



CIRCONTROL
Mobility & eMobility

Raption 150 Series

Installation Manual



Raption 150 Series Installation Manual

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Here's your guide to install Raption 150

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This manual provides information for installing the Charge Point, which has been designed and tested to allow charging electric vehicles, as specified at IEC 61851 standards.

This document has different sections describing electrical components inside the Charge Point and a step-by-step installation procedure.

It is mandatory to follow the basic security information supplied in this manual to ensure safe and proper installation.

Failure to follow safety instructions may involve personal injury, equipment damage and danger of death. CIRCONTROL is not responsible for events arising from such breach.

THE FOLLOWING SYMBOLS ARE USED FOR IMPORTANT SAFETY INFORMATION IN THIS DOCUMENT



ELECTRIC RISK

- This symbol indicates a potentially hazardous situation which, if not avoided may result in a risk of fire, serious injury or death.
- The Charge Point must be disconnected from any power source before performing any maintenance, repair or electrical manipulation inside.

ATTENTION!



- Follow the instructions preceded by this symbol, if not respect them or perform them correctly, may result in minor or moderate injury to the user, damage to equipment, damage to facilities or other property.
- Handling the equipment can cause injuries as result of the dimension and weight. Persons handling the unit must wear safety shoes and gloves.

So, hello!

- Compliant with IEC 61851; Electric vehicle conductive charging system (IEC 61851-1, IEC 61851-21-2 and IEC 61851-23).
- Compliant with IEC 62196; Plugs, sockets-outlets, vehicle connectors and vehicles inlets, Conductive charging of electric vehicles (IEC 62196-1, IEC 62196-2 and IEC 62196-3).
- Compliant with CHAdeMO certification.
- Meets the CCS specification, DIN 70121. ISO 15118 Ready.
- RFID complies with ISO / IEC14443A / B / MIFARE Classic / DESFire EV1 / ISO 18092 / ECMA-340 / NFC 13.56MHz
- Complies with Radio Equipment Regulations 2017, Electromagnetic compatibility regulations 2016 and Electrical equipment (safety) regulations 2016.
- Meter complies with 2014/32/UE.
- Modem 4G complies with CE/RED.

2

A Important safety instructions



Read carefully all the instructions before starting in order to ensure properly installation of the charge point.

The Charge Point is designed for installation at indoor and outdoor areas. For each of the different conditions of installation, the unit must be installed safely and ensure adequate protection.

- Charge point must not be installed in areas where there is potential risk of explosions.
- Do not install the Charge Point where falling objects may damage the equipment.
- The surface where the Charge Point is placed must withstand the mechanical forces.
- Do not use this unit for anything other than electric vehicle charging modes are expected in IEC 61851-23.
- Do not modify this unit. If modified, CIRCONTROL will reject all responsibility and the warranty will be void.
- Comply strictly with electrical safety regulations according to your country.
- Do not make repairs or manipulations with the unit energized.
- Only trained and qualified personnel should have access to the electrical parts inside the Charge Point.
- Check the installation annually by qualified technician. Follow Service Manual Instructions.
- Remove from service any item that has a fault that could be dangerous for users (broken plugs, caps that don't close...).
- Use only Circontrol supplied spare parts.
- Do not use this unit if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.

Before the installation

B Electrical wiring considerations



Take into consideration this section before start wiring connections of the charge point.

1 – INPUT POWER SUPPLY

The input power supply line for the Charge Point must be hardwired from a dedicated power transformer or generator and not by LV overhead power lines. It has to be done under electrical safety regulations according to your country.

Additionally, installation must be physically separated from residential environments by distance greater than 30m or by a structure which acts as a barrier to radiated phenomena.

2 – POWER SUPPLY LINE DIMENSIONING

The dimensioning of the input power supply line of the Charge Point must be checked by a qualified electrician. Note that various factors, such as, cable length between distribution board and the Charge Point; maximum input current of the Charge Point; the installation way, may have influence of the selected cable. In such cases, increasing the cable cross-section can be necessary. The installation company will be responsible for dimensioning the wires cross section and the electrical protections, taking into account the conditions above.

3 – MAXIMUM POWER OUTPUT

Depending on the input power line, you can carry out the charging sessions to the electric vehicle with different power output level, it is possible to limit the maximum output power by software limitation so as not to exceed the available input power.

In order to implement this limitation by software, please, refer to the Instruction Manual.

Note: In the Chapter 4, subsection E, you are going to find more electrical instructions so as to implement a secure POWER SUPPLY LINE.

Important Electrical Safety Instructions



Read carefully all the instructions before starting in order to ensure properly handling of electrical parts.

A safe work environment is not enough to control all potential electrical hazards. It is recommended to be very cautious and work safely. So, the safety rules shown below could help to control risks of injury or death from workplace hazards.

- Avoid contact with energized electrical circuits.
- Disconnect the power source before servicing or repairing electrical equipment.
- Use only tools and equipment with non-conducting handles when working on electrical devices.
- Never use metallic pencils or rulers, or wear rings or metal watchbands when working with electrical equipment.
- Enclose all electric contacts and conductors so that no one can accidentally come into contact.
- When it is necessary to handle equipment that is plugged in, be sure hands are dry and, when possible, wear nonconductive gloves, protective clothes and shoes with insulated soles.
- Never handle electrical equipment when hands, feet, or body are wet or perspiring, or when standing on a wet floor.

EVSE Classification

Classification of the unit according to the IEC 61851-1:2017:

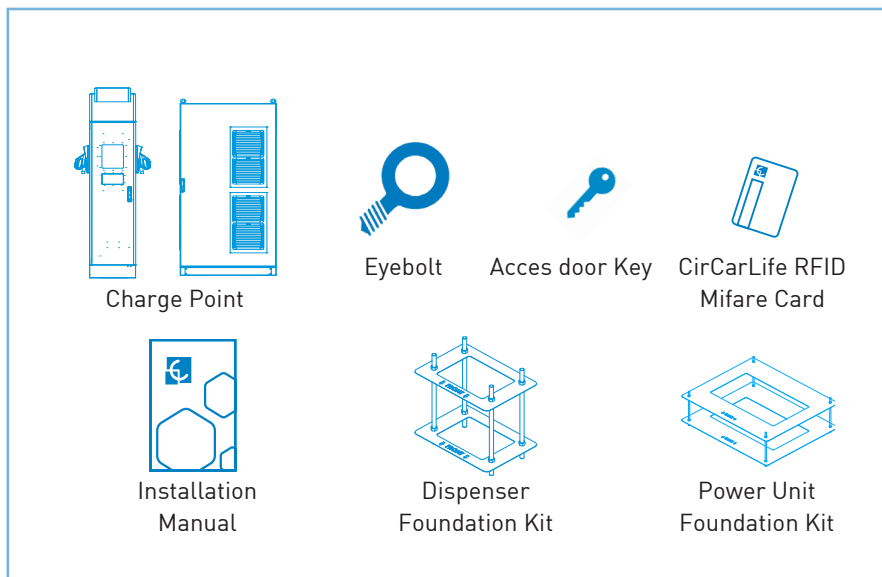
1 — Power supply Input	<ul style="list-style-type: none">• EV supply equipment connected to AC supply network• Permanently connected
2 — Power supply Output	<ul style="list-style-type: none">• DC EV supply equipment
3 — Environmental conditions	<ul style="list-style-type: none">• Indoor and outdoor
4 — Access	<ul style="list-style-type: none">• Equipment for locations with restricted access and;• Equipment for locations with non-restricted access.
5 — Mounting method	<ul style="list-style-type: none">• Stationary equipment - Ground mounted; floor mounted
6 — Protection against electric shock	<ul style="list-style-type: none">• Class I
7 — Charging models	<ul style="list-style-type: none">• Mode 4

Storage

Whenever possible, the Charge point must be unloaded in their place of installation and operation. In case of unloaded to a temporary location for storage, it is convenient to not remove the packaging and store them meeting the following minimum requirements:

- **Safety:** Charge Point must be protected against negative elements such as heat radiation, direct solar radiation, mechanical damage, organic dissolvent impacts, etc.
- **Temperature:** for temperatures below -20°C and over $+60^{\circ}\text{C}$ special attention must be paid to the storage and handling.
- **Environment:** Charge Point must be stored in a dry and dust-free location. The distance from a heat source must be 1 m away. Outdoor storage of the unit has to be avoided.

