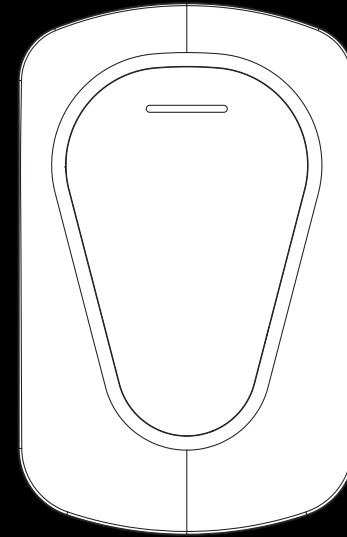


Technical Support:  
(888) 728-4094

**RAB**<sup>®</sup>

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P-100864

# Welcome



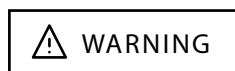
## EVC32 & EVC40 Charging Station

INSTALLATION INSTRUCTIONS

**RAB**<sup>®</sup>

# 1. Safety Instructions

Please read all Important Safety Instructions as well as charging instructions in your vehicle owner's manual before attempting to charge your electric vehicle. Failure to do so can result in death or severe injury. Save this user manual for future reference. There are many safety features built into the charger. Read all the safety information and warnings in this manual to avoid any risks or hazards and risks associated with using this charger.



INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK  
IMPORTANT SAFETY INSTRUCTIONS, SAVE THESE INSTRUCTIONS

- a) Read all the instructions before using this product.
- b) This product 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, had 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 product 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 ANSI/ NFPA 70 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.

# 2. Federal Communication Commission Interference Statement

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This equipment may not cause harmful interference, and (2) this equipment 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 equipment, 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:

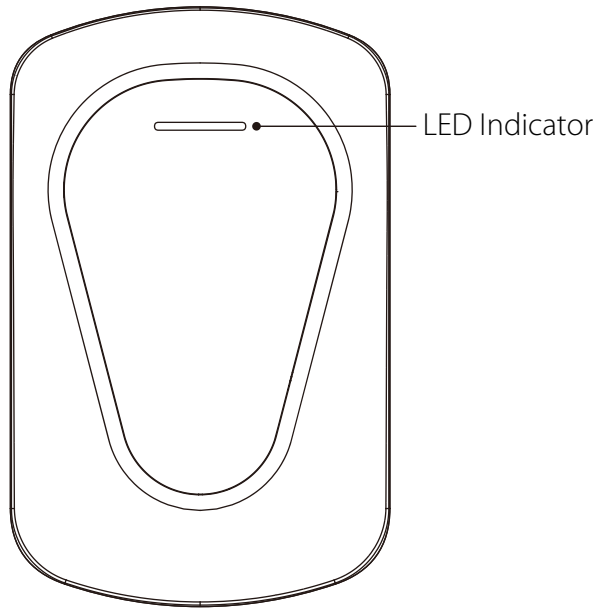
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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:

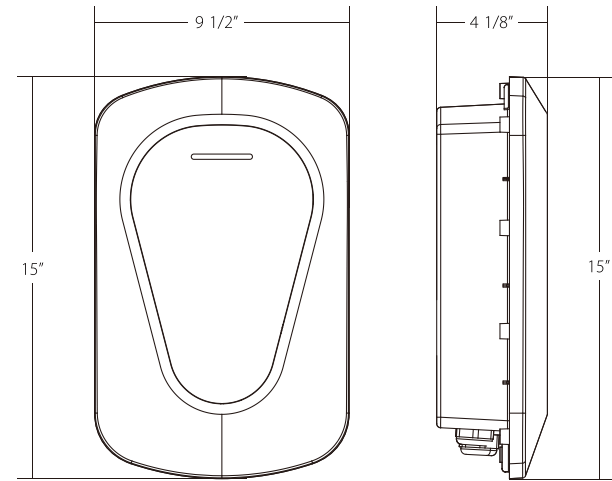
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### 3. Interface

