EverCharge

Fast A10 DCFC

Installation Manual



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1 - Safety and Liability

DO NOT DISCARD THE FOLLOWING IMPORTANT SAFETY INSTRUCTIONS

This manual contains important instructions that must be followed during the installation of an EverCharge Fast A10 Direct Current Fast Charging System (known throughout this document as the Fast A10).

1.1 - Grounding Instructions

The EverCharge Fast A10 DCFC must be connected to an equipment-grounding conductor, must be run with circuit conductors and connected to the equipment grounding terminal / lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE shall comply with all applicable codes and ordinances.

1.2 - Handling and Storage Guidelines

Handling Instructions:

- In the process of unloading and handling, the forklift should be selected reasonably according to size and weight of the goods in order to avoid the packaging containers from being dropped.
- In order to prevent the safety of placing and unpacking products affected by tilt and uneven ground, please choose a flat ground when unloading.
- If the containers need to be temporarily stored after unloading, it is recommended to keep sufficient space between each pallet to avoid damages to the packagings or pallets during the second transfer.

Storage Instructions:

- Due to the complexity of the environment and climate of project sites, it is required to store and stack the goods with a single layer after unloading in order to ensure the safe storage of the goods on site.
- The goods should be stored in a complete outer packaging.
- The storage area should be protected, keeping the pallets and packaging containers from damp, direct sunlight, rain (waterproof) measures, and all other environmental hazards. The indoor storage temperature should be -40°F to 185°F (-40°C to +85°C).
- The grounds of the storage areas should be kept dry and leveled.
- Do not stack other items on the containers.

Important Notes:

⚠ **Title and risk of loss for the product transfer to you upon delivery. You are responsible for any damage to the product occurring after delivery.**

1.3 - FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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 this document, may cause harmful interference with radio communications. Operation of this equipment in a residential area could cause interference, in which case, you will be required to correct the interference at your own expense.

⚠ **Important:** Changes or modifications to this product not authorized by EverCharge Inc. could affect EMC compliance and revoke your authority to operate this product.

1.4 - Safety and Compliance

This document provides instructions to install the EverCharge Fast A10 DCFC and should not be used for any other product. Before installing the EverCharge Fast A10 DCFC, you should review this manual carefully and consult with a licensed contractor, licensed electrician, and trained installation expert to ensure compliance with local building practices, climate conditions, safety standards, and all applicable codes and ordinances. The EverCharge Fast A10 DCFC should be installed only by a licensed contractor and a licensed electrician and in accordance with all local and national codes and standards. The EverCharge Fast A10 DCFC should be inspected by a qualified installer prior to the initial use. Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact EverCharge, Inc. EverCharge, Inc. is not responsible for any damages that may occur resulting from custom installations that are not described in this document.

1.5 - Safety Requirements for Installation Personnel

- ⚠ **Warning**: You must comply with the installation site's established safety requirements.
- ⚠ **Warning**: Pay attention to warning and safety signs posted in and around the work site.
- ⚠ **Warning**: Wear proper head protection, closed toed shoes, and Personal Protective Equipment while installing the EverCharge Fast A10 DCFC.

- **Warning**: When testing the EverCharge Fast A10 DCFC, wear proper Personal Protective Equipment and an Arc Suit, including an Arc-rated face shield, arc-rated coveralls, safety glasses, ear canal inserts, and rubber insulated gloves.
- **Warning**: If working at an elevated height, wear proper fall protection, head protection, and closed-toed non-slip shoes. Installation personnel working at heights must be trained for, and proficient at using personal fall arrest systems
- **Warning**: If working at an elevated height, properly secure work tools.
- **Warning**: Do not stand or walk underneath elevated loads, and always maintain clearance from machinery, moving parts or vehicles, and live electrical equipment.
- **Warning**: If in the presence of heavy dust or paint fumes, wear a respirator.
- **Warning**: Do not stand under a forklift, hoist zone, or other such area where personnel are working at height.
- **Warning**: When possible, keep a safe distance from mechanical and electrical equipment to reduce potential exposure to mechanical or electrical hazards.
- **Warning**: When possible, avoid unnecessary contact with mechanical and electrical equipment to prevent undue damage to said equipment.
- **Warning**: Only properly trained personnel should use power tools.
- **Warning**: When using power tools, wear protective shoes, gloves, and other equipment.
- **Warning**: Ensure all power tools are properly grounded or connected to a neutral line.
- **Warning**: Be sure to keep all electrical equipment and power supplies intact. If electrical components are damaged, they must be fixed before work can proceed.
- **Warning**: Prevent falls: Pay attention when moving around open pits or elevated work zones.
- **Warning**: Pay attention to ground conditions when walking to prevent injuries from contact with construction debris (nails, steel bars, etc.).
- **Warning**: Technicians working on or near energized electrical parts must be trained in and strictly adhere to arc flash boundaries as per NFPA 70
- **Warning**:Electrical systems must be de-energized and Locked Out/Tagged out prior to performing any work on them, unless one of the following conditions apply:De-energization of electrical system would interrupt critical life support systems, or cause other life-safety hazards

1.6 - Accuracy

Reasonable effort was made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

1.7 - Disclaimer

The EverCharge products are provided “AS IS,” and EverCharge, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purpose, and non-infringement, to the maximum extent permitted by law.

1.8 - Limitation of Liability

In no event shall EverCharge, Inc. or its authorized distributors be liable for any indirect, incidental, special, punitive, or consequential damages, including without limitation, lost profits, lost data, loss of use, cost of cover, or loss or damage to the EverCharge Charging station, arising out of or relating to the use or inability to use this manual, even if EverCharge, Inc. or its authorized distributors have been advised of the possibility of such damages.

1.9 - Copyright Notice

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2 - General

2.1 - Purpose of Document

This document aims to help guide installation personnel to successfully complete the electrical and mechanical installation of the EverCharge Fast A10 (DC Fast Charger).

2.2 - Product Scope

This manual applies to the following products and part numbers:

- EverCharge Fast A10 Dispenser - E800-1040

This manual is intended for use by the personnel responsible for installing this charger.

2.3 - Definitions of Related Warning Symbols

Table 1 - Definition of Warning Symbols	
Symbol	**Meaning**
	**The "Electrical Hazard" symbol indicates Danger.** Failure to follow the procedures, practices, and/or proper implementation steps as specified in this manual may cause **injuries or death**. Only perform the operations marked by the "Electrical Hazard" symbol when the associated pre-conditions are fully understood and satisfied.
	**The "Caution" symbol indicates Warning.** Failure to follow the procedures, practices, and/or proper implementation steps as specified in this manual may cause **product damage**. Only perform the operations marked by the "Caution" symbol when the associated pre-conditions are fully understood and satisfied.
	**The "Tips" symbol indicates operational tips or useful information.** This symbol does not indicate information about warnings for dangerous or harmful functions.
	**The "Waste Disposal" symbol indicates electronic and electrical waste.** This logo is located on the product, the packaging, or in the instruction manual to indicate that electrical and electronic equipment (and its accessories) should be disposed of separately from ordinary household waste. If marked as such, the material should be reused or recycled.

3 - Tools and Materials

3.1 - Installation Tools

It is recommended to have the following tools on hand for this installation process:

- Large Diameter Cable Cutter
- Large Cable Strippers
- RJ45 Crimping Tool
- Multimeter
- Ohmmeter
- Heat Gun
- Hammer
- Hammer Drill
- Tongue-and-Groove Pliers
- Tape Measure
- Metric Socket Set
- Metric Box End Wrench Set
- #1 & #2 PH Screwdriver
- Torx Security Bits
- Allen Wrench Set
- Level
- Utility Knife
- Pen / Marker
- Crane / Forklift

Use the following protective equipment on hand when testing this device:

- Arc-rated face shield
- Safety Glasses
- Ear Canal Inserts
- Arc-rated Coveralls
- Rubber Insulated Gloves
- Close-toed Safety Shoes

⚠ Note: The above tools shall be selected based on the actual situations on site.