What's included:



F Unloading and handling

All processes of unloading and handling of the Charge Point must be executed and monitored by qualified personnel attending to the significant weight of the unit, complying with safety rules and using the appropriate points of support. Important notes:

- The delivery truck only unloads the pallet carrying the Charge Point.
- The delivery truck does not have the lifting facilities to move the Charge Point to its final location.
- The placement of the Charge Point to its final location is the responsibility of the contractor.

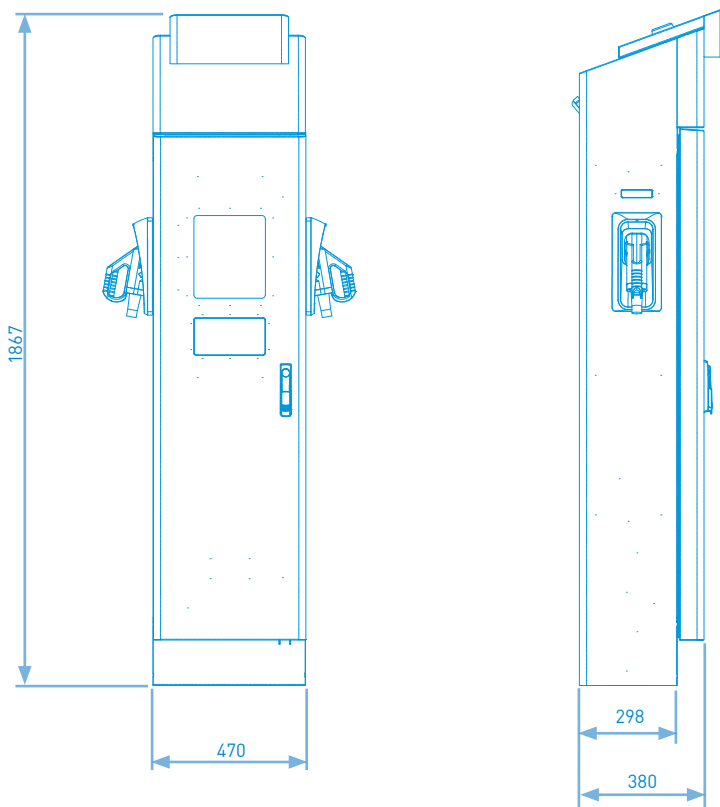
Once the Charge Point is already unloaded from the truck, move it to its final location with a forklift.



3

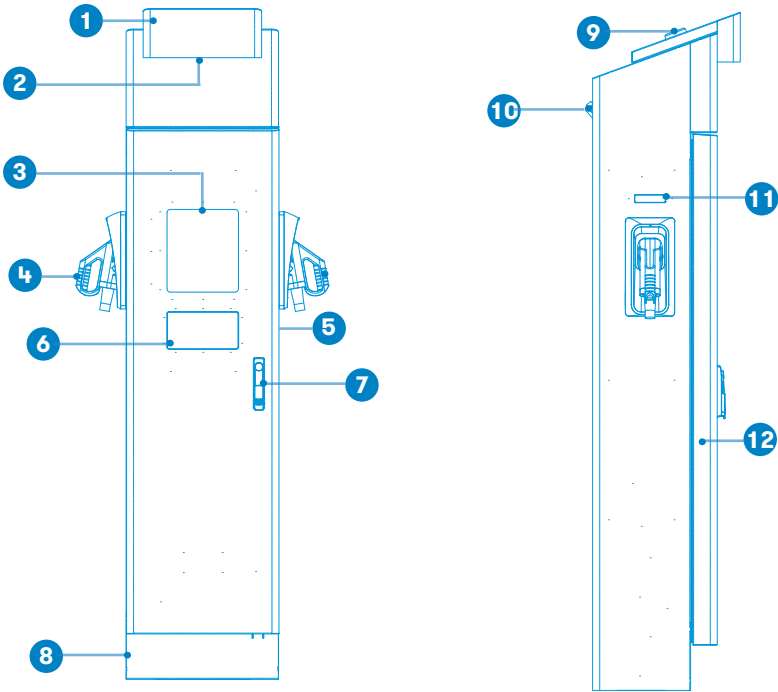
A Dimensions of the Dispenser

- Units specified in millimeters:



Dimensions and Overview

B Overview of the Dispenser

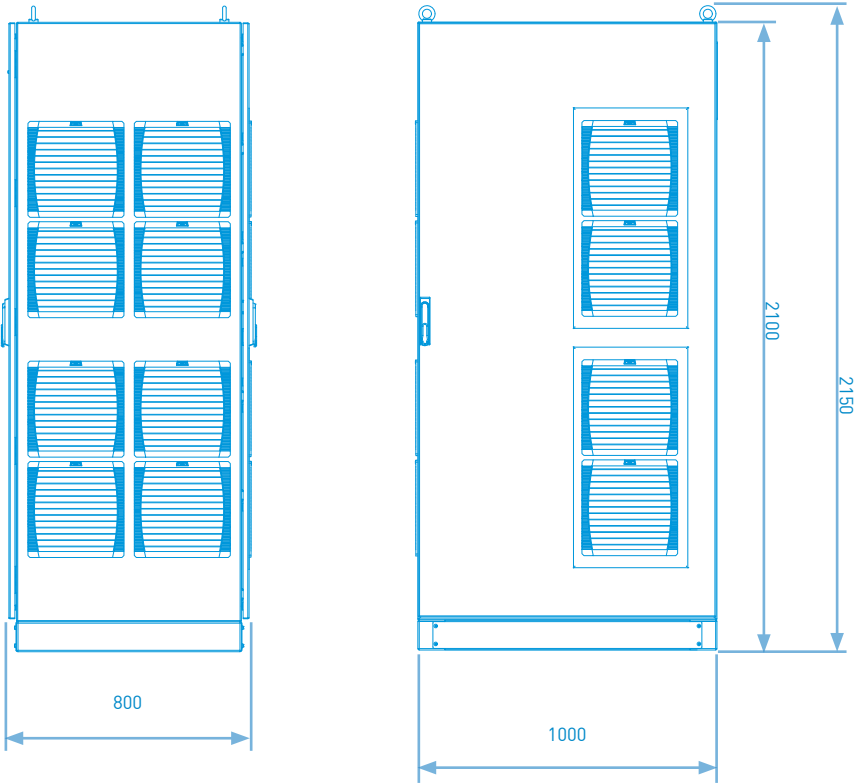


1 — Cover	2 — Courtesy Lights	3 — Screen	4 — CCS/CHA plug
5 — Emergency button	6 — RFID Reader	7 — Locking handle	8 — Decorative Front panel
9 — Antenna	10 — CCS/CHA cables	11 — LED beacons Light	12 — Front Door