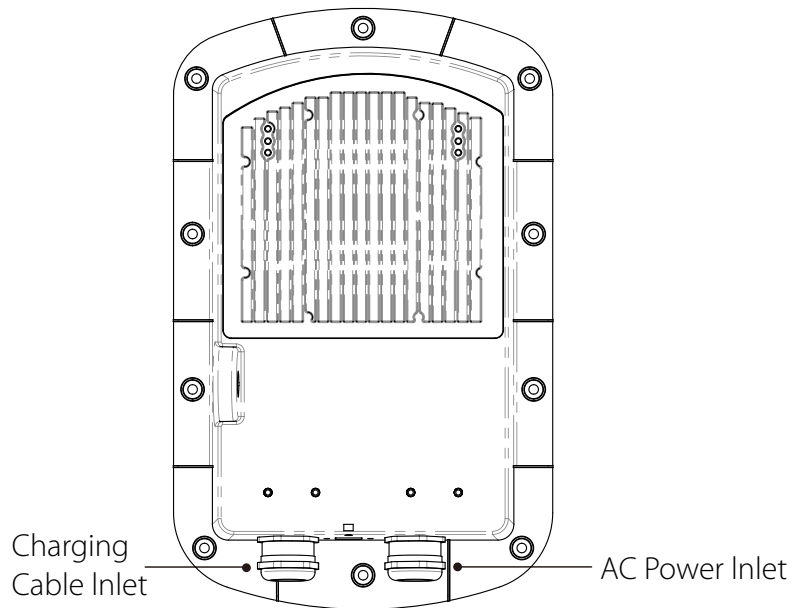
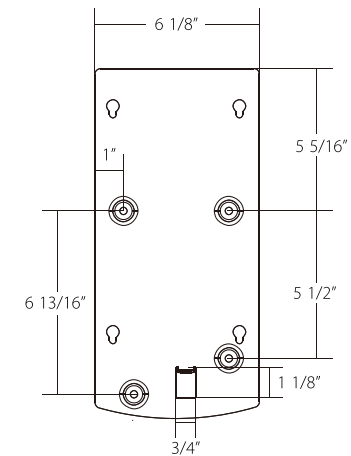


### 4. Dimensions

#### 4.1 Main Size of Charger



#### 4.2 Wall-Mount Bracket



# 5. Equipment Specifications

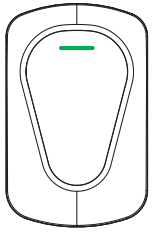
## EVC32 specifications

Specifications	Values
Maximum Power	7.6KW
Input Voltage	200-240VAC / L-L/L-N Single phase
Input Frequency	50/60Hz
Output Voltage	200-240VAC / L-L/L-N Single phase
Maximum Output Current	32A
Charge Mode	Plug & Play
Operating Temperature	-30°C to 55°C (-22°F to 131°F)
Relative Humidity	≤90%
Protection Level	NEMA Type 4
Impact Resistance	IK08
Output Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Automatic full charge protection, Control pilot fault protection, Short circuit protection, Over temperature protection.
Input Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Short circuit protection, Over temperature protection.
Installation mode	Wall-mounted
Input Plug	NEMA 14-50
Cable length	25 ft
Dimension	15 x 9 1/2 x 4 1/8 inch
Operating Environment	Indoor / Outdoor
Application	Residential charging
Output Interface	SAE J1772 AC Level 2 (Type 1)
Altitude	≤6561.68 ft
Weight	13.52 lbs

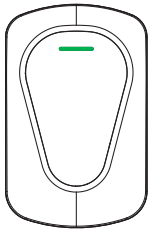
## EVC40 specifications

Specifications	Values
Maximum Power	9.6KW
Input Voltage	200-240VAC / L-L/L-N Single phase
Input Frequency	50/60Hz
Output Voltage	200-240VAC / L-L/L-N Single phase
Maximum Output Current	40A
Charge Mode	Plug & Play
Operating Temperature	-30°C to 55°C (-22°F to 131°F)
Relative Humidity	≤90%
Protection Level	NEMA Type 4
Impact Resistance	IK08
Output Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Automatic full charge protection, Control pilot fault protection, Short circuit protection, Over temperature protection.
Input Protection	Leakage protection, Over-voltage protection, Over current protection, Under-voltage protection, Short circuit protection, Over temperature protection.
Installation mode	Wall-mounted
Input Plug	NEMA 14-50
Cable length	25 ft
Dimension	15 x 9 1/2 x 4 1/8 inch
Operating Environment	Indoor / Outdoor
Application	Residential charging
Output Interface	SAE J1772 AC Level 2 (Type 1)
Altitude	≤6561.68 ft
Weight	13.52 lbs

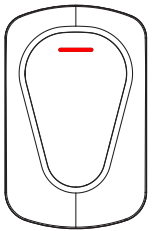
## 6. LED Indicator Description



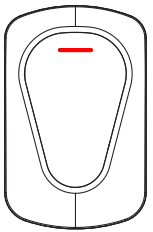
Standby  
Green light always on



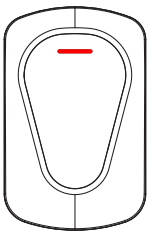
Charging  
Green light flashes, 1 second on, 1 second off



Electric leakage  
Red light flashes, 2 seconds on, 2 seconds off



Ground fault  
Red light flashes, 4 seconds on, 4 seconds off



Power meter malfunction  
Red light flashes, 6 seconds on, 6 seconds off

## 7. Installation Instructions

### 7.1 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 their 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.
  - Not do anything to endanger themselves or other persons.
  - Use personal protective equipment as required and take reasonable care of 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 after they happen.

