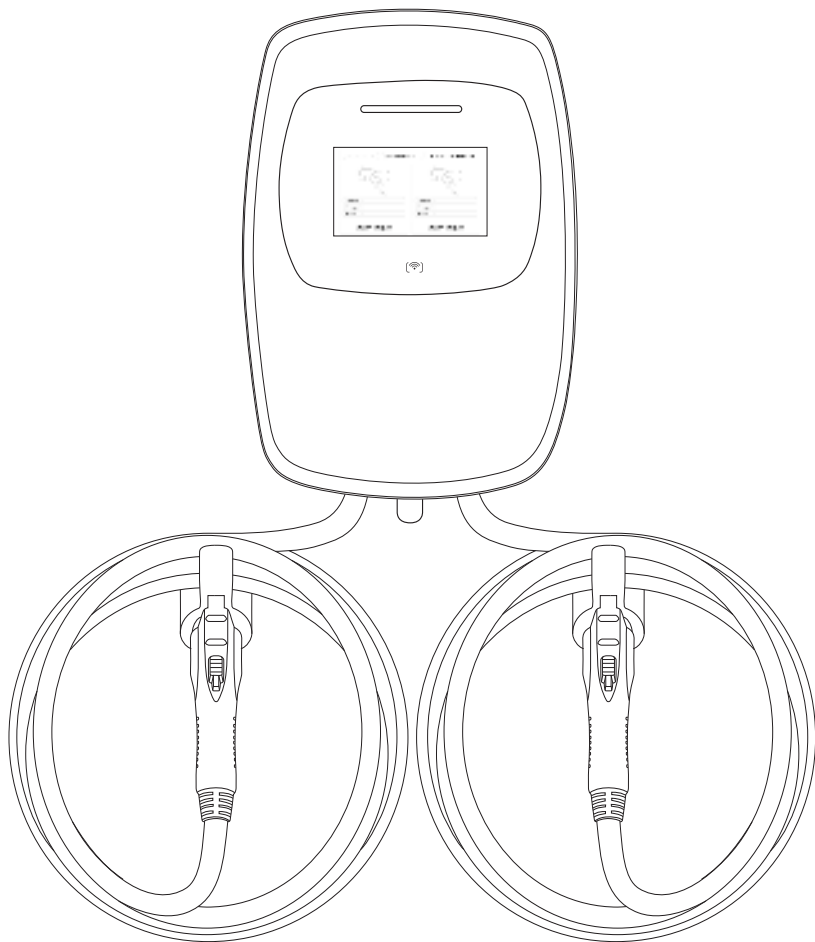


Electric Vehicle AC Charger Installation Manual



For model: DS308

CONTENTS

1. Safety Instructions.....	1
1.1. Warnings & Cautions.....	1
1.2. Installation Requirements.....	2
1.3. Daily Maintenance	2
1. Consignes De Sécurité Importantes.....	4
1.1. Avertissement & Mise En Garde Généraux.....	4
1.2. Exigence Avant L'installation.....	5
1.3. Daily Maintenance.....	5
2. Product Introduction.....	7
2.1. Basic Interface	7
2.2. Basic Dimension	8
2.3. Specifications	10
2.4. Design Standards.....	11
3. Accessories.....	12
4. Tools for Mounting.....	13
5. Plan for Mounting.....	14
6. Operate Your Device.....	22
6.1. Operating Steps with Plug and Charge.....	22
6.2. Operating Steps with RFID Card.....	24
7. Light Codes.....	26
7.1. After Start UP.....	26
7.2. Error and Warning Message.....	26
8. FCC STATEMENT.....	27
9. Warranty and Maintenance.....	28

1. Safety Instructions

1.1 Warnings & Cautions

WARNING

-  To avoid fire, injury or death, read and follow the instructions carefully during installation, operation and maintenance.
- DO NOT** put fingers into the electric vehicle connector.
- DO NOT** use this product if the power cord or EV cable is frayed, insulation-broken, or any other signs of damage.
- DO NOT** use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- DO NOT** remove cover or attempt to open the enclosure because of risk of electric shock.
-  This device should be supervised when used around children.
-  This device must be grounded.
-  To avoid the risk of fire or electric shock, do not use this device with an extension cord.
-  The suitability of the use of flexible cord in accordance with CE code, part I, rule 4-012, is to be determined by the local inspection authority.
-  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 1 (Canada) or NOM-001-SEDE Electrical installations (utility) (Mexico) or ANSI / NFPA 70 National Electrical Code (USA).