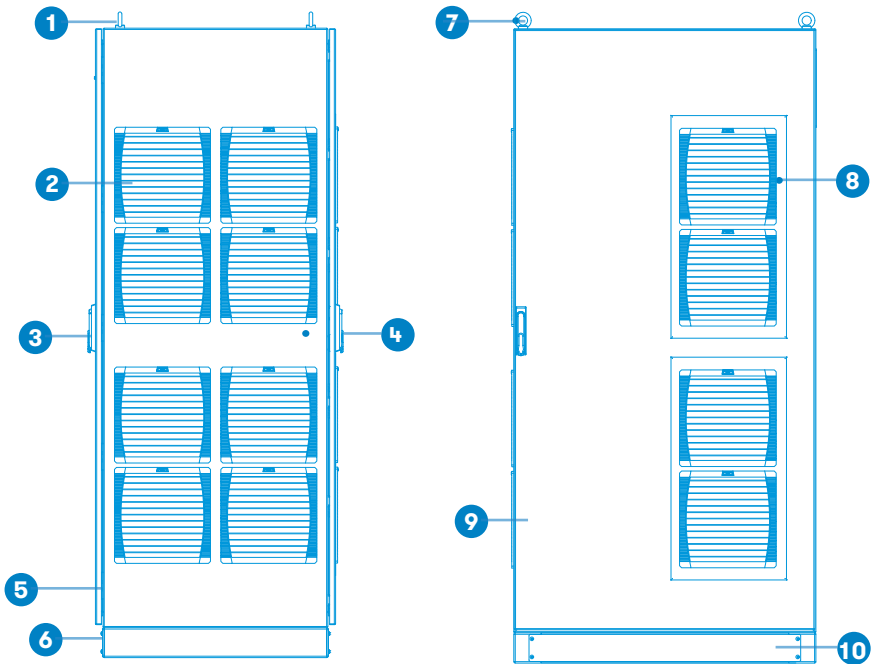
(*) Depending of the model, the components can vary.

Dimensions of the Power Unit

- Units specified in millimeters:



D Overview of the Power Unit



1- Cover	2- Unit air inlet	3- Locking handle	4- Locking handle	5- Rear door
6- Decorative Rear panel	7- Eyebolts	8- Unit air outlet	9- Front door	10-Decorative Front panel

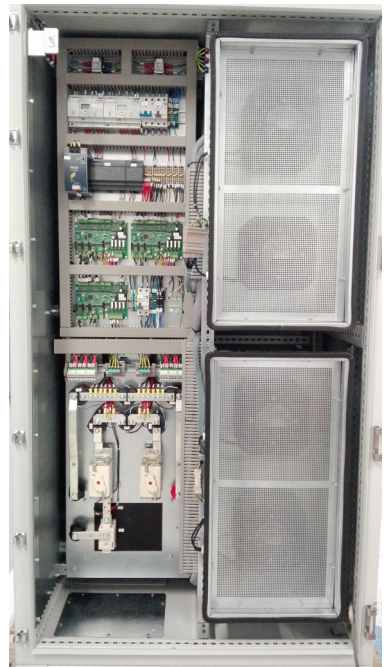
Power Unit front door



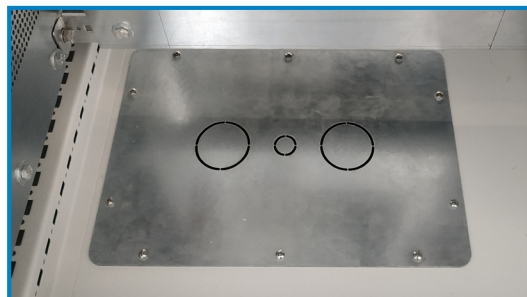
Power input supply:



Power Unit rear door

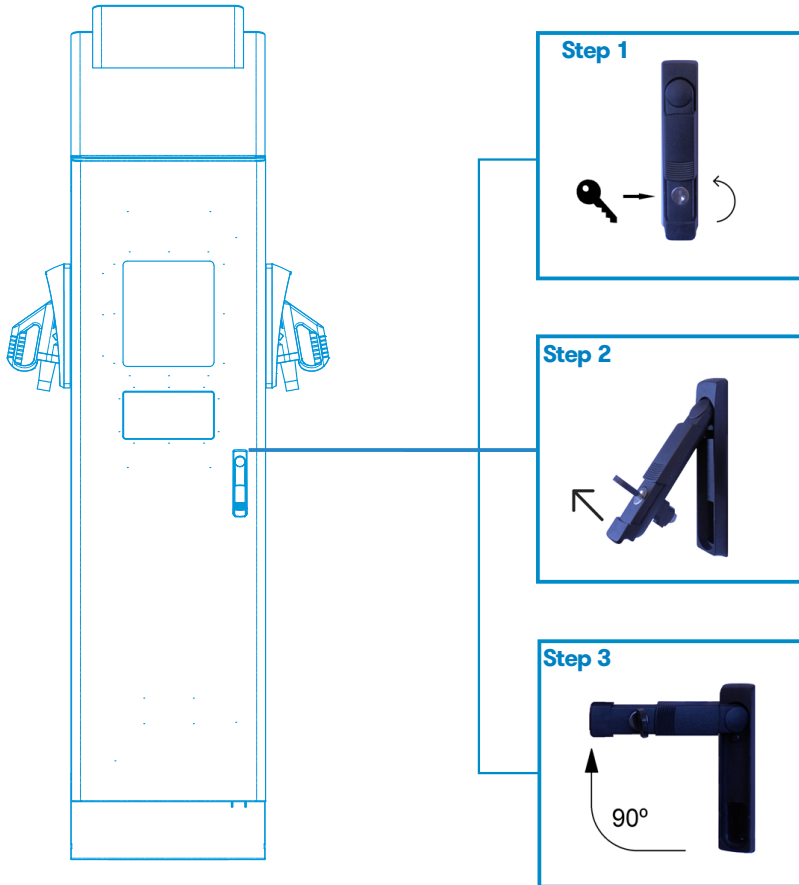


Output wiring to Dispenser:



E Opening

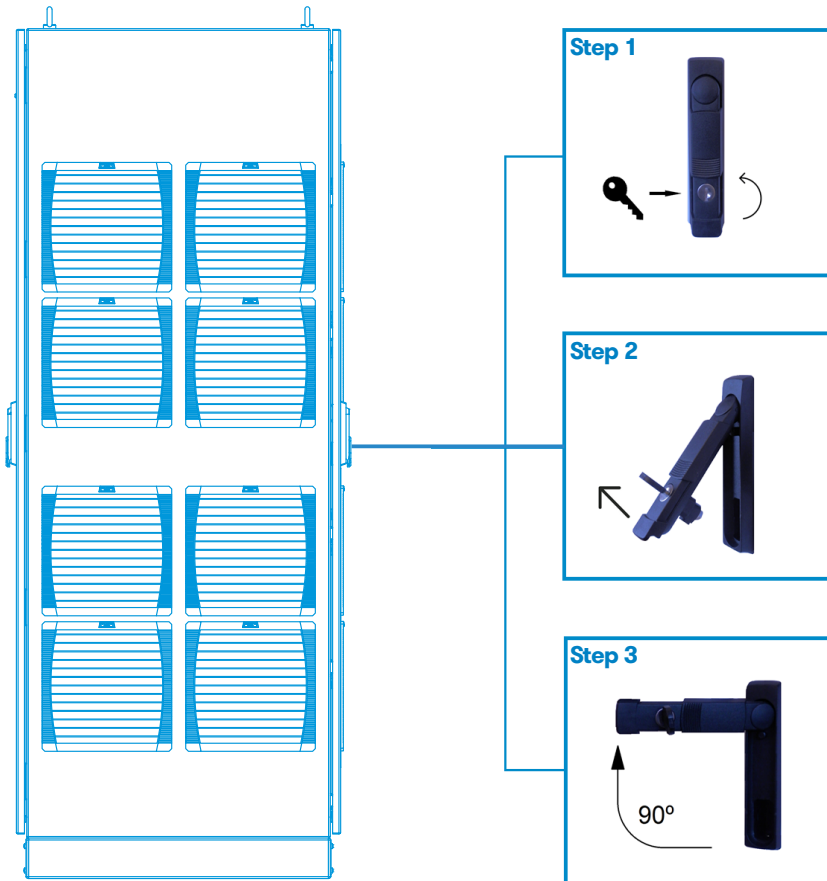
Dispenser



Steps:

- 1- Insert the key supplied in the lock and turn it 90 ° counterclockwise.
- 2- Pull back the handle.
- 3- Turn the handle 90 ° clockwise direction.

Power unit



Steps:

- 1- Insert the key supplied in the lock and turn it 90 ° counterclockwise.
- 2- Pull back the handle.
- 3- Turn the handle 90 ° clockwise direction.

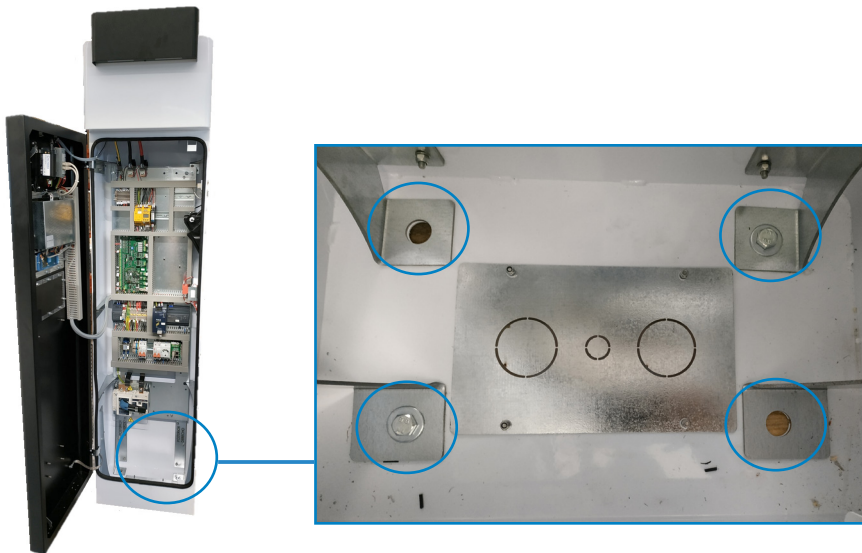
F Placing

In order to place the Charge Point in its final place, please follow next steps:

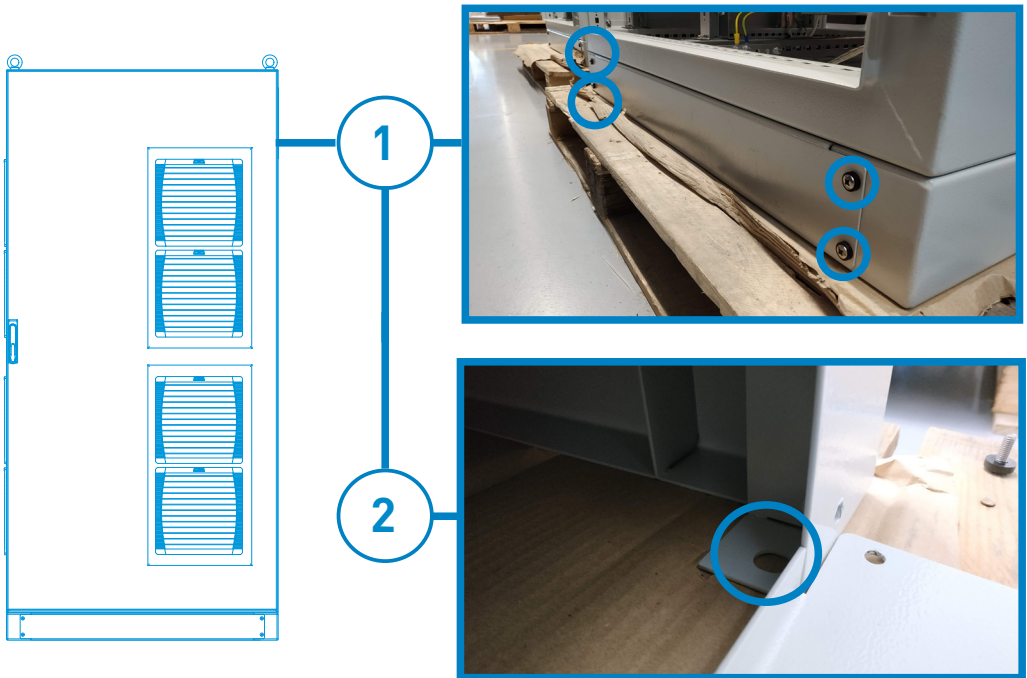
REMOVING THE CHARGE POINT FROM PALLET

The Charge Point is mounted on a pallet so as to do a safe transport. It has to be removed before to be installed.

Locate the screws that are keeping the Dispenser in the pallet. Remove the screws with a 17 mm spanner tool.



Repeat the same process with the Power Unit but following the next steps:



Steps:

1- Remove the screws from the Decorative front panel (on both sides) and pull it outwards.

2- Once the Decorative front panel is removed, locate the screws that are keeping the pallet. Remove the screws with a 17 mm spanner tool.

PLACING THE DISPENSER IN THE FINAL LOCATION

Once the Dispenser is free from the pallet, follow the next steps to move the charger:

Steps to elevate the Dispenser:

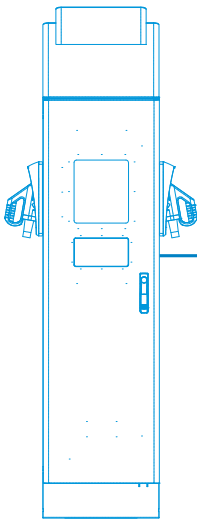
1- Check that the screws of the Dispenser base are removed, so it can be moved and elevated. Find the eyebolt too. It is provided but it needs to be installed*.

2- Locate the top cover screws inside the unit, remove the screws.

