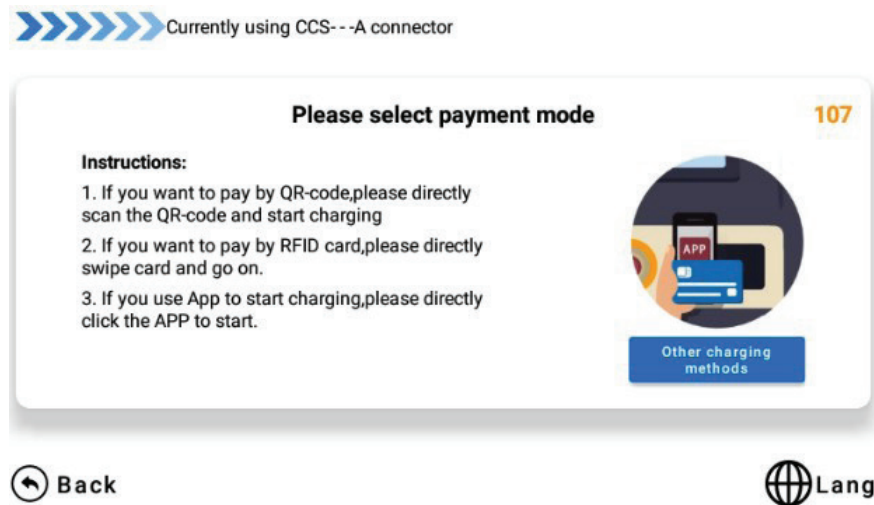
- Click on the icon will enter the interface shown below, the corresponding connector will be plugged into the car relative to the charging port.



- After completing the connection to enter the interface shown in the figure, enter the e-mail address and click “Confirm”. The e-mail address is used to receive billing information after settlement, please make sure to enter it, otherwise it can not be charged.



- Into the charging payment method selection interface, where there are several options: A. Default RFID payment method, swipe the card to enter the charging preparation stage.



- Credit Card Payment Methods Refer to the RFID Payment Methods screen and click “Other charging methods” to enter the following figure. Select “BANK CARD” to enter the next screen.

Please select payment mode 100

Instructions:

1. If you want to pay by QR-code, please directly scan the QR-code and start charging
2. If you want to pay by RFID card, please directly swipe card and go on.
3. If you use App to start charging, please directly click the APP to start.

BANK CARD

Other charging methods

Back Lang

After selecting the amount or manually entering the amount, insert the credit card into the slot below the card reader and enter the PIN on the card reader screen to confirm approval and enter the charging preparation stage. At this time, the status indicator changes from blue to blinking blue.

Selection amount

10

20

30

40

50

Enter amount

| | | | |
|---|------|---|-----|
| 1 | 2 | 3 | Del |
| 4 | 5 | 6 | |
| 7 | 8 | 9 | OK |
| 0 | Back | | |

Back Lang

C. Scanning QR code Scanning QR code in the screen starts.


Currently using CCS--A connector

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Please select payment mode

Instructions:

1. If you want to pay by QR-code, please directly scan the QR-code and start charging
2. If you want to pay by RFID card, please directly swipe card and go on.
3. If you use App to start charging, please directly click the APP to start.



Other charging methods

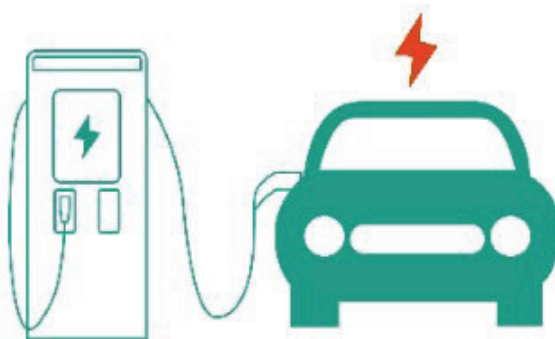
Back

Language

5. Charging preparation interface is shown below, the system is ready to start charging. During the charging process, the status indicator keeps flashing blue, and when the charging is stopped and the connector is not unplugged, the status indicator keeps lighting blue.