Circuit Breaker Options											
Output Amperage (A)	32A	16A×2	40A	20A×2	48A	24A×2	64A	32A×2	80A	40A×2	48A×2
	32A		40A		48A		64A		80A		96A
Recommended Circuit Breaker (A)	40A		50A		60A		80A		100A		120A

1.2 Installation Requirements

WARNING

-  Disconnect electrical power prior to installing the charging station.
-  Be sure to preview the user manual and ensure local building and electrical codes are reviewed before installing the AC charger.
-  The AC charger should be installed by a qualified technician according to the user manual and local safety regulations.

CAUTION

-  Use appropriate protection when connecting to the main power distribution cable.
-  Type B, C or D breaker with the rating current for table should be installed in the upstream AC distribution box.
-  Disconnect switch for each ungrounded conductor of AC input shall be provided by others in accordance with the National Electric Code, ANSI/NFPA70.
-  The device shall be mounted at the height between 600 mm and 1200 mm from ground.
-  Please keep the charger in a clean area with low humidity. Not recommended to be installed in coastal environments with high humidity or thick dust.

1.3 Daily Maintenance

CAUTION

-  Avoid moisture or water in the charger. If there is water or moisture ingress in the charger, it is necessary to immediately power off to avoid immediate danger and notify the professionals to carry out maintenance before next

use.

- ! Please use the charger properly. Do not hit or press hard on the enclosure. If it is damaged, please contact a professional technician.
- ! Avoid placing the charger near hot objects and at high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.
- ! To avoid any danger, please do not put any heavy objects on the charger.

1. Consignes De Sécurité Importantes

1.1 Avertissement & Mise En Garde Généraux

AVERTISSEMENT

⚠ Pour éviter les risques d'incendie, de blessure ou de mort, il faut lire et suivre soigneusement les instructions pendant l'installation, l'utilisation et l'entretien.

Ne mettez pas les doigts dans le connecteur du véhicule électrique.

N'utilisez pas ce produit si le cordon d'alimentation flexible ou le câble EV est effiloché, isolé ou présentant tout autre signe de dommage.

N'utilisez pas ce produit si le boîtier ou le connecteur EV est cassé, fissuré, ouvert ou montre toute autre indication de dommage.

Ne retirez pas le couvercle et n'essayez pas d'ouvrir le boîtier en raison du risque de choc électrique.

⚠ Cet appareil doit être surveillé lorsqu'il est utilisé à proximité d'enfants.

⚠ Cet appareil doit être mis à la terre.

⚠ Pour éviter tout risque d'incendie ou de choc électrique, n'utilisez pas cet appareil avec une rallonge électrique.

⚠ L'adéquation de l'utilisation du cordon flexible conformément au code de, partie I, règle 4-012, doit être déterminée par l'autorité d'inspection locale compétente.

⚠ Pour réduire les risques d'incendie, ne connecter qu'à un circuit protection contre les surintensités des circuits de dérivation conformément à la norme canadienne CSA C22. 1-15 Code électrique, partie 1 (Canada) ou NOM-001-SEDE Installations électriques (Mexique) ou ANSI / NFPA 70 National Electrical Code (États-Unis).

Tableau Des Options Du Disjoncteur

Courant De Sortie (A)	32A	16A×2	40A	20A×2	48A	24A×2	64A	32A×2	80A	40A×2	48A×2
	32A		40A		48A		64A		80A		96A
Disjoncteur recommandé (A)	40A		50A		60A		80A		100A		120A

1.2 Exigence Avant L'installation

AVERTISSEMENT

-  Assurez-vous de consulter le manuel d'utilisation et assurez-vous que les codes locaux du bâtiment et de l'électricité sont passés en revue avant d'installer le chargeur.
-  Débranchez l'alimentation électrique avant d'installer la station de charge.
-  Le chargeur CA doit être installé par un technicien qualifié conformément au manuel d'utilisation et aux réglementations de sécurité locales.

MISE EN GARDE

-  Utilisez une protection appropriée lors de la connexion au câble de distribution d'alimentation principal.
-  Un disjoncteur de B, C ou D avec le courant nominal indiqué dans le tableau doit être installé dans le boîtier de distribution CA en amont.
-  L'interrupteur de déconnexion pour chaque conducteur non mis à la terre de l'entrée CA doit être fourni par des tiers conformément au Code national de l'électricité, ANSI/NFPA70.
-  Cet appareil doit être monté à une hauteur entre 600 mm (2 pieds) et 1200 mm (4 pieds) du sol.
-  Veuillez conserver le chargeur dans un endroit propre et peu humide. Il n'est pas recommandé de l'installer dans des environnements côtiers à forte humidité ou à forte poussière.

1.3 Daily Maintenance

MISE EN GARDE

-  Évitez l'humidité ou l'eau dans le chargeur. En cas d'infiltration d'eau ou

d'humidité dans le chargeur, il est nécessaire de l'éteindre immédiatement pour éviter tout danger immédiat et d'avertir le personnel professionnel d'effectuer l'entretien avant la prochaine utilisation.