3.2 - Construction Materials

It is necessary to have the following cable types on hand.

1) Conductors sized appropriately as specified in the site's engineering drawings.
2) RJ45 connector for CAT6e network cable

4 - Site Preparation

Keep the following in mind when selecting an installation site for the EverCharge Fast A10 DCFC system.

1) Ensure that the space and the airflow around the Dispenser meets the requirements laid out in Section 4.3 - Equipment Spacing Requirements.

2) When placing the Dispenser, consider the length of the CCS charging cables to make sure their length is sufficient for connecting to different makes and models of electric vehicles.

The length of the charging cables is 16.4 ft (5 m).

⚠ **Note:** Electric vehicles can have charging ports on both the front or rear of the vehicle (either passenger or driver side).

3) Ensure the overall site (especially the Dispenser placement) complies with applicable usability standards, such as Americans With Disabilities Act (ADA). More details about ADA Compliance can be found in the "Height of User-Operable Elements" section of Appendix F: Technical Data.

4) Ensure the concrete foundations for the Dispenser have been sized appropriately. See Section 4.2 - Concrete Foundation Requirements for relevant drawings and guidelines.

5) Confirm site power availability and power distribution infrastructure.

6) Plan to use the correct type of communications wiring depending on the planned distance between the Dispenser and Gateway.
   a) The ethernet cable and 480V Auxiliary power connection from the Dispenser to Gateway must be installed in a separated raceway enclosure.
   b) For installations where the distance between Gateway and DISPENSER is less than 328 ft (100 m) the use of CAT6e ethernet cable is recommended.
   c) If you have a site with greater distances, utilize optical fiber and please contact EverCharge for installation guidance.

7) Verify that there is enough excess cable at both ends of the Power Distribution Box and Dispenser to properly terminate the connections without inducing stress on the equipment terminals.

4.1 - Site Distribution and Wiring Requirements

4.1.1 - Handover of Construction Drawings

Before beginning construction, the installation contractor must verify whether the installation plans provided meet the minimum installation requirements specified in this manual. It is the responsibility of the project engineer to ensure that the plan details comply with all electrical, mechanical, and foundation guidelines provided in this guide, in addition to all local jurisdictional requirements related to building, mechanical and electrical codes, before installing the EverCharge Fast A10 DCFC.

4.1.2 Inspection of Power Cables

Please check and verify the cable type is in accordance with the engineering plans before installation.

4.1.3 - Distribution Infrastructure Capacity Requirements

The power grid could be TN、TT and IT system, Neutral (N) is not required for installation, the phase-to-phase voltage is 480V (± 10%), and the frequency is 50 ~ 60Hz. When the EverCharge Fast A10 DCFC operates at full power (180kW DC output), the maximum AC input current of the Dispenser is 250A at 480V (3PH AC), and the capacity of the site transformer supplying the system should be 200kVA or greater. It is recommended that the MCCB should be Ue: 480Vac, In: 400A, thermo-magnetic type, Icu ≥Ics ≥65kA, 3P.

4.1.4 - Grounding/Insulation Resistance Requirements

Check the Grounding Resistance test report to ensure the grounding grid's resistance value is less than or equal to 10Ω.

Check the Insulation Resistance test report to ensure that the cable's insulation resistance value is greater than or equal to 10MΩ.

Note: The above requirements are only for reference. The specific standards shall be subject to local laws and regulations.

4.1.5 - Voltage Drop

The maximum recommended voltage drop between system components at their design load is 3.5% or less. Failure to adhere to this design requirement could result in substandard performance of the system.

4.2 - Concrete Foundation Requirements

Pour a fresh concrete foundation before installing the charger. Table 7 contains the minimum foundation requirements for the Dispenser, but the specific size can be adjusted for specific customer needs or site conditions.

The pad must be level and flat (within ± ¼ in / 6 mm variation across the surface), with a minimum strength of 4000 PSI (or greater). The concrete pad must support the full size and weight of the unit while complying with all applicable local building codes.

⚠ **Important**: Verify the concrete pad is cured to its required strength according to manufacturer's instructions before mounting the Dispenser.

Table 2 - Dispenser- Concrete Pad Minimum Requirements	
Dimension	**Value**

Length	35 ⅝ in (900 mm)
Width	35 ⅝ in (900 mm)
Overall Depth	23 ⅝ in (600 mm)
Height Below Finished Grade	15 ¾ in (400 mm)
Height Above FInished Grade	7 ⅞ in (200 mm)

The following requirements must also be met:

1) Outlet holes must be reserved on the foundation.
2) The foundation should be checked to be level to within ± ¼ in (6 mm) across the total surface.
3) (4x) M10*150mm (3/8''-16x5 3/4'') (not included) shall be used to anchor the units to the concrete pad.
    a) The bolts must be pre-embedded into the concrete pad in advance according to the drawing positioning, with between 1 - 1 ½" (25 - 40 mm) of thread exposed from the finished surface of the concrete.
4) If installing the charger in an area with wet soil, consider using impermeable concrete.

The top view of the concrete foundation for the 180 kW Dispenser is shown in Figure 1. The front and side installation views for the Dispenser are shown in FIgure 2.