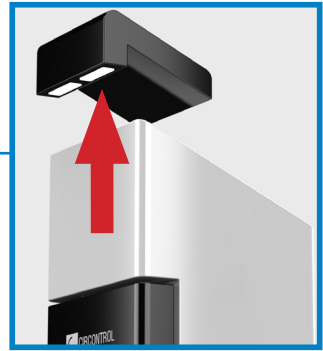
3- Remove the roof cover and install the eyebolt in the middle (there is one hole inside the steel nerve for the eyebolt installation).

4- Hold the sling to the eyebolt. Make sure that it is properly fastened. Raise up, move and place the Dispenser in the final location. Remove the eyebolt and install the roof cover when installation has been finished.

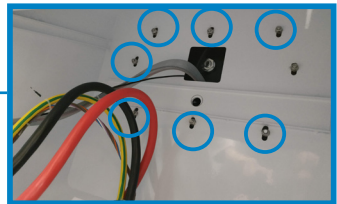
*It is mandatory to remove the roof cover to install the eyebolt in the top of the Dispenser. In like manner, eyebolt has to be removed in order to be able to install the roof cover again.



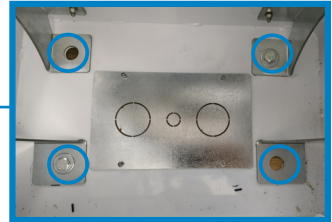
1



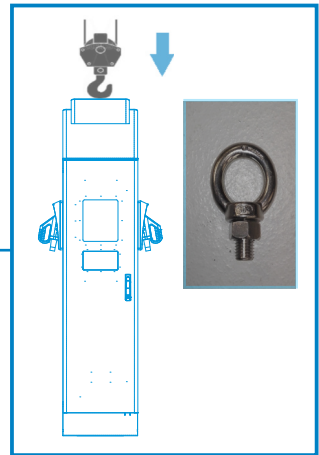
2



3

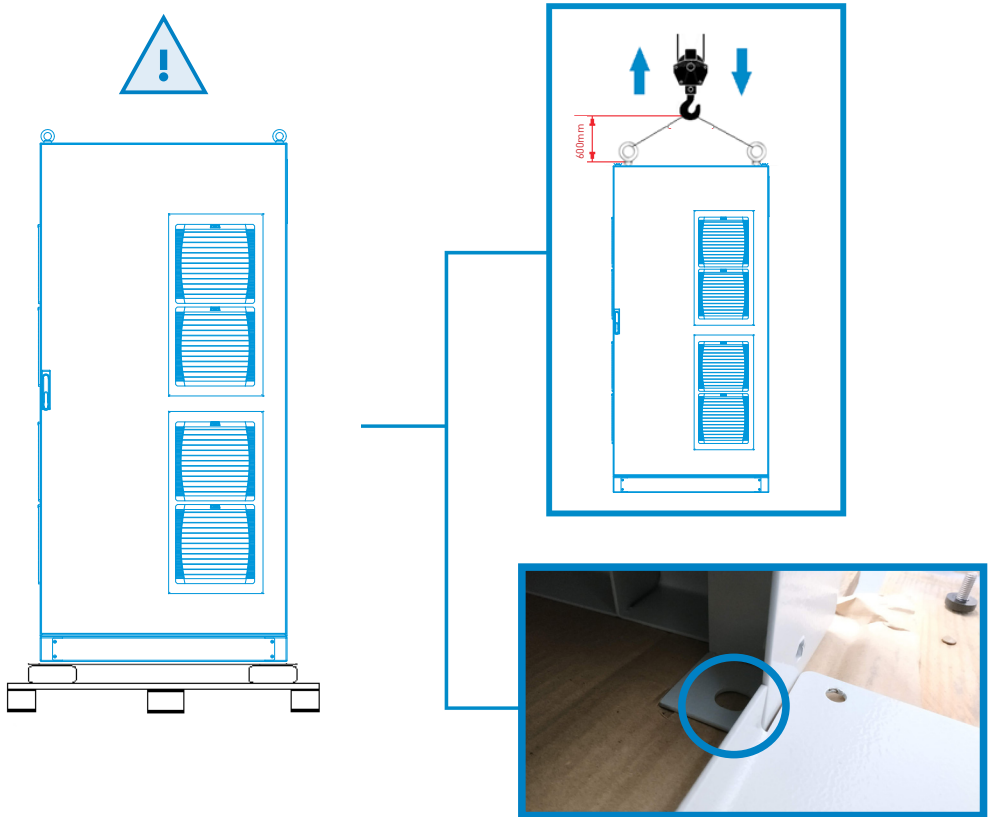


4



PLACING THE POWER UNIT IN THE FINAL LOCATION

Once the Power Unit is free from the pallet, there are two options to move the charger. Follow the next steps:



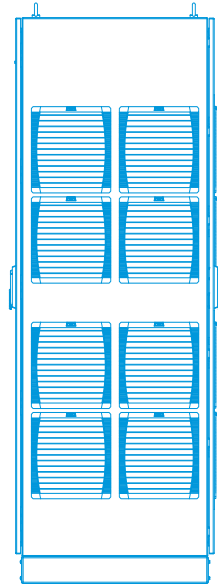
Steps to elevate the Power Unit:

- 1- Locate and make sure that the eyebolts provided are strongly tight.
- 2- Hold the sling to the eyebolts, raise the Power Point up and place it on the final location.

Steps to move with forklift:

- 1- Remove the decorative rear panel. Pull outward the metal flange (on both sides).
- 2- Move out the metal flange (on both sides) and remove the decorative rear panel.

Once the decorative panels have been removed, it will be available enough space to introduce the forklift, 560 mm



4

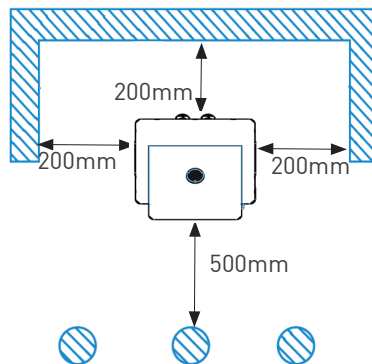
When installing the Dispenser or Power Unit, respect the minimum distances space for maintenance and safety reasons.

Please comply accordingly to your country specifications.

The next picture shows how it should be installed.

- Do not install near areas where water or fluids can penetrate into the unit.
- Do not install on unstable terrain.
- Note that Power Unit's frontal and left side have air outlet/inlets.

A Minimum distances of the Dispenser

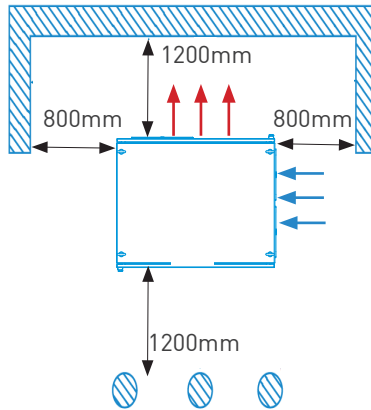


(*) Respect the minimum lateral distance to allow proper circulation of air flow. This unit has forced ventilation.

(**) If Bollard Impact Protector is installed, keep **500 mm** as a minimum distance in order to give enough space to open the frontal door of the Charge Point for maintenance tasks.

Installation

B Minimum distances of the Power Unit



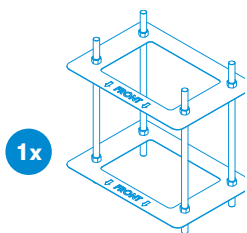
[*] Respect the minimum lateral distance to allow proper circulation of air flow. This unit has forced ventilation.