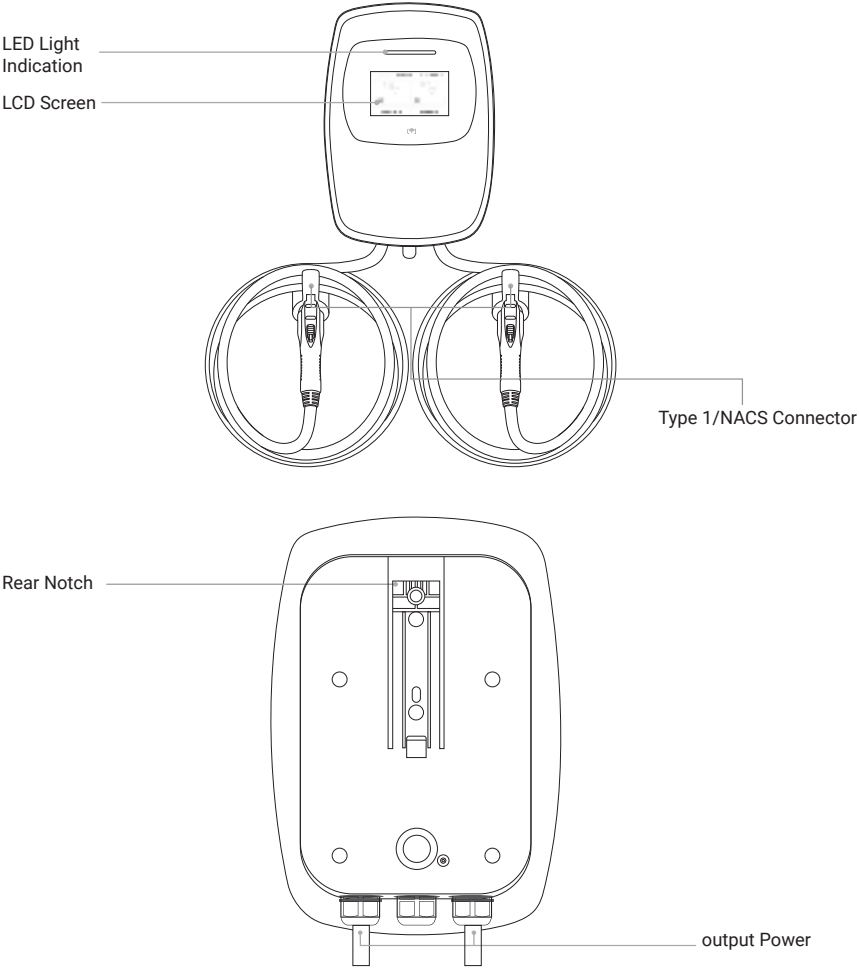
- ! Veuillez utiliser le chargeur correctement. Ne frappez pas ou n'appuyez pas trop fort sur le boîtier. Si le boîtier est endommagé, veuillez contacter un technicien professionnel.
- ! Évitez de placer le chargeur à proximité d'objets chauds et à des endroits à haute température et loin de substances dangereuses telles que des gaz inflammables et des matériaux corrosifs.
- ! Pour éviter tout danger, veuillez ne pas mettre d'objets lourds sur le chargeur.

2. Product Introduction



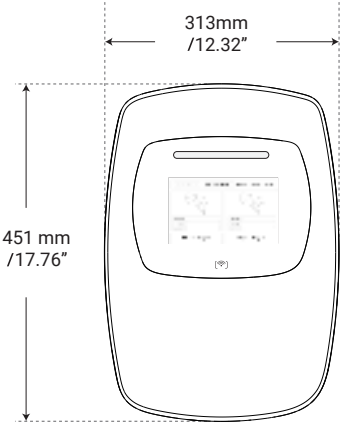
CAUTION: Avoid placing the charger near hot objects or high temperature locations and away from dangerous substances such as flammable gases and corrosive materials.