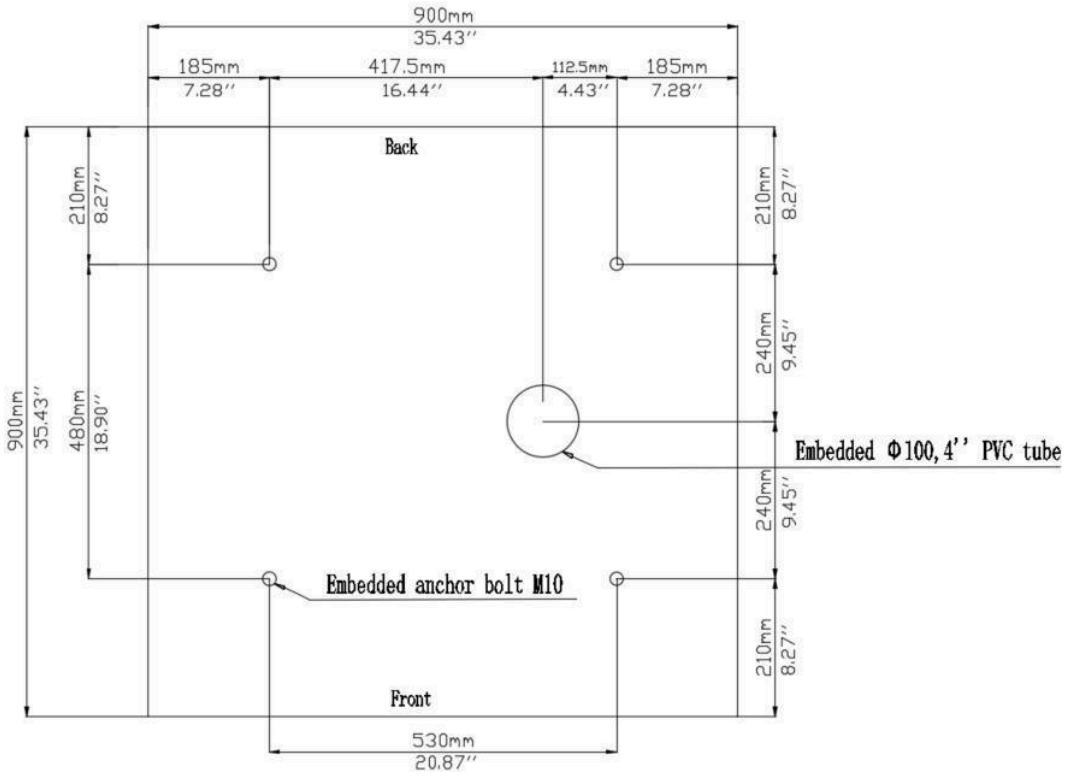


Figure 1 - Top View of Concrete Foundation of Fast A10 Power Dispenser

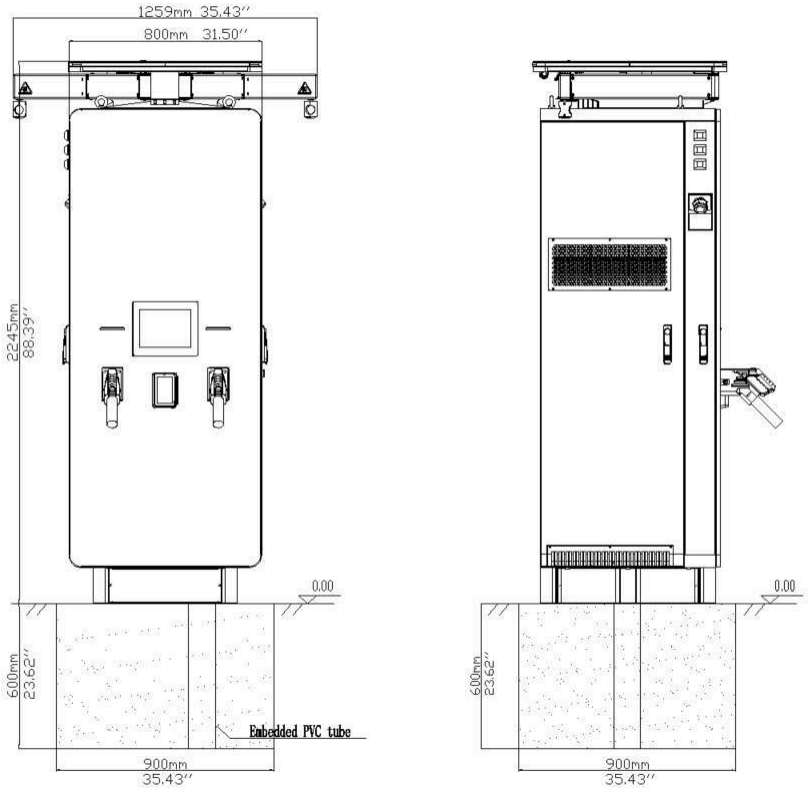


Figure 2 - Installation Views of Fast A10 Dispenser

4.3 - Equipment Spacing Requirements

4.3.1 - Maintenance Distance Requirements

Proper access and working clearance per the NEC, local AHJ or utility requirements, as well as those outlined in this document shall be provided for the Dispenser. In all cases, the clearances called out in this document shall be treated as the minimum allowable.

The minimum maintenance distance requirements for the Fast A10 Power Dispenser are shown in Figure 5.

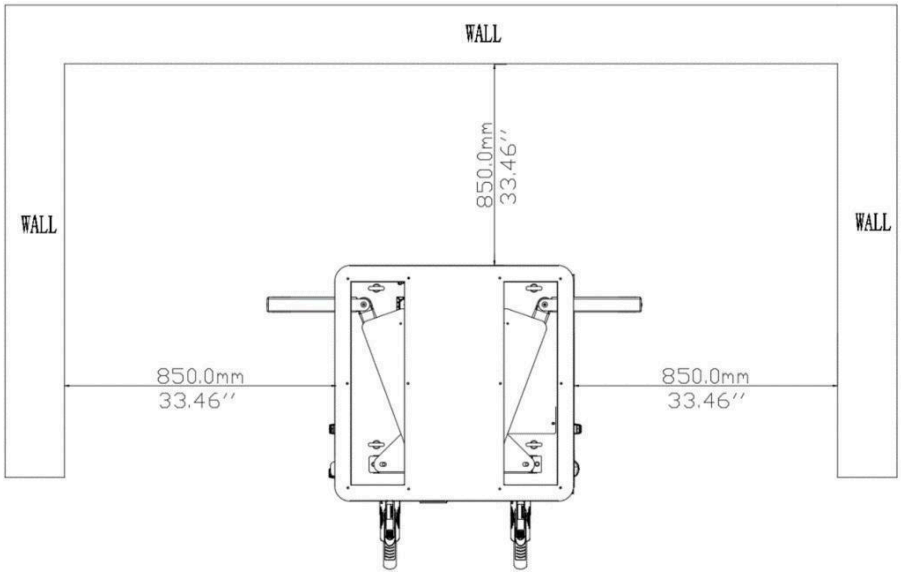


Figure 3 - Minimum Inspection Distance Requirements for Fast A10 Power Dispenser

4.3.2 - Distance Requirements Between Spaces

When the DISPENSER is installed in the middle of a parking space or a parking space with back to back, it is suggested to set aside 1200mm (47.2'') space between the wheel stopper and the charger to facilitate the use of the charger

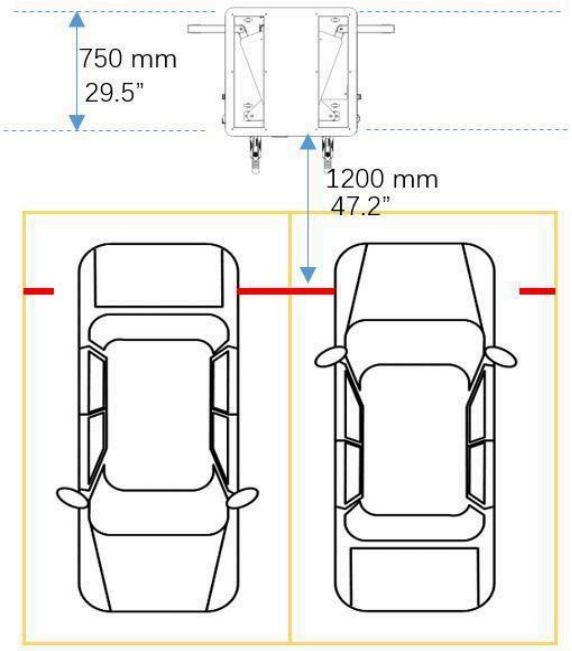


Figure 4 - Minimum Inspection Distance Requirements Between Parking Spaces

5 - Installation Steps

Before commencing installation, ensure your preparations meet the following preliminary requirements:

1. You have all tools & personal protective equipment on hand and ready for use. See Section 3.1 - Installation Tools for a list of recommended equipment.
2. You have an engineered planset that is fully permitted by the relevant local Authority Having Jurisdiction, as delineated in Section 4.1.1 - Handover of Construction Drawings.
3. All AC, DC, auxiliary power, and communications conduit and cable is installed.
4. There is no power applied to any wiring during the installation process.