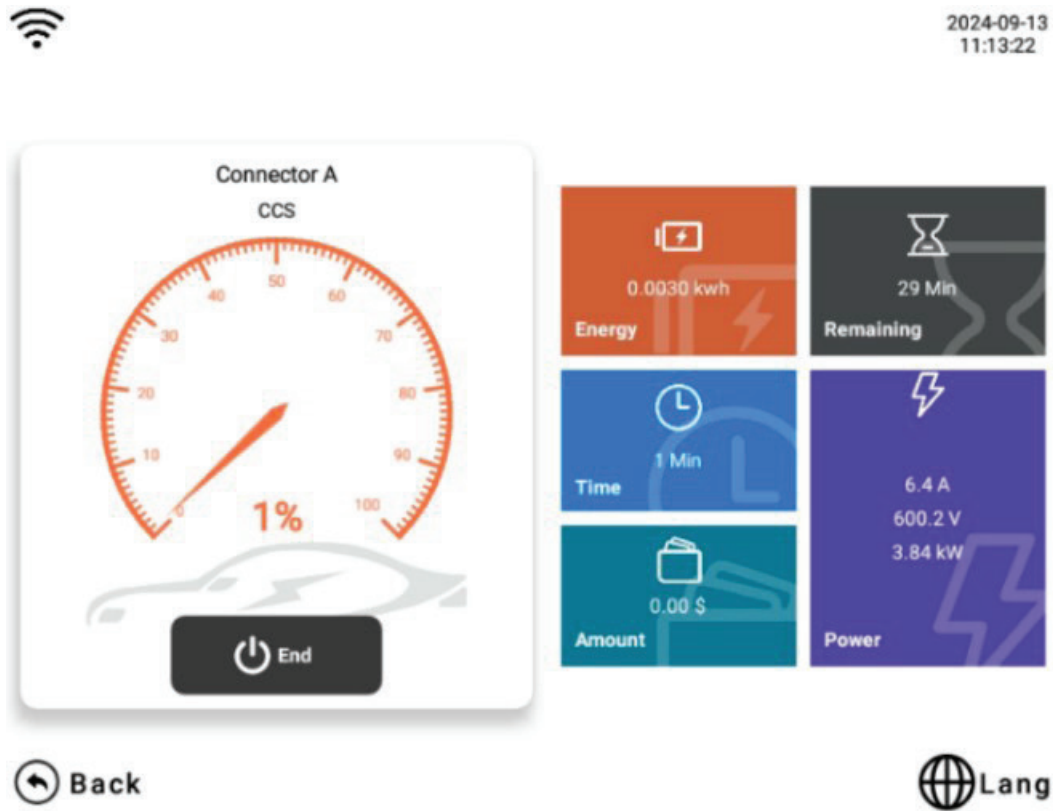
Currently using CCS--A connector

179



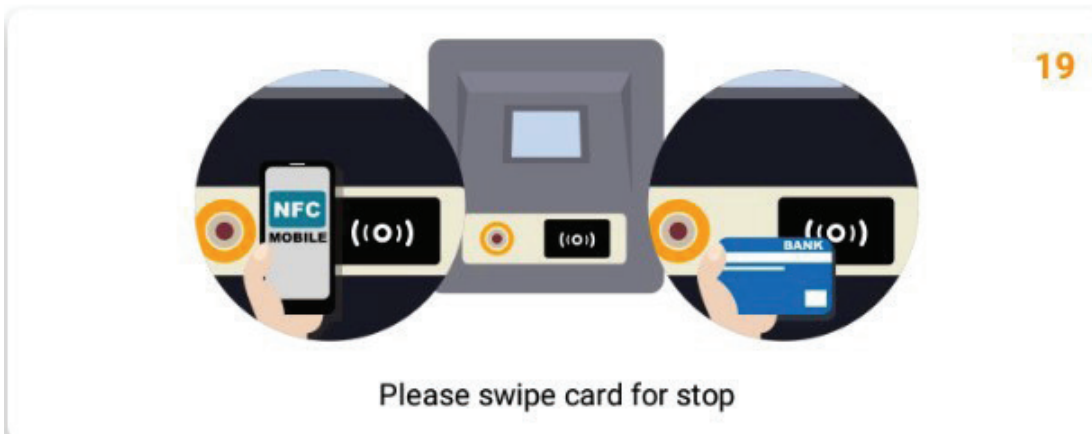
Preparing to charge...