2.1 Basic Interface

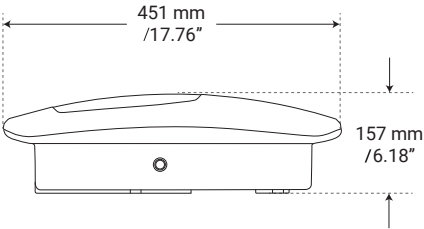


2.2 Basic Dimension

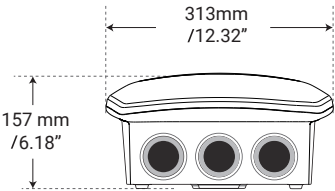
ENCLOSURE



Front View

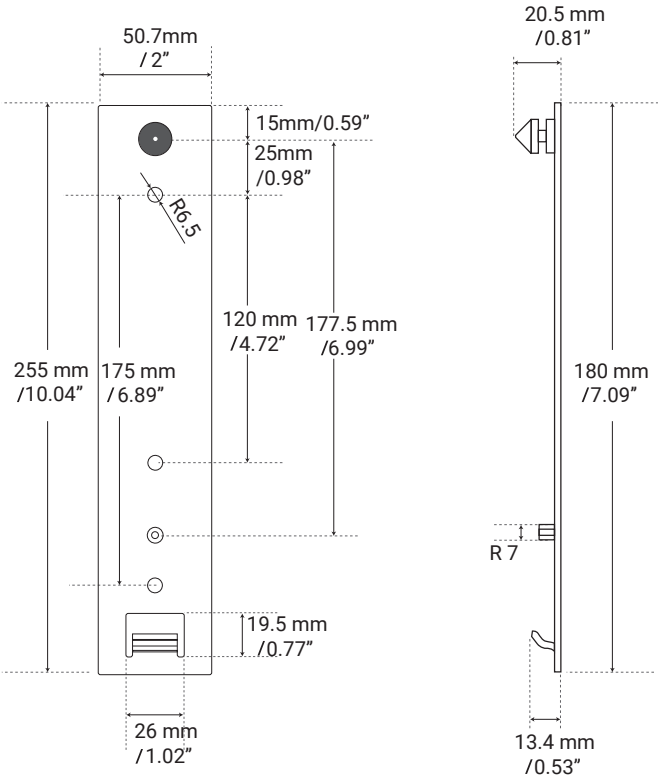


Left View



Bottom View

WALL-MOUNTED HOLES



2.3 Specifications

Model Name		DS308-A96			
Power Specification	Input AC Rating	208-240Vac			
	Max. AC Current	24A*2 /48A	32A*2 /64A	40A*2 /80A	48A*2 /80A
	Frequency	60Hz			
	Max. Output Power	5.76kW*2 /11.52kW	7.6kW*2 /15.2kW	9.6kW*2 /19.2kW	11.5kW*2 /19.2kW
User Interface & Control	Display	7" LCD Screen			
	LED Indicator	Yes			
	Push Buttons	Restart Button			
	User Authentication	RFID(ISO/IEC 14443 A/B), APP			
Communication	Network Interface	LAN, Wi-Fi and Bluetooth,3G/4G Optional			
	Communication Protocol	OCPP1.6 J/OCPP2.0.1 Upgradeable			
	Communication Function	ISO/IEC 15118 Optional			
Environment	Operating Temperature	-22 °F to 122 °F			
	Humidity	5%~95% RH, Non-condensing			
	Altitude	≤ 6562ft(2000m), No Derating			
	IP/IK Level	NEMA Type3R(IP65)/IK10			
Mechanical	Cabinet Dimension (W×D×H)	12.32"×6.18"×17.76"(313mm×157mm×451mm)			
	Weight	16.98lbs(7.7kgs)			
	Cable Length	18ft(5.5m)(Standard)/25ft(7.5m)(Optional)			
Protection	Multiple Protection	OVP(Over Voltage Protection), OCP(Over Current Protection), OTP(Over Temperature Protection), UVP(Under Voltage Protection), SPD(Surge Protection Detection), Grounding Protection, SCP(Short Circuit Protection), Control Pilot Fault, Relay Welding Detection, CCID Self-test			
Regulation	Safety	UL 2594, UL2231-1/-2			
	Certificate	ETL, FCC			
	Charging Interface	SAE J1772 Type 1/NACS			

2.4 Design Standards

UL 2594: Electric Vehicle Supply Equipment.

UL 2231-1: UL Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: General Requirements.

UL 2231: Personnel Protection Systems for Electric Vehicle (EV) Supply Circuits: Particular Requirements for Protection Devices for Use in Charging Systems.

UL 2251: Plugs, Receptacles and Couplers for Electric Vehicles.

UL 62: Flexible Cords and Cables.

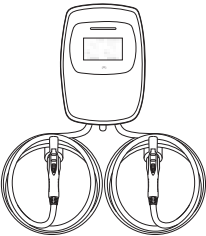
UL 991: Tests for Safety-Related Controls Employing Solid-State Devices.

UL 1998: Software in Programmable Components.

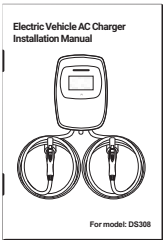
NFPA 70 Article 625: National Electrical Code, Electric Vehicle Charging System UL 840 (Clearance and Creepage).