Installation Steps Outline:

1. Prepare for installation.
    a. Prepare the Site (Section 4 - Site Preparation)
    b. Unpack the EVSE components (Section 5.1 - Unpacking and Inspection)
2. Move the Dispenser into the correct location and perform the mechanical installation. (Section 5.2 - Mechanical Installation)
3. Perform the electrical installation. (Section 5.3 - Electrical Installation)
    a. If necessary, install these optional elements:
        i. Cable management system. (Section 5.2.3 - Cable Management System)
    b. Prepare for commissioning. (Section 6 - Pre-Commissioning Steps)

5.1 - Unpacking and Inspection

5.1.1 - Unpacking Record Checklist

Upon receiving the crates containing the components for the EverCharge Fast A10 DCFC system, ensure the Tip-n-Tell sensors on the crate exteriors are not compromised. If they are fine, proceed to unpack the unit and verify that everything ordered is present and in good working condition.

Be sure to fill out the Unpacking Record Form (Appendix A) while unpacking and verifying the system components are present and in good working order. Receive the site representative's signature for confirmation before proceeding.

1) Remove the crate panels and other packaging material.
2) Visually inspect the interiors and exteriors of the equipment to check for damage (chips, deformations, stains, etc.)
3) Verify that the parts received matches the system packing list (listed in Table 9 - System Packing List, below).
   Ensure the equipment quantities received matches the site planset and/or the sales order.
4) Check that the equipment nameplate matches the equipment ordered.
5) Verify that the expected accompanying documents are present and complete.

6) Ensure the accessory keys are present.
7) Verify the Delivery Inspection Report & certificate are in good order.

Table 3 - System Packing List					
Component	**Packaging**	**Packaging Size**	**Weight**	**Accompanying Documents**	**Accessories**
Dispenser (E800-1040)	Wooden Crate	43.3''*41.3''*96.0'' 1100*1050*2438	1060 lbs 480 kg	Certificate of Conformity Delivery Inspection Report	- 3x Door Key - 2x IC Card - 4x Lifting Bolts
Power Modules	Cardboard Box	31.5''*23.4''*27.6'' 800*595*700mm	242 lbs 110 kg	N/A	N/A

If you find any damaged or missing parts, contact EverCharge customer support for next steps.

⚠ **Important**: Reach EverCharge Customer Support at *support@evercharge.com* or *888-342-7383*

5.1.2 - Pre-Installation Checklist

The installer must also complete the Pre-Installation Checklist (Appendix B) before proceeding.

If everything (including the Unpacking Record Form and the Pre-Installation Checklist) is in good order, proceed to Section 5.2 - Mechanical Installation in this manual.

5.1.3 - Shipping Damage

If the Tip-n-Tell Sensors on the Dispenser crate exterior indicate that the packaged experienced shock or tipping during transit, proceed with the following steps.

1) Refuse to accept delivery of the EVSE.
2) If unable to refuse delivery, describe any visible damage on the delivery receipt or BOL.
3) If the delivery was made without proper time to assess the damage, report it as soon as possible (must be within 3 days of the delivery date). Contact the freight company regarding the damage and provide evidence of the damage.
4) If you can see any damage on the Dispenser through the packaging material, do not accept the shipment or unpack the units.

5.2 - Mechanical Installation

5.2.1 - Preparing and Moving the Dispenser

Forklift or Crane can be used to transport the Fast A10 Dispenser.

1) Using a Philips screwdriver, remove the front, rear and side sealing plates of the base, as shown in Figure .

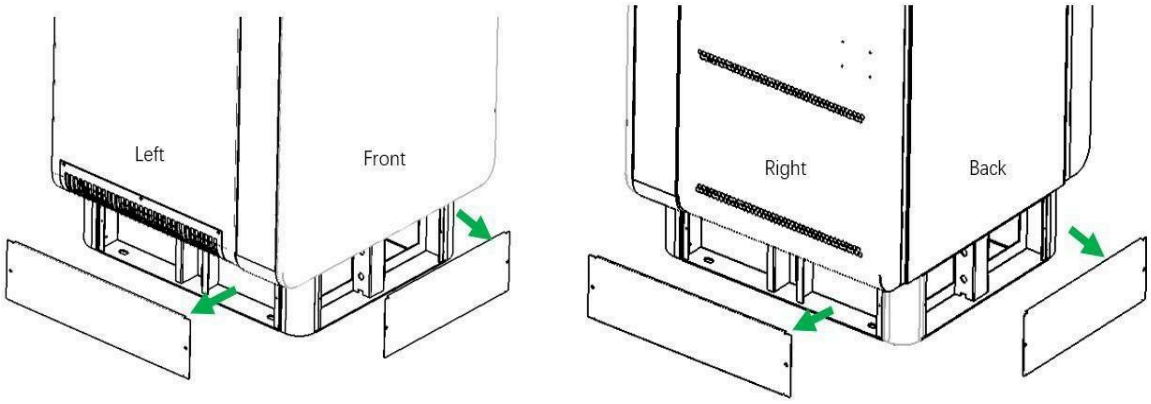
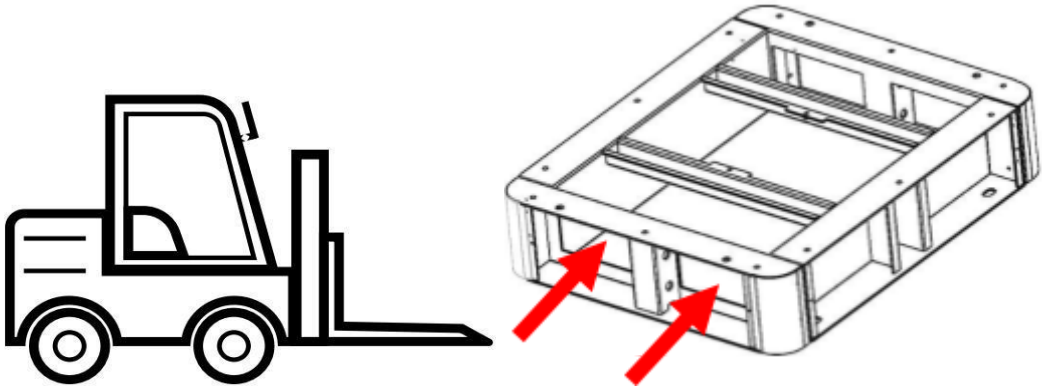


Figure 5 - Diagram of Sealing Plates

5.2.1.1 Forklift Transportation Instructions

Fork the charger from the sealing plate holes, place it on the concrete foundation, and make the four holes aligned with the bolts.



Insert the fork

Figure 6 Schematic diagram of installation with forklift

Install nuts and washers on the anchor bolts to fix the charger.

Reinstall the base sealing plate and the charger is fixed

5.2.1.2 Crane Transportation Instructions

Select the appropriate lifting rope and machinery according to the weight. Each eyebolt on the top shall be provided with a rope, the lifting height of the rope shall not be less than 1m, the stress center of the hook shall be located at the symmetrical stress center, and the lifting schematic diagram is

shown in Figure 3-3. Hoist the charger according to the hoisting operation specification, align the four holes of the base with the anchor bolts, and place the charger on the concrete foundation.

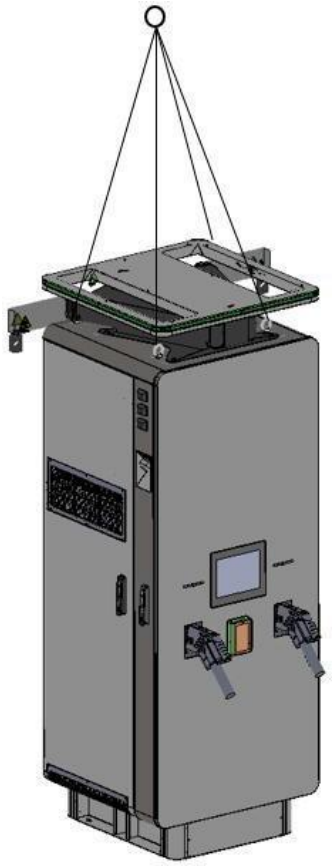


Figure 7 Schematic diagram hoisting of charger

Install nuts and washers on the anchor bolts to fix the charger.