[**] If Bollard Impact Protector is installed, keep **1200 mm** as a minimum distance in order to give enough space to open the frontal door of the Charge Point for maintenance tasks.

Foundation kit

The purpose of this chapter is the technical definition and basic requirements for implement the base and fixing the Charge Point.

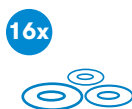
- The unit can be installed both, inside and outside.
- Two foundation kits with a mounting templates is provided to ensure the distances between the foundation bolts.



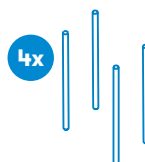
Template for
Dispenser



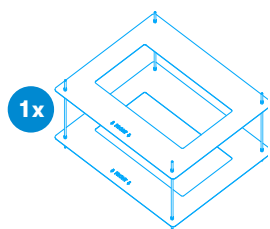
Nuts M16



Washers M16



Foundation rod
435 mm x M16



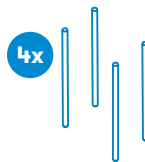
Template for
Power Cabinet



Nuts M10



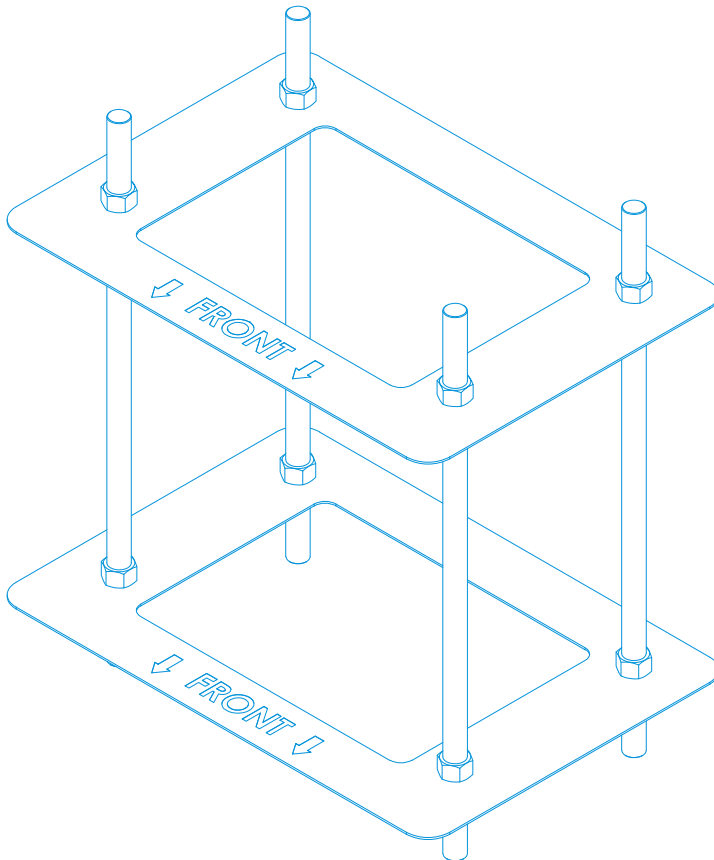
Washers M10



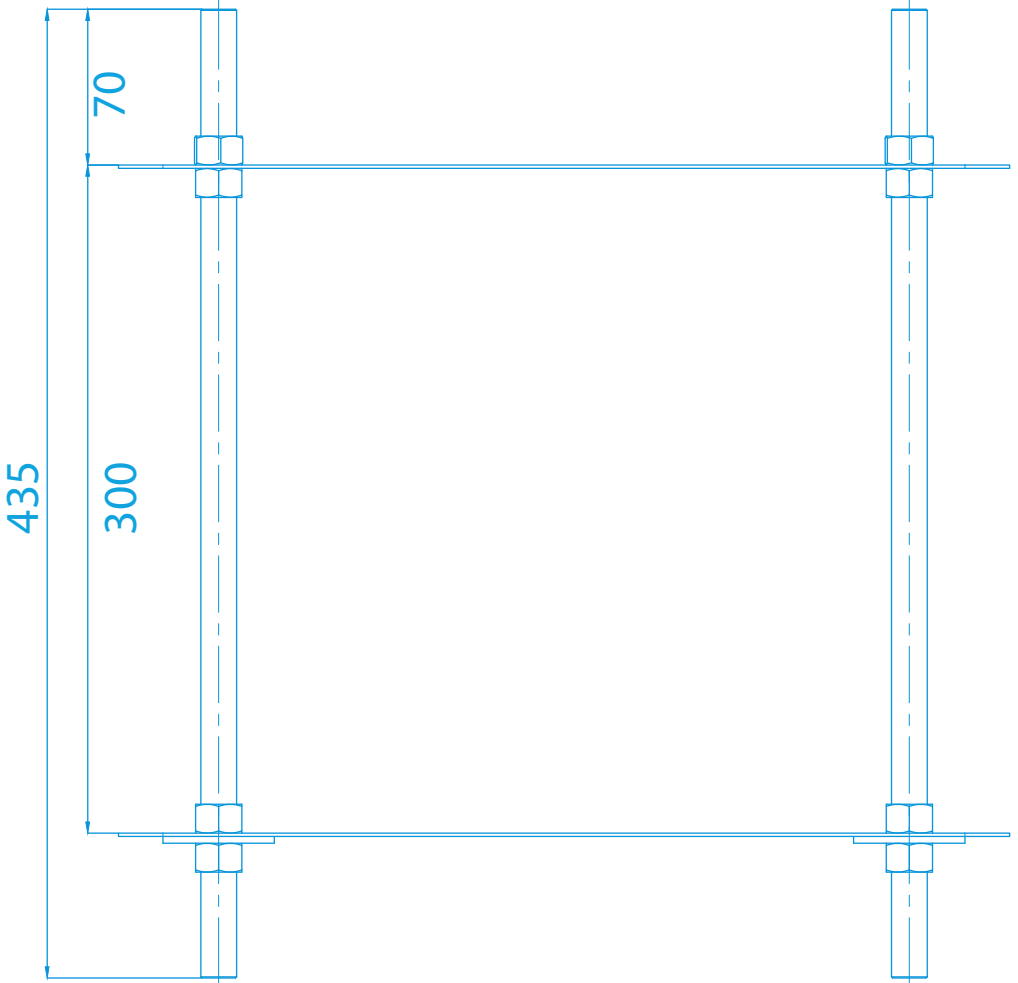
Foundation rod
350 mm x M10

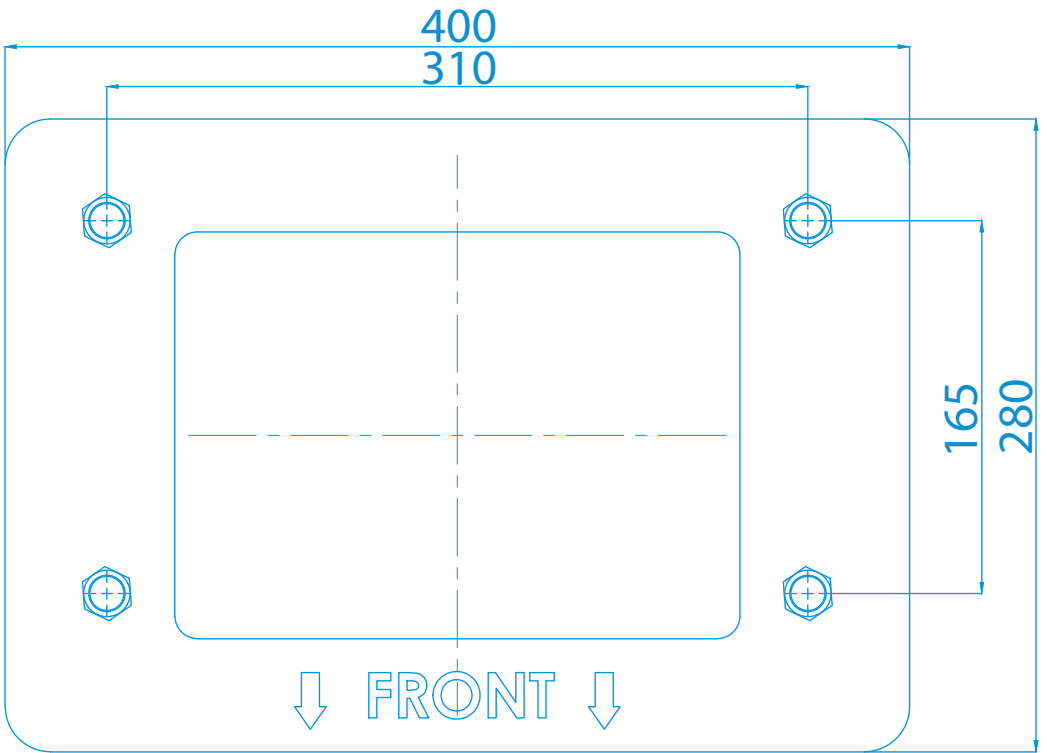