## 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 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

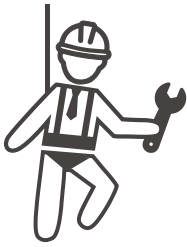
## 7- Ladders



- 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

## 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

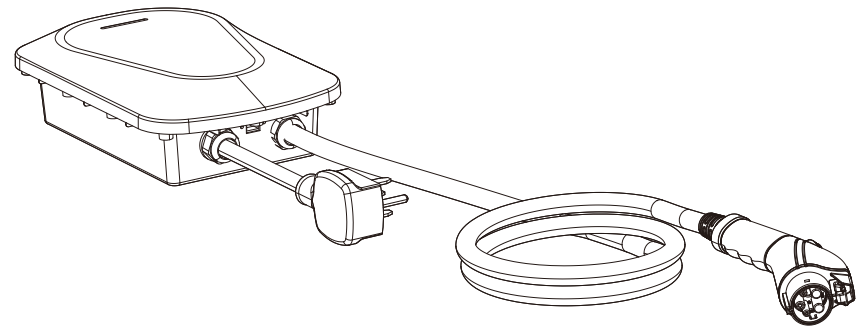


- Plan all work
- Turn off power (work with live parts de-energized whenever possible)
- LOTO (Lock Out, Tag Out)
- Live electrical work permit (input terminals with HV after door open)
- Use personal protective equipment (PPE)
- Safe workplace conditions and space
- Adhere to other occupational health,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

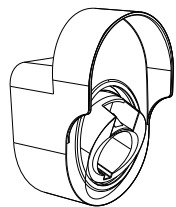
## 7.2 Safety Requirements

- Read this user manual thoroughly and make sure to review all local building and electrical codes before installing the AC charger. A qualified technician should install the AC charger according to the user manual and local safety regulations.
- Use appropriate protection when connecting to the main power distribution cable.
- Type B, C or D breaker with a rating current of 50Amp 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 NFPA 70.
- Verify that the Wall Connector is properly grounded. The ground connection must be bonded in the upstream power supply for proper operation. Check all physical connections, including the wire box terminals, electrical panel(s), and wire box. In residential power supplies, check the bond between ground and neutral at the main panel. If connected to a step-down transformer, contact the transformer's manufacturer for direction on how to bond the ground connection.

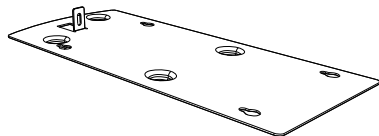
## 7.3 Contents



AC charger  
with charging cable



Nozzle holder x 1



Wall-mount bracket x 1



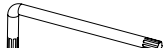
Installation Instructions x 1



Expansion screw x 8



M5 self-tapping screws x 8



Torx/T30 L-wrench x 1



M4 screw x 1

## 7.4 Tools and Materials Required

Tools required before installing the charger onto the Wall-Mount Bracket are:

- Wire stripper.
- Phillips screwdriver for M4—M6 1-3/8 inch or 6 mm drill diameter.
- Voltmeter or digital multimeter (for measuring AC voltage at the installation site).
- The inserting cable should meet the best waterproof performance requirements.  
It is recommended to use a 3 core 8 AWG to pull the cable from the distribution box.  
The maximum outer diameter of the cable should be 0.63-0.9 inch.
- Bubble level.
- Pencil or marker.
- Drill.
- Slotted head screwdriver for M5.