3. Accessories

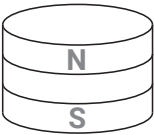
Check the box to ensure you have this installation guide and these parts:



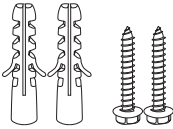
1 AC Charger



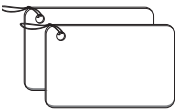
2 User Manual



3 Magnet



4 M6 Hexagonal Expansion Screws*2



5 Standard RFID Cards*2

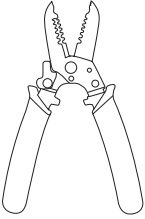


6 Mounting Bracket

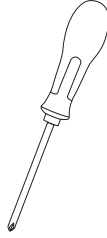
No.	Product Name	Quantity	Description
1	AC Charger	1	With attached input power cable and output charging cable.
2	User Manual	1	PDF version available online.
3	Magnet	1	Magnet to unlock the security hatch
4	M6 Hexagonal Expansion Screws	2	For installing the Mounting Bracket to the wall / structure.
5	Standard RFID Cards	2	To start/stop charger for the unit with RFID reader.
6	Mounting Bracket	1	For easy drilling of 2 screws holes for AC Charger.

4. Tools for Mounting

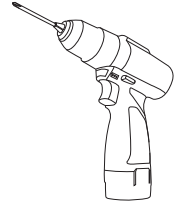
Tools required before installing the Wall-mounted charger, gather the following tools:



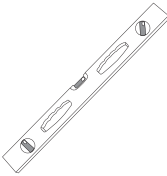
1 Wire stripper



2 Phillips screwdriver



3 Drill



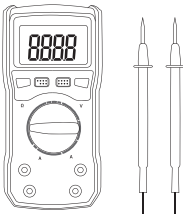
4 Level



5 Pencil or marker



6 Adjustable wrench



7 Voltmeter or digital multi-meter (for measuring AC voltage at the installation site)

NOTE: The above tools are very important, get them ready prior to installation.

5. Plan for Mounting



WARNING: In areas with frequent thunderstorms, add surge protection at the service panel for all circuits. Ensure all power and ground connections, especially those at the breaker and bus bar, are clean and tight.

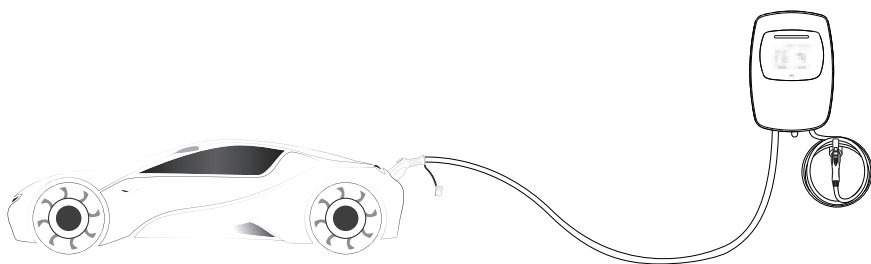


CAUTION: Not recommended to be installed in coastal environments with high humidity or thick dust.

STEP 1

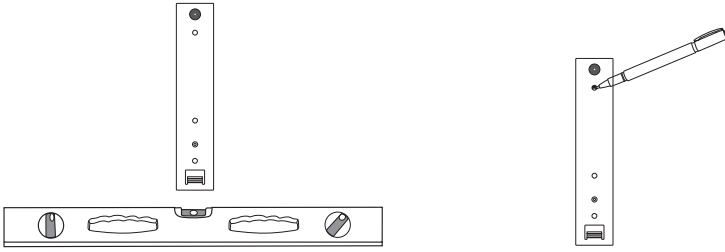
Select the appropriate mounting location with electrical capacity.

- I. Ensure the owner has chosen a mounting location that allows the charging cable to reach the car's charging port while still providing slack.
- II. The device must be anchored on a solid wall or a stud with the dimensions: 2" x 4".
- III. The device shall be mounted at height between 2 feet (600mm) and 4 feet (1200mm).



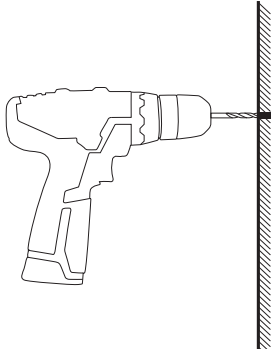
STEP 2

Use a level to verify if a bracket is horizontally aligned and mark the holes by one pencil.