D Foundation template for dispenser

Place the foundation bolts into the templates using provided nuts with the help of a **24mm open-end wrench**. Take into consideration the measures of the following chapters.



E Dispenser template dimensions



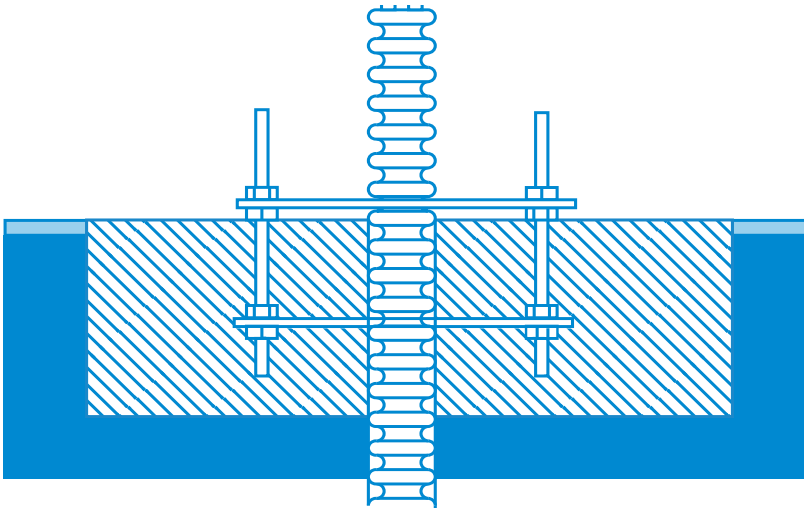


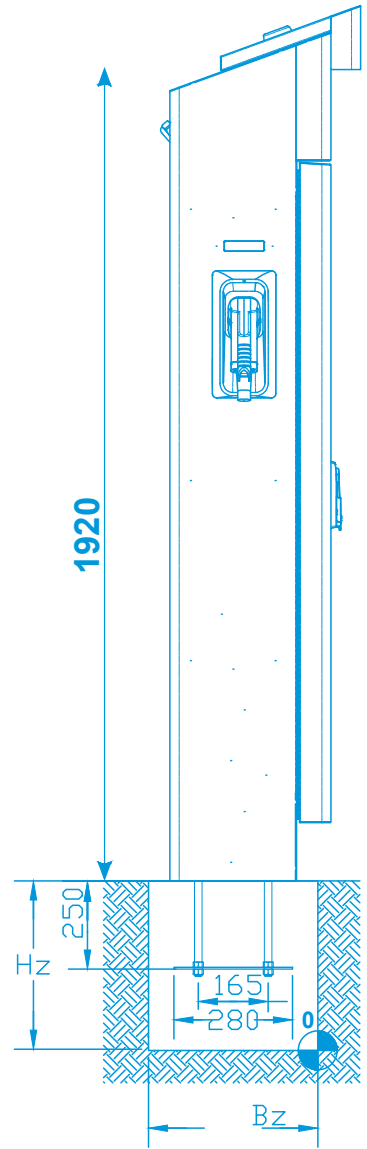
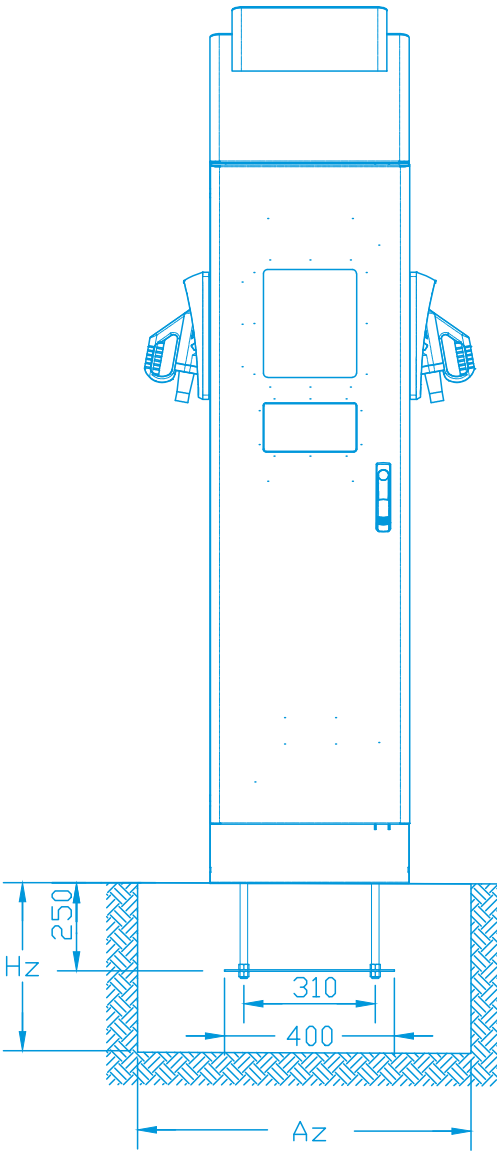
F Concrete basement for Dispenser



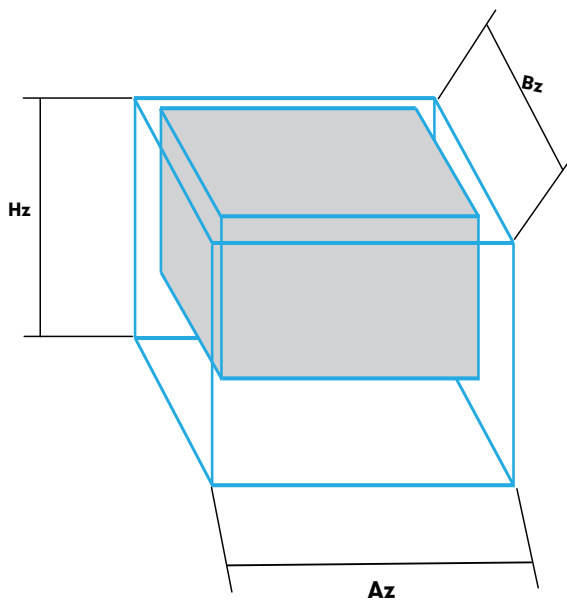
Before fixing the template inside of the concrete basement make sure front mark must face with the front side of the charger

- Once the kit is assembled, it must be placed in the ground. If the Dispenser has to be installed outside and there is no limitation of depth, is recommended to make a concrete base.
- The concrete base shall provide the passage of power cables, it must be done by corrugated tube placed inside the foundation through the mounting template, as it can be seen below.