## 7.5 Wall-Mount Installation Requirements

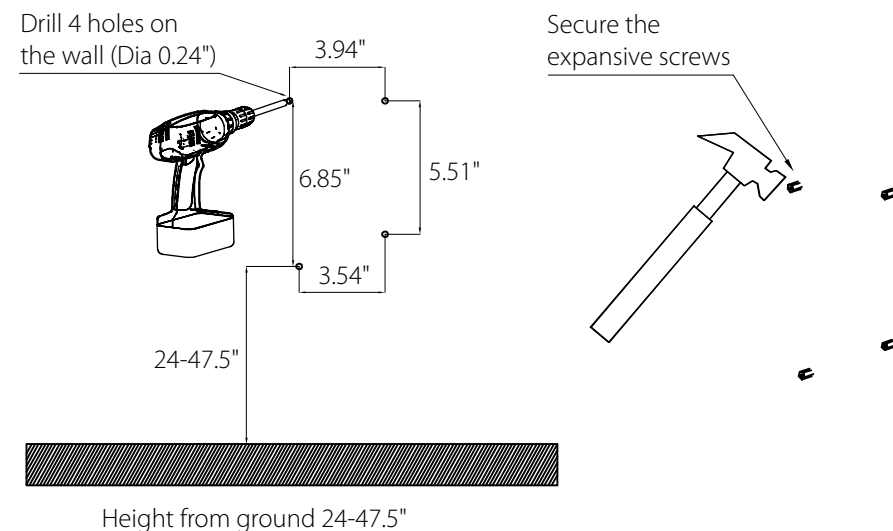
Before installing the wall-mount bracket, you should Confirm the load capacity of the wall exceeds 88.18 lbs. When installing on a concrete wall, you can use the included expansion screws to install the bracket and use a hammer drill to drill holes on the concrete wall (Dia 0.24 inch) following the hole spacing.

When installing on a wooden wall, use the included M5 self-tapping screws to install the wall-mount bracket .

- To select the best location and position to install the wall-mount unit, you should first determine the parking position of the vehicle to ensure the charging connector can be easily inserted into the vehicle charging inlet.
- The wall-mount unit should be located:
  - In a well-ventilated area. Avoid installing in closed spaces or near to exothermic chargers.
  - 1.2 meters or 4 feet above the floor.
  - 10 inches from any obstacles to allow cables to loop around the wires and to allow related maintenance.
  - If in an enclosed garage, Install the EV Charger on the side of vehicle charging inlet.

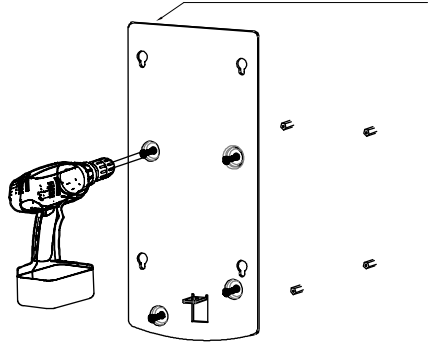
## 7.6 Installation Steps

### 7.6.1 EV Charger

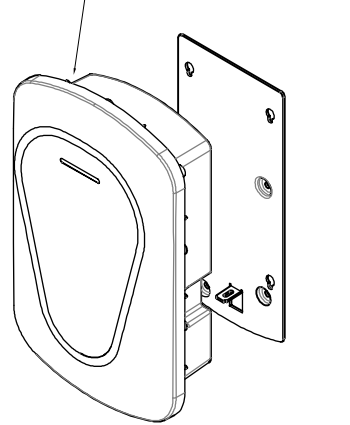




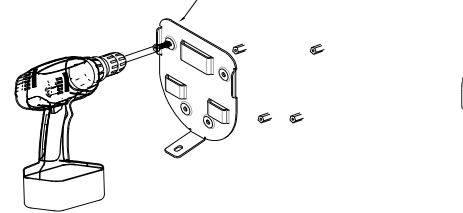
Secure the wall mount bracket to the wall



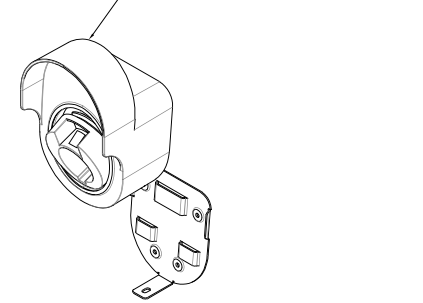
Hang the charger on the wall-mount bracket



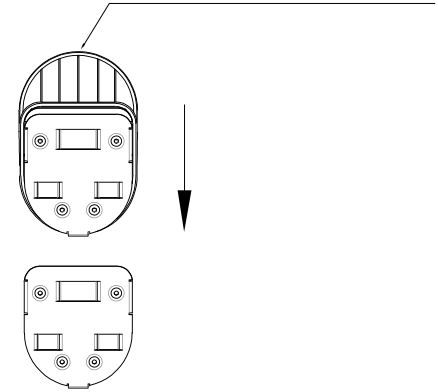
Secure the nozzle holder bracket to the wall