Reinstall the base sealing plate and the charger is fixed

5.3 - Electrical Installation

5.3.1 - Wiring and Conduit of the Dispenser

Open the right door of the charger and put the power cable into the charger from the bottom.

Make the power cable go through the waterproof gland as shown in Figure 3-4, reserve the corresponding length, crimp the copper lugs, and connect it to the corresponding terminal,

and ensure that the copper lug bolts of the wiring connection are not loose; When wiring, avoid the scratch and damage of the cable insulation sheath, so as to avoid short circuit

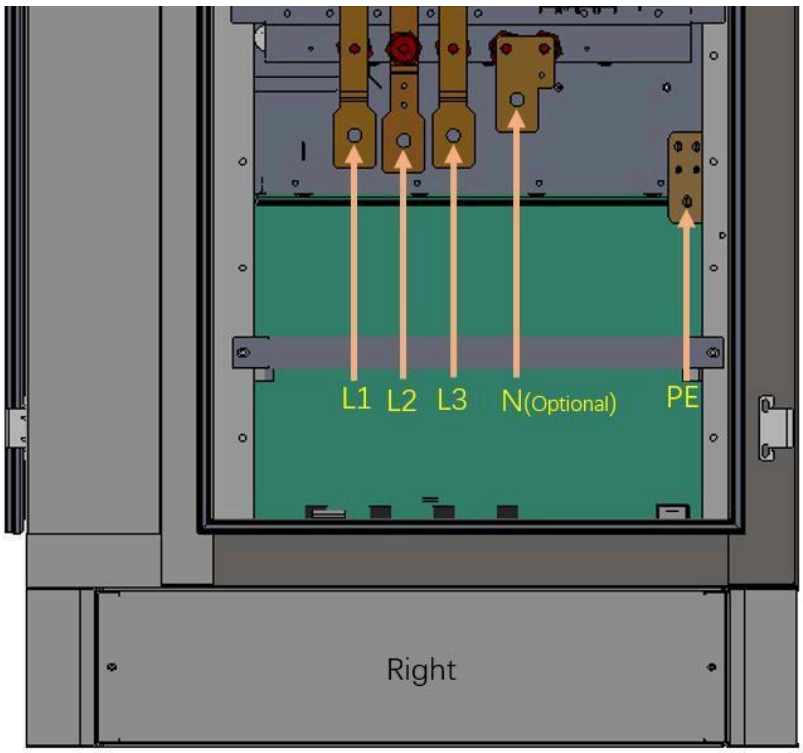


Figure 8 Power cable wiring diagram

5.3.2 - Connect to EverConnect

If the Ethernet communication is required, open the right door of the charger, make the network cable go through the bottom of the Dispenser, and take it from the right side to the front side, reserve the corresponding length, strip the cable, crimp the RJ45 connector, and connect it to the switch, as shown in Figure 9..

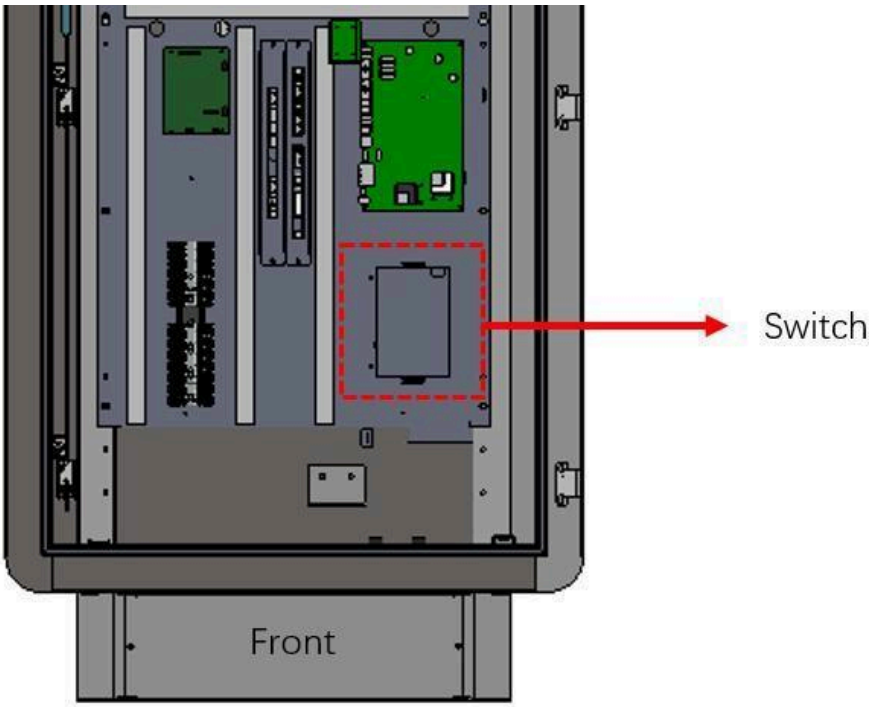


Figure 9 Network cable connection

1) Feed the cables through the bottom of the Dispenser. Connect the cables to the corresponding cable terminals.

5.3.3 - Installation of Power Modules

1) Open the right door of the charger, and gently insert the power modules into the module slots as shown in Figure 33. A total of 6 Power Modules will be installed in each Fast A10 charger.

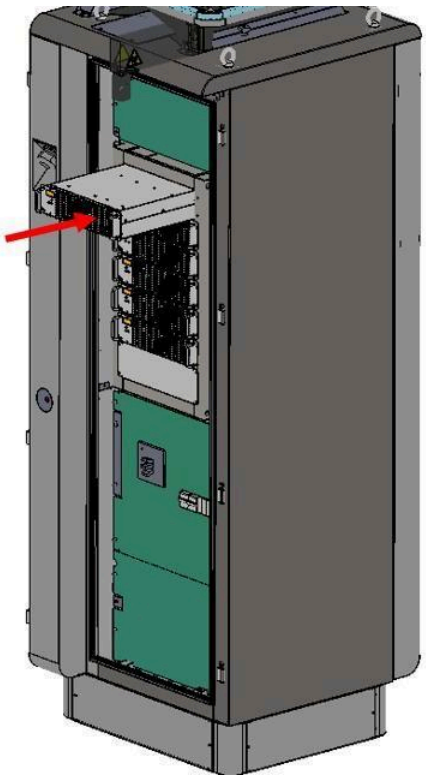


Figure 10 - Installation of Power Modules

2) Each module shall be secured with 4x M4*12 Phillips screws as shown.