6. When ready to complete to enter the charging interface, the following figure. At this time you can see the charging progress, charging time, charging power and other parameters.

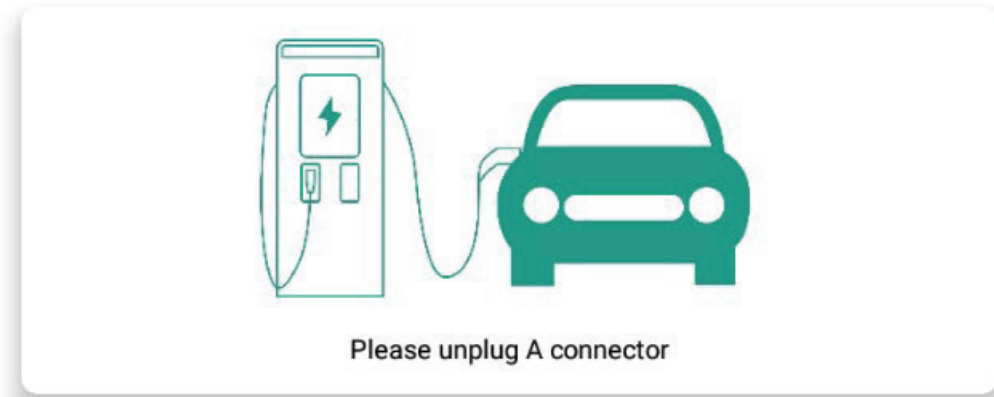


There are three ways to end the charging: A. Manually stop charging When the capacity is not full to 100%, click the “End” button on the charging interface. For RFID payment method, it will enter the interface shown below. If you swipe the card again, the charging will stop, and the status indicator will change from flashing blue to blue. If the card is not swiped again within the countdown time, it will be judged as a misoperation, and the charging interface will be returned to continue charging after the countdown time.

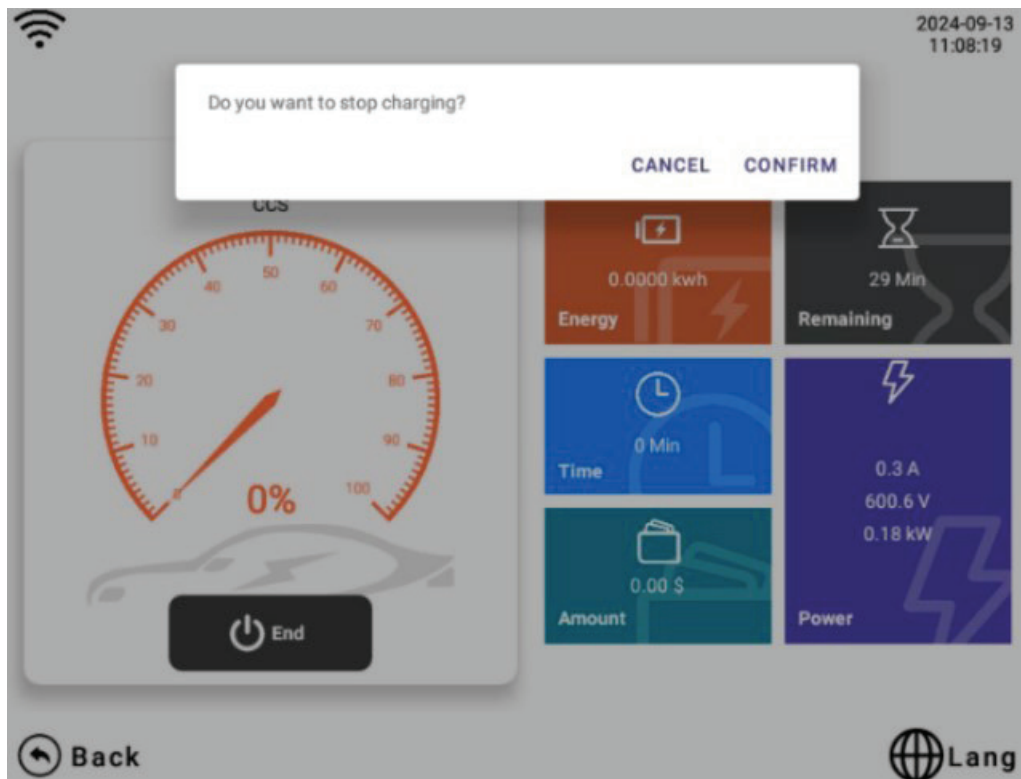
➡➡➡➡➡ Currently using CCS- -A connector



Take out the RFID card again and swipe it to enter the Waiting to Draw screen as shown below:



For credit card payment, a pop-up window will appear to confirm whether to stop charging or not, when you press “CONFIRM” to enter the wait for the connector pulling interface, press “CANCEL” to continue charging. If it is not operated, it will be judged as a misoperation and wait for the pop-up window countdown to end to continue charging. The pop-up window interface is shown below:



If the app starts please click stop at the app. B.Auto stop charging When the system detects that the power has been charged to 100%, it will automatically exit the charging interface and jump to the waiting for connector pulling interface.

8. Either RFID payment method or credit card payment method, after entering the waiting for the connector pulling interface, pulling out the connector will enter the settlement interface, after pulling out the connector status indicator from blue always on to green always on. The settlement interface is shown below:



9. Because you have filled in the e-mail address before you start charging, when you enter the interface shown below after the settlement is completed, the final billing information will be sent to the e-mail address you have filled in before charging through the background. The final billing information will be sent to the e-mail address filled in before charging through the background. When the countdown time of the interface ends, it will automatically return to the standby interface.

6. SIMPLE TROUBLESHOOTING

Analysis and treatment of common faults

Refer to the maintenance manual for detailed treatment

| ERROR CODE | NAME OF ALARM OR FAULT | PROCESSING METHOD |
|------------|---|---|
| 7 | Lightning protection failure | <ul style="list-style-type: none"> Check the status of lightning arrested. If the visual window of lightning protection is red, it means it is damaged, please replace it. |
| 1 | Emergency stop fault | <ul style="list-style-type: none"> Please check whether the emergency stop button is pressed and not pulled out. If the fault has been solved, please pull up the emergency stop button. |
| 11 | Over temperature protection of air outlet | <ul style="list-style-type: none"> Please check whether the air duct of the system is blocked and whether there is too much dust on the dust screen. Please check whether the air outlet fan of charger works normally. If the fan fails, please replace the fan. |
| 32 | Access protection | <ul style="list-style-type: none"> Please check whether the cabinet door is completely closed; Confirm that the door is closed, but the alarm still appears. Please check the status of the micro switch. If it is damaged, please replace it. |
| 20 | Charging module failure | <ul style="list-style-type: none"> Check the module fault code, confirm the fault type and find the fault cause. Pull out the fault module and replace the spare module. |
| 3 | RCD action | <ul style="list-style-type: none"> It is necessary to check whether there is insulation fault in the circuit at the back end of RCD; Check whether the casing is reliably grounded. |



Notice: in order to prevent personal electric shock accident, all switches of the equipment and front-end power distribution switch of the equipment shall be disconnected during fault detection and treatment, and protective measures shall be taken.



Avertissement : Pour prévenir les accidents d'électrocution, tous les interrupteurs de l'équipement ainsi que l'interrupteur de distribution électrique à l'avant de l'équipement doivent être déconnectés pendant la détection et le traitement des pannes, et des mesures de protection doivent être prises.

7. AFTER-SALES SERVICE

If you have any questions or problems, please contact the equipment supplier. Before contacting the equipment supplier:

- Please check the troubleshooting measures in the chapter “5. Simple troubleshooting”.
- Please record the model and serial number of the equipment (name plate of the equipment) and the failure time.

APPENDIX

MODULE GROUP NUMBER SETTING GUIDE

160/150/120/100 kW Front View

| | | | |
|-----------|-----------|-----------|-----------|
| M1(G0 A1) | M2(G0 A2) | M3(G0 A3) | M4(G0 A4) |
|-----------|-----------|-----------|-----------|

80/60/50 kW Front View

| | | | |
|-------------|-------------|-----------|-----------|
| M1(reserve) | M2(reserve) | M3(G0 A3) | M4(G0 A4) |
|-------------|-------------|-----------|-----------|