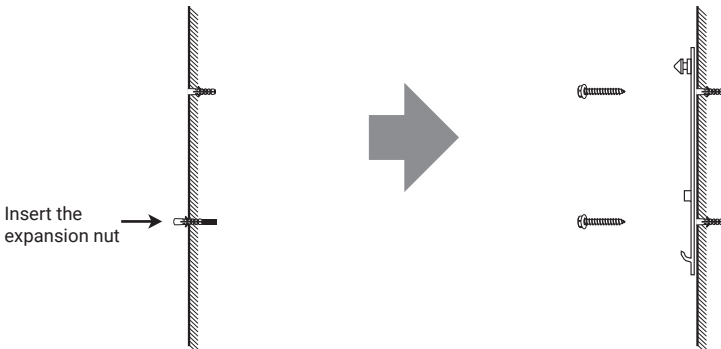
STEP 3

Drill 2 Screw Holes with a diameter of 0.33" and a depth of 2.05" by using #6 mounting bracket.



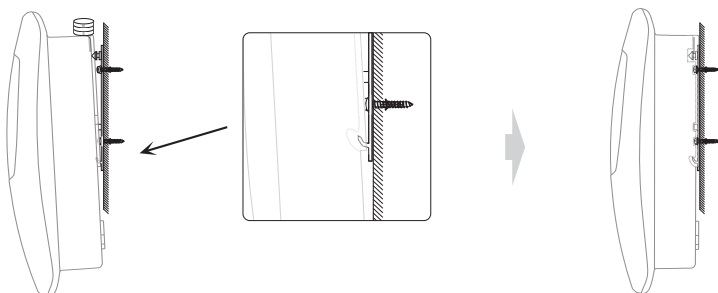
STEP 4

Nail #5 two expansion rubber sleeves into the holes and nail #5 two M6 hexagonal expansion screws to secure the wall-mounted bracket on the wall. Then level the brackets.

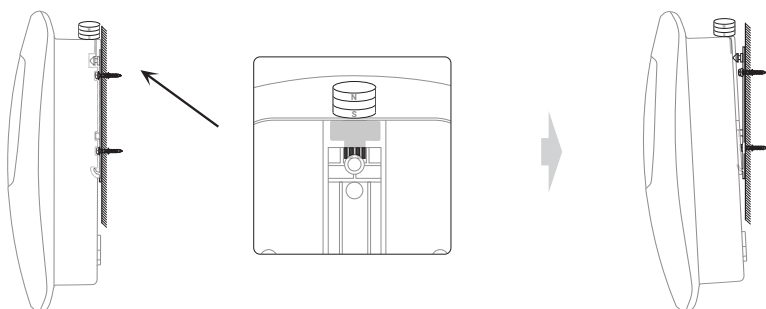


STEP 5

Hang the charger to the bracket button position with a slightly tilted angle, and click back to the bracket up position to lock.

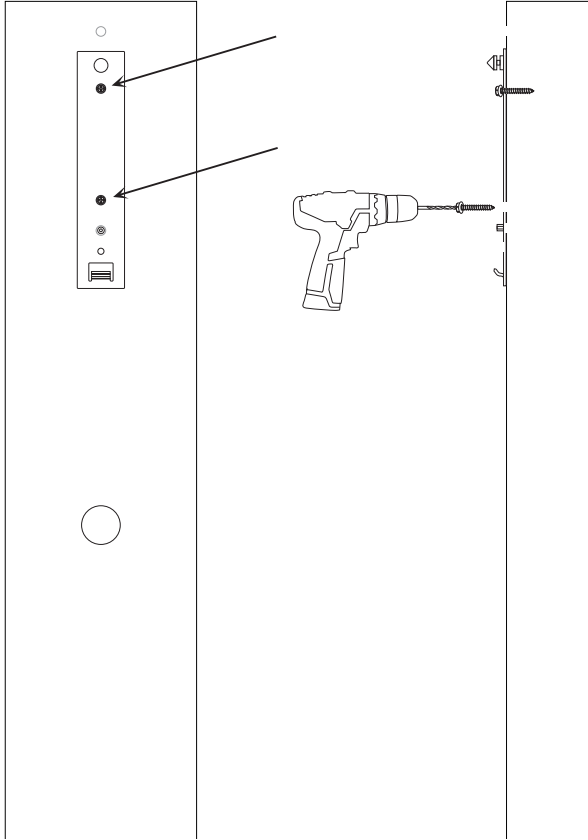


Note: if remove the charger from bracket/wall/pedestal, put the magnet on the top(location as shown in the picture), to level up the hatch and release the charger from the bracket/wall/pedestal.