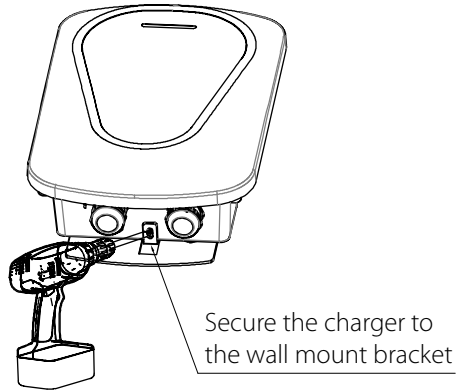
Align the nozzle holder to the mounting plate



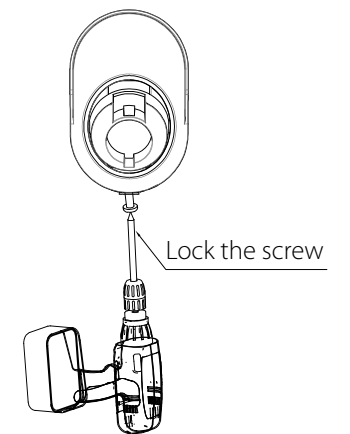
The nozzle holder slides down to fit in the mounting plate



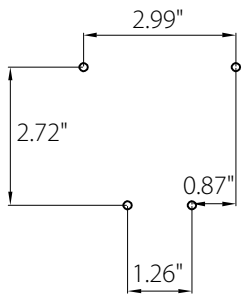
Secure the charger to the wall mount bracket



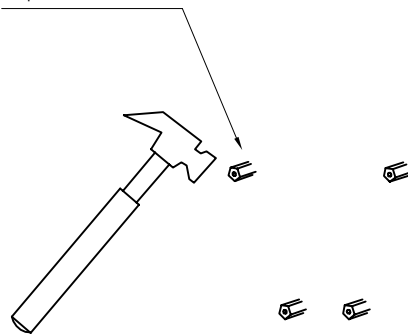
Lock the screw



## 7.6.2 Charging Connector Holder



Secure the expansive screws



## 7.7 Input Device Requirements

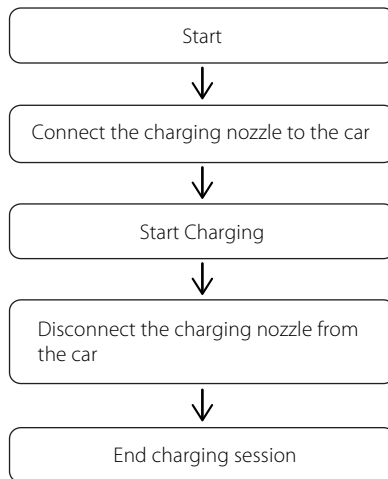
### EVC32:

- a. Cable: 3 x 10AWG
- b. Breaker: 40A/2P

### EVC40:

- a. Cable: 3 x 8AWG
- b. Breaker: 50A/2P

## 8. Charging Operation Flowchart



## 9. Maintenance

Please keep the charger clean and install it in a clean area with low humidity. Do not install it in an environment near the ocean, with high levels of oil, humidity or dust.

- Avoid water into the charger. If water gets into the charger, immediately power off the charger to avoid danger. Proceed to contact the professional technician before next use.
- Use the charger correctly. Do not hit or press hard on the case. If the case is damaged, please contact a professional technician.
- Avoid placing the charger near to hot objects and in high-temperature locations, and keep it away from dangerous substances such as flammable gases and corrosive materials.
- Do not place external objects or heavy objects on the charger, in order to avoid danger.

## 10. Warranty

- This product is covered by a Three-year parts warranty. If you have a technical issue, contact our technical support representative at our help line.
- The warranty period for this charger is Three years and covers parts only.
- During the warranty period, if any malfunction is caused by regular use in accordance with the user manual and service instructions (to be determined by dealer), the charger shall be repaired free of charge. Except for the following situations, the charger shall be subject to the above warranty terms:
  - Inability to provide valid proof of purchase.
  - A product that is out of warranty.
  - Damage caused to the product due to not following the product service instruction for use, maintenance and storage.
  - Damage or malfunction caused by a foreign object entering.
  - Unauthorized repair, disassembly or modification.
  - Damage caused by force of nature (such as lightning, excessive voltage, earthquake, fire, flood, etc.).
  - Malfunction and damage caused by other unavoidable external factors.
  - Malfunction and damage caused by improper use of the equipment, such as water or other solutions entering into the equipment.
  - Malfunction and damage caused by the mains power supply and voltage which is not specified for use with the charger equipment.