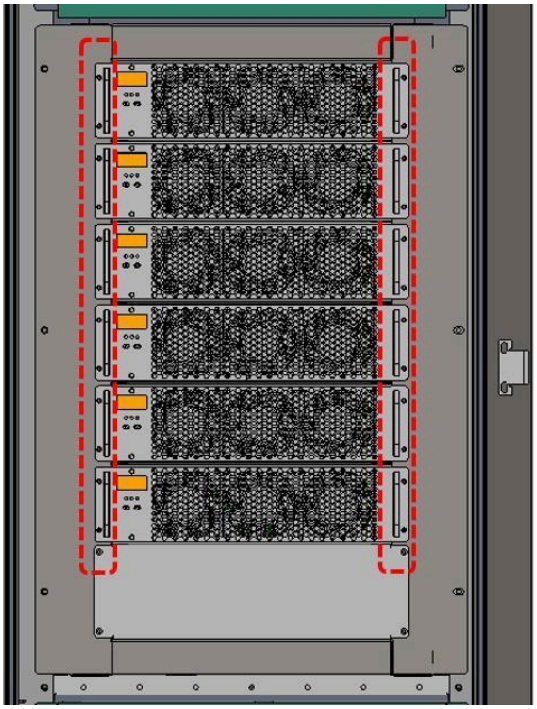
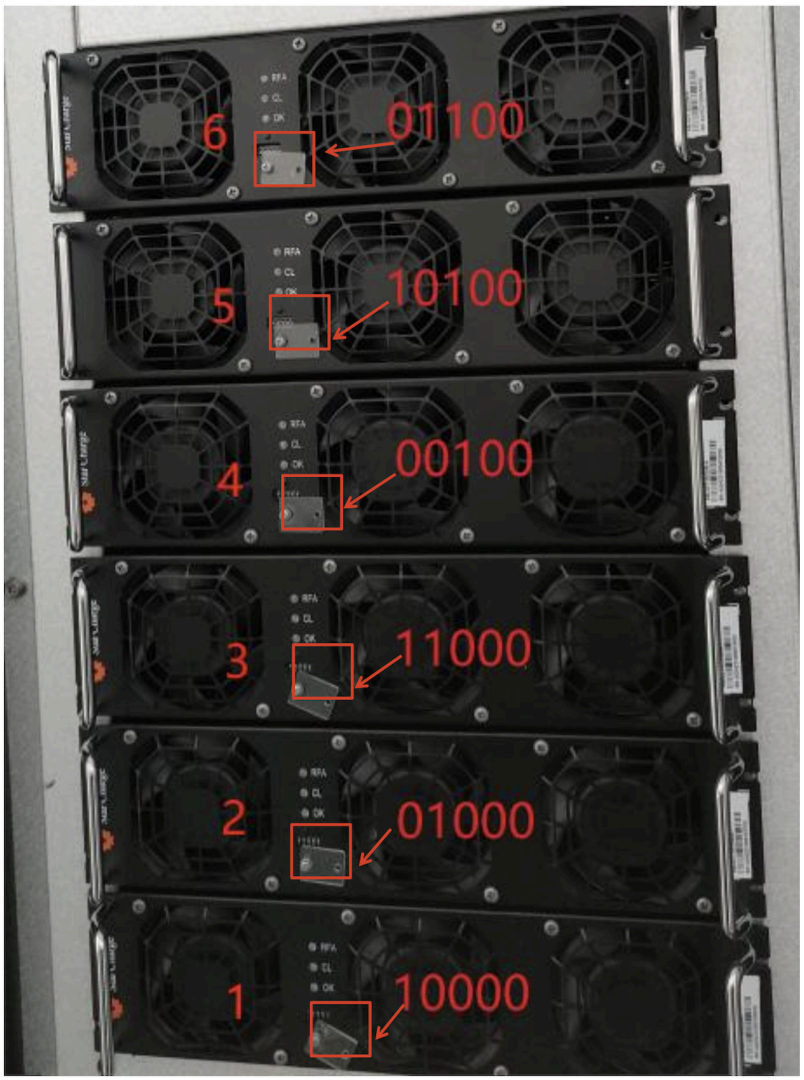


Figure 11 - Power Module Installation

⚠ **Warning**: Make sure to follow the proper installation procedures as given in this manual to avoid potential injuries and/or death.

Set power module address according to the figure below:



5.3.4 Fixation of Charging Cables

Fix the charging cable on the clamp of the charging cable management system(CMS).

Open the package of the charging cable and the clamp is on the charging cable already.

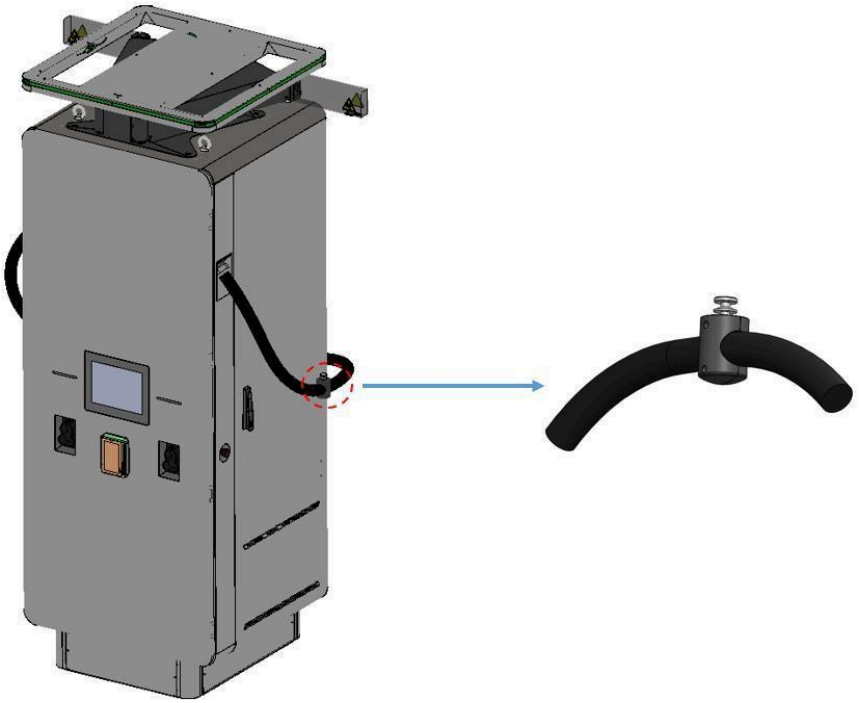


Figure 12 Position of the charging cable clamp

Remove the sealing plate from the CMS.

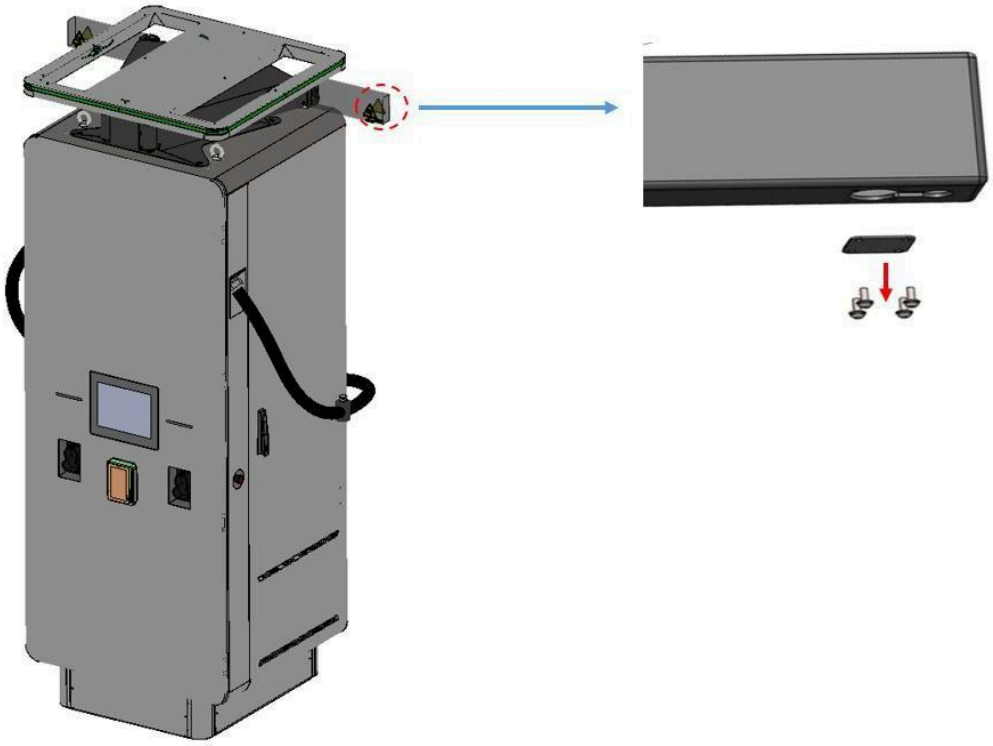


Figure 13 Removing the sealing plate

Insert the axis of the charging cable clamp into the hole of the CMS.