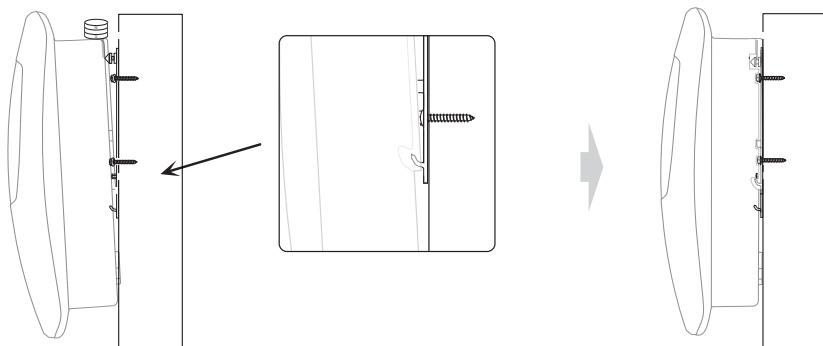
STEP 6

Fix the bracket in the corresponding positions on the pedestal with M6*20mm hexagon socket bolt.

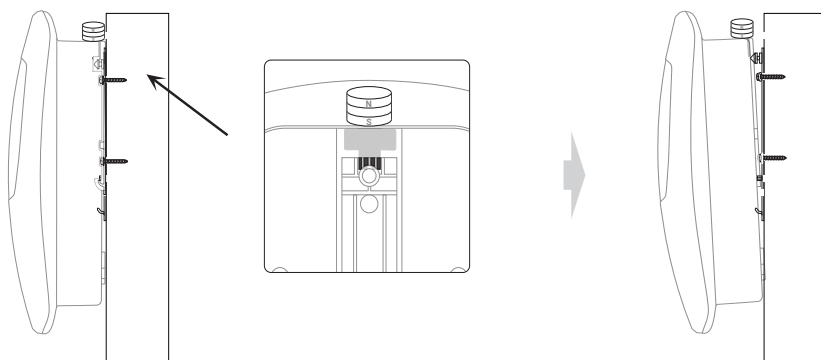


STEP 7

Hang the charger to the bracket button position with a slightly tilted angle, and click back to the bracket up position to lock.



Note: if remove the charger from bracket/wall/pedestal, put the magnet on the top(location as shown in the picture), to level up the hatch and release the charger from the bracket/wall/pedestal.



STEP 8**Wire the Circuit****WARNING**

-  This device must be grounded. Disconnect electrical power prior to installing the charging station.
-  Improper connection of the equipment-grounding conductor would result in a risk of electric shock. Check with a qualified electrician or service man if you are not sure whether the product is properly grounded. Do not modify the plug provided with the product – if it doesn't fit the outlet, have a proper outlet installed by a qualified electrician.

CAUTION

-  Use appropriate protection when connecting to the main power distribution cable.

For the safety purpose, please set circuit breaker protection in the input part of EV Charger. Please follow the instructions below:

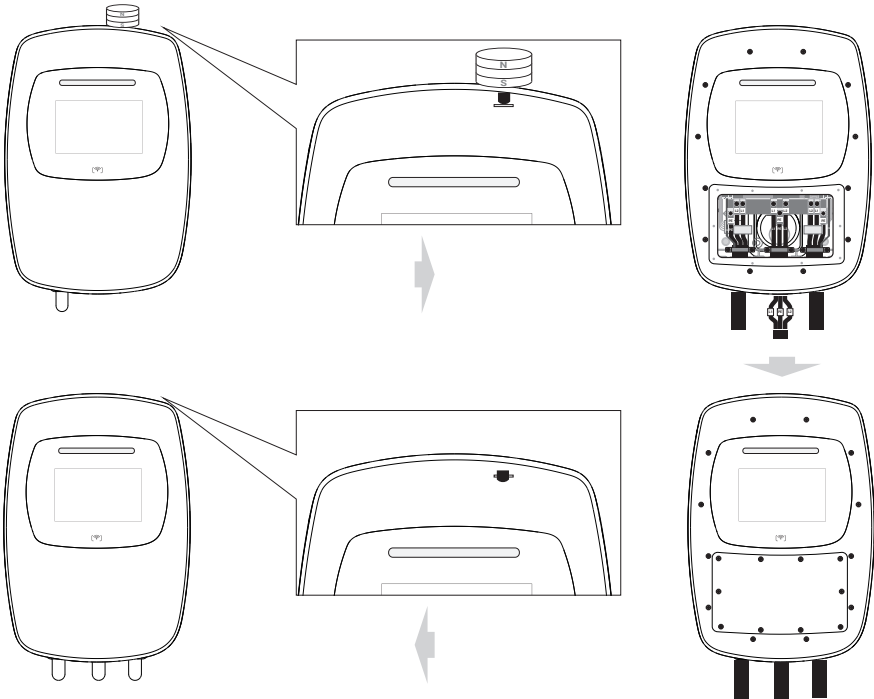
Circuit Breaker Options											
Output Amperage (A)	32A	16A×2	40A	20A×2	48A	24A×2	64A	32A×2	80A	40A×2	48A×2
	32A		40A		48A		64A		80A		96A
Recommended Circuit Breaker (A)	40A		50A		60A		80A		100A		120A