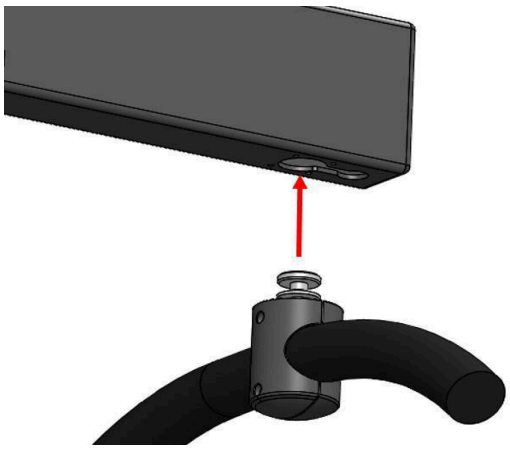


Figure 14 Inserting the axis of the cable clamp

Move the charging cable clamp to the right position, then install the sealing plate.

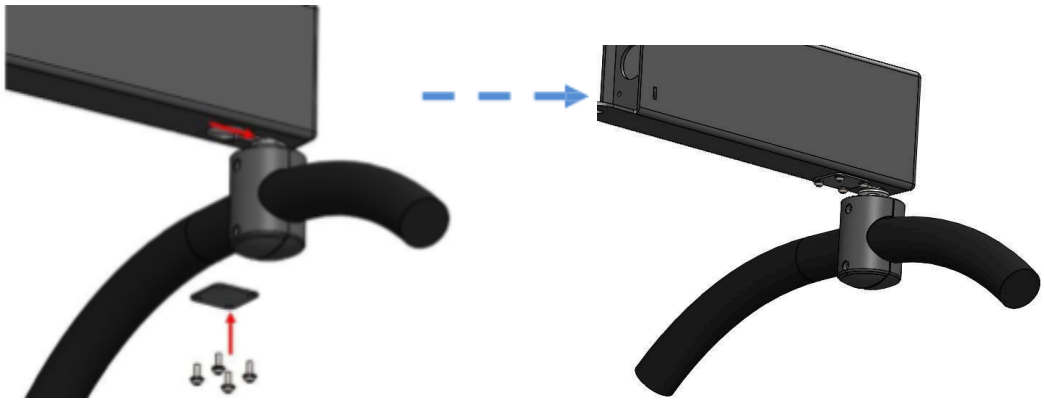


Figure 15 Sealing up

Clean the stains and sundries on the cable entry of the charger.

Fasten the cable glands to maintain its sealing performance to prevent moisture from entering.

⚠ **Warning**: The operation must be implemented in accordance with specifications and correct operation procedures, so as to prevent personal injuries or death.

6 - Pre-Commissioning Steps

⚠ **Warning**: Live electrical equipment should only be operated by engineers and/or personnel with relevant local qualifications.

Complete the following steps post-installation steps prior to turning on the EverCharge Fast A10 DCFC system. Complete the Post-Installation Checklist (Appendix C).

6.1 - Installation and Wiring Inspection

6.1.1 - Equipment Inspection

1) Ensure the charging equipment is pristine and clean, without surface defects.
2) Ensure the charging equipment is fastened properly to the concrete base, and the entire assembly is level as directed in this manual.
3) Make sure all necessary components of the equipment are present and installed correctly.

6.1.2 - Cable and Connection Inspection

1) Verify the cable jacket is not scratched or damaged.
2) Ensure the connecting power cable terminals are securely attached to the charging equipment.
3) Ensure the communication cable has been wired correctly and is securely attached to the equipment.
4) Check that the cables' bending radius will not cause damage to the cables.
5) Make sure the charger is grounded correctly.

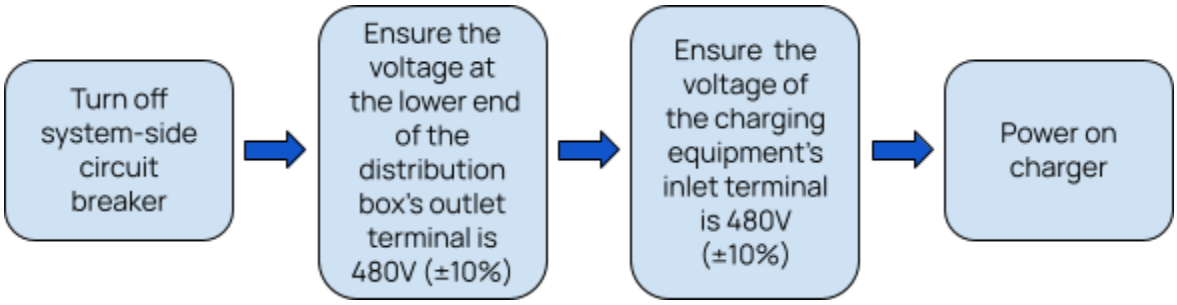
6.2 - Check Before Power-On

1) **Short Circuit** - check the power cable and check whether there is a short circuit between the three-phase wire, and ground wire.

2) **Power Voltage before Power-On** -before powering on the equipment, check whether the power voltage on upper end of MCCB in the Dispenser is normal, ensure there is no phase lack, overvoltage, undervoltage, phase-sequence anomaly or other abnormalities.

6.3 - Power-On Inspection

The equipment can only be powered on after confirming that the equipment has been wired correctly. The power-on operation is as follows:



7 - Installation Environment

Do not perform installation operations outdoors on rainy days.

Table 4 - Installation Environment Requirements	
Ambient Conditions	**Recommended Range**
Ambient Temperature	-30°C to 55°C
Altitude	≤ 2000m
Humidity	5% - 95% RH No condensation inside the product
Degree of Dust	≤ 1 mg/m^3
Corrosive Substances	No pollutants (salt, acid, smoke, etc.)
Vibration	≤ 1.5 mm/s^2
Insects, Pests, Vermin, Termites	None
Mold	None
Moisture	Rain Prevention
Fire Prevention	No flammable substances in immediate vicinity of Dispenser

8 - Completion Documents

Completion of the following documents is required for the Installation of the 240 kW system:

1) Unpacking Record Form (Appendix A)
2) Pre-Installation Checklist of Fast A10 Split Charging System (Appendix B)
3) Post-Installation Checklist of Fast A10 DCFC System (Appendix C)

9 - Commissioning

Contact EverCharge Customer Support at *support@evercharge.com* or *888-342-7383* to complete commissioning.

Appendix A - Unpacking Record Form

Unpacking Record Form					
Owner's Name				**Unpacking Date**	
No.	**Case**	**Name**	**Quantity**	**Acceptance**	**Notes**
Unpacking Conclusions		**Installation Unit**		**Owner's Unit**	
Signature				**Date**	

Appendix B - Pre-Installation Checklist for Fast A10 Charger

Pre-Installation Checklist for 240 kW Power Dispenser					
Contractor:		**Electrical Contractor:**		**Project Name:**	
Sub-Project		**Main Acceptance Criteria**		**Acceptance Records**	**Treatment Measures**
Installation Plan		Does the on-site equipment installation comply with the construction plan design drawings?			
Distribution Box Circuit Breaker		Does the Circuit Breaker meet the electrical installation requirements? (The maximum input current of each 180 kW Dispenser is 250A)			
Cable Type		Do the selected cables meet the requirements of the engineering site plans?			
Concrete Foundation		Do the dimensions of all the concrete foundations meet the requirements of Section 4.2 - Concrete Foundation Requirements?			
Maintenance Channel		Does the maintenance channel meet the equipment distance requirements of Section 4.3 - Equipment Spacing Requirements?			
Conclusions:					
Note: 1) In the Acceptance Record, fill in "✓" or "✗" according to the on-site situation 2) In the Conclusion section, fill in "Qualified: or "Needs to be Rectified" according to the on-site situation					
Signature of Inspector: _____ **Date:** _____					

Appendix C - Post-Installation Checklist for Fast A10 Dispenser

Post-Installation Checklist for 240 kW Power Dispenser					
Contractor:		**Electrical Contractor:**		**Project Name:**	
Sub-Project		**Main Acceptance Criteria**		**Acceptance Records**	**Treatment Measures**
Equipment Inspection		Is the charging equipment present, installed, and secured properly? Does the installation visually look professional?			
Cable and Connection Inspection		Are all power and communication cables intact, properly laid, hooked up, and grounded correctly?			
Short Circuit		Is there a short circuit between the three-phase wire, neutral wire, and ground wire?			
Power Voltage		Is the power voltage at the upper end of the MCCB normal (with no phase lack, overvoltage, undervoltage, or other abnormalities?			
Conclusions:					
Note: 1) In the Acceptance Record, fill in "✓" or "✗" according to the on-site situation 2) In the Conclusion section, fill in "Qualified: or "Needs to be Rectified" according to the on-site situation					
Signature of Inspector: _____ **Date:** _____					

Appendix D - Torque Specifications

The following tables outline the required torque values that must be reached for proper installation of the EVSE.

⚠ **Important**: A calibrated torque wrench or screwdriver **MUST** be used when torquing the various fasteners inside and outside the charger. Failure to do so may result in damage to the charger and/or poor performance.

⚠ **Important**: Per NEC 110.14(D), proper torquing of electrical terminals is required: ***Terminal Connection Torque***. *Tightening torque values for terminal connections shall be as indicated on equipment or in installation instructions provided by the manufacturer. An approved means shall be used to achieve the indicated torque value.*

Table 5 - Dispenser - Torque Values	
L1, L2, L3 Lugs	32 ft-lbs (43.5 NM)
Ground and Neutral Lug	18.75 ft-lbs (25.5 NM)

Table 6 - Dispenser Foundation Bolts - Torque Values	
M10*150mm (⅜”-16x5 3/4’’) Anchor	29,5 ft-lbs (40 NM)

Appendix E - Technical Data

Equipment Specifications Datasheet

Table 7 - Equipment Specifications Datasheet		
Power Input	**Input Rating**	480VAC, 60 Hz, L1+L2+L3+PE AC 250A MAX
	Power Factor	≥0.99
Power Output	**DC Output Voltage**	150-1000 VDC
	Output Rating	180kW (2 outputs)
	Max Output Current	300A DC/connector
	Connector Type	Dual CCS1 or NACS
User Interface and Control	**Display**	10.4 inch Touch Screen
Environmental	**Operating Temperature**	-30°C - 50°C
Mechanical	**Cable Length**	5m
	Ingress Protection	NEMA 3R
	Dimensions	31.5in x 80.7 in x 29.5 in 800 mm x 2050 mm x 750 mm
	Net Weight	882 Lbs (410 kg)
Regulation	**Certificate**	UL2202, UL2231-1/-2, FCC part 15B, Energy Star
Connectivity	**Wireless**	Ethernet

Height of User-Operable Elements

According to the ADA (Act of Disabled Americans), the height of user-operable Americans must be between specific limits:

- Maximum Height: 48 in (1.22 m)
- Minimum Height: 15 in (0.4 m)

To ensure ADA compliance, make sure that the distance from the site-finished grade to the operable elements of this charging system are in accordance with these above requirements.

General Power Specifications

⚠ **Note**: Power limiting is possible via software configuration.

Table 8 - General Power Specifications

Parameter	Specification
AC Input Connection Type	3 phase ,L1+L2+L3+PE
AC Input Voltage Range	480Vac±10%(60Hz)
Power Factor at Full Load	≥0.99
Efficiency	95%
Total Harmonic Distortion(Ithd sum L1, L2, L3)	L1:1.753% L2:2.355% L3:1.972%
Total Harmonic Distortion(Vthd sum L1, L2, L3)	L1:1.604% L2:1.964% L3:1.671%
Maximum Rated Input Current	250A
Recommended Input Circuit Breaker	400A
Maximum Power Dissipation	189.5kVA
Short Circuit Current Rating	65kA
Maximum Size of Input Wire	Kcmil 300 for phase lines AWG 2/0 for PE line
DC Output Voltage Range, CCS	150-1000Vdc
Minimum DC Output Current	10A
Connection Standard	CCS1
DC Output Power on One EV Charge Cable	180kW max.
Simultaneous DC Power on Two Outlets	90kW max.
Maximum DC Output Current	300A rating

Appendix F - Equipment Failures - Emergency Protocols

Disclaimer

This guideline should be reviewed by the customer's operations or facilities manager and is intended to be used by trained and certified equipment operators. It assumes that the readers have full understanding of how the equipment works and have completed the appropriate training required to safely handle emergency situations. This procedure should be used in conjunction with the company's emergency response plans.

Important Safety Notes

This document contains important warnings that must be followed when handling EverCharge systems in an emergency situation. EverCharge customers should develop a company emergency response plans and contingencies to respond effectively to equipment failures.

EverCharge Equipment Failures

Operators should be attentive to the equipment and its performance to be able to identify equipment failures. Types of failures could be mechanical, electrical, and/or software failures.

⚠ **WARNING**: Always use appropriate tools, and always wear appropriate personal protective equipment (PPE) when working around EverCharger equipment and electrical equipment. Failure to comply can result in serious injury.

⚠ **WARNING**: Regardless of the shutdown method you use, always assume that all high voltage components are energized! Improperly touching high voltage components can result in serious injury.

Electrical failure - Be aware of electrical hazards such as smoke and/or fire.

⚠ **WARNING**: Ensure all personnel are moved to a safe distance away from the EV Charger (refer to company's emergency response plans for the recommended safe distance). Only trained personnel should approach the scene of an electrical emergency using extreme caution.

⚠ **WARNING**: Attempt to repair the system should only be done by licensed electricians and trained technicians with a proper understanding of the equipment.

EverCharge Equipment Emergency Failure Protocol

- Locate and press the Emergency Stop Button on the EV Charger. Photos below.
- De-energize the main breaker at the main electrical panel and apply a Look Out Tag Out (LOTO) device to ensure the breaker cannot be reenergized.
- If there is any fire, use a CO2 fire extinguisher to put it out. Refer to your site or company's emergency response plans for proper protocol.
- Contact EverCharge Support to review and repair faulty equipment

Important Notes:

⚠ **EverCharge will not be liable for any damages or losses resulting from the customer's failure to follow the warnings or procedures set forth in this guideline.**