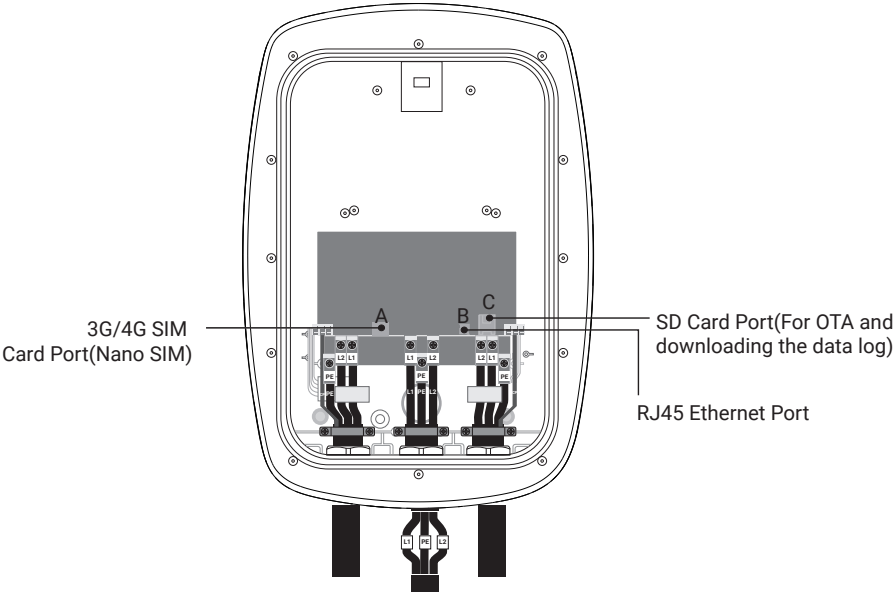
STEP 9

For the safety purpose, the cross-sectional area of the three power cords should follow the instructions below:

The cross-sectional area of the three power cords options											
Output Amperage (A)	32A	16A×2	40A	20A×2	48A	24A×2	64A	32A×2	80A	40A×2	48A×2
	32A		40A		48A		64A		80A		96A
The cross-sectional area of the three power cords	10Awg		8Awg		6Awg		4Awg		3Awg		2Awg

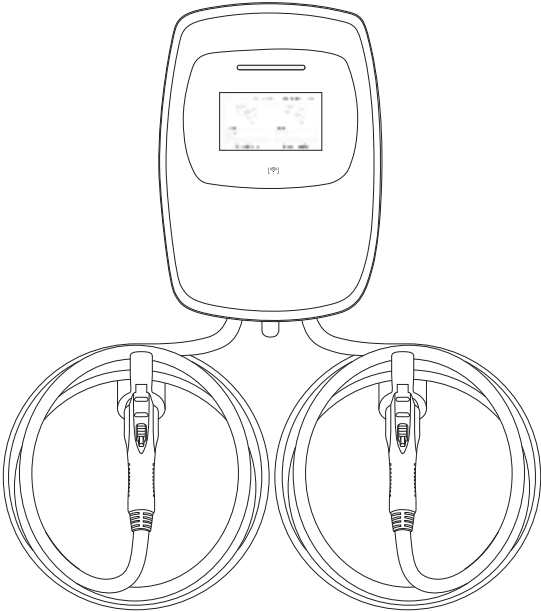
Please unclick the shelf with slotted screwdriver, connect L1 with grid L1, L2 with grid L2 and lead the PE to the grid PE. The power cords should be fully crimped with ring terminals, with a tightening torque of screw of 25lbf.in. Click back the shelf.





STEP 10

Overall outlook after installation



6. Operate Your Device

WARNING

- ⚠ This device should be supervised when used around children.

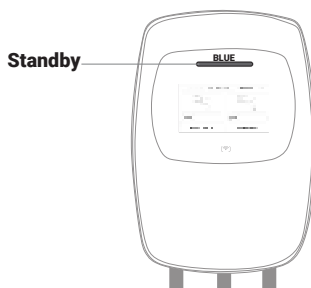
CAUTION

- ⚠ Please use the charger properly. Do not hit or press hard on the enclosure. If the case is damaged, please contact a professional technician.
- ⚠ To avoid any danger, please do not put any heavy objects on the charger.

6.1 Operating Steps with Plug and Charge

STEP 1

Standby Mode: After being powered on, the lights will be all on, blue light (STANDBY), green light (CHARGING) and red light (FAULT). Then the blue light (STANDBY) is constantly on in standby mode.



*Figures are for reference only

STEP 2

Plug the Charging Connector: Please plug the charging connector into the vehicle charging inlet