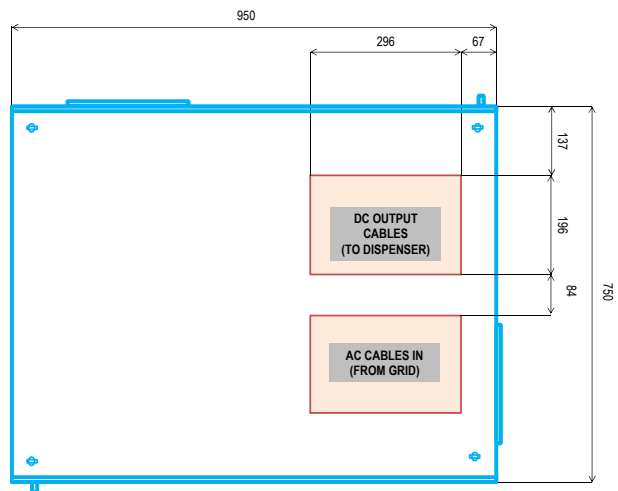
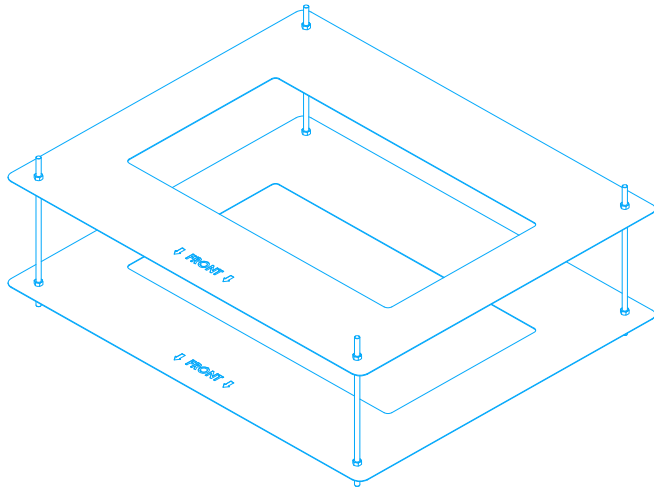
FOUNDATION MEASUREMENTS FOR DISPENSER



ORIENTATIONAL FOUNDATIONS FOR RAPTION 150			
TYPE OF TERRAIN	Ck (kg/cm ²)	FOUNDATION SIZE (Az x Bz x Hz) cm	COMMENTS
SOFT	5	65 x 65 x 65	For example vegetal not compact terrain
COMPACT	12	55 x 55 x 55	For example mix vegetable land with engraved compactors
VERY COMPACT	20	55 x 50 x 50	For example mix sand ground with very compacted and paved gravel asphalt
VERY COMPACT AND CONCRETE SLAB	20	55 x 45 x 40	Minimum slab edge 10cm of concrete HM - 100

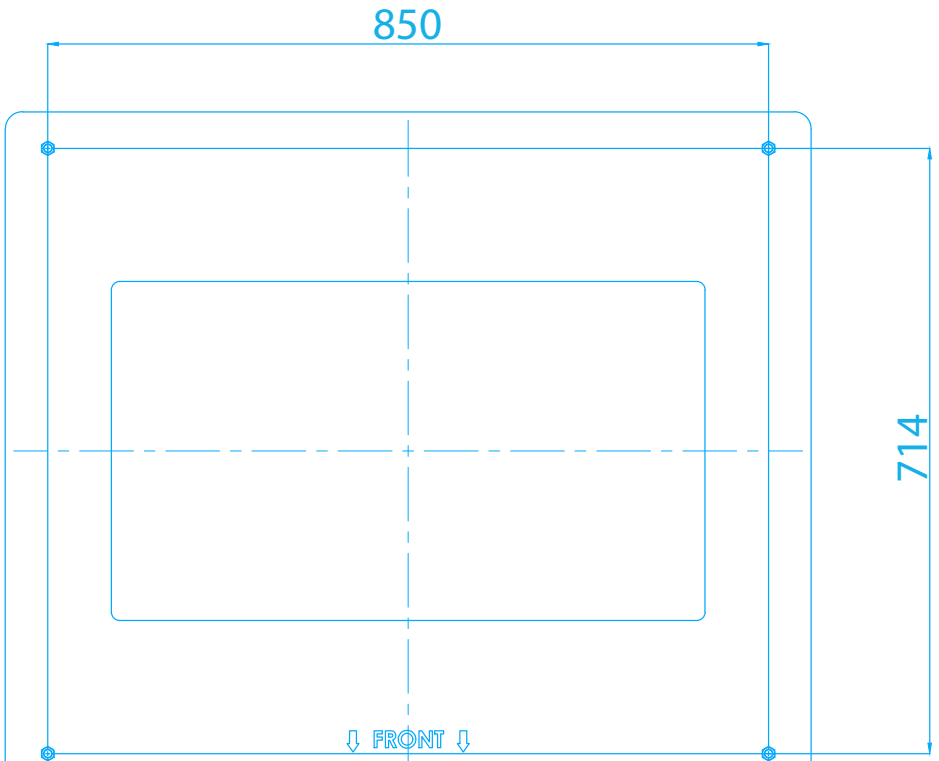
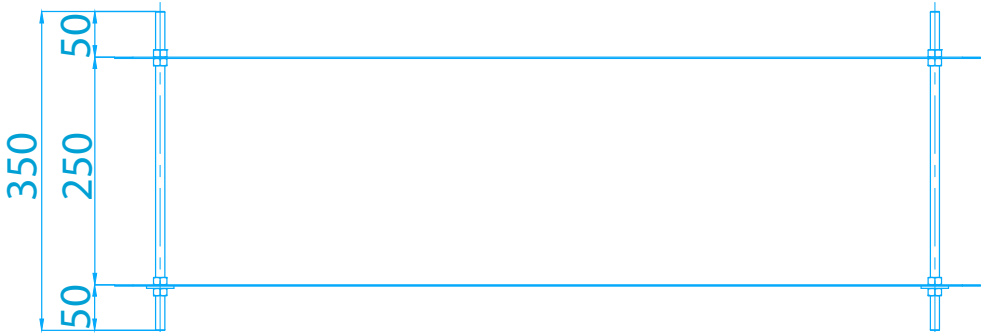
Foundation template for Power Unit

- Place the foundation bolts into the templates using provided nuts with the help of a **24mm open-end wrench**. Take into consideration the following measures.
- Take in mind the disposition of the supply of the power unit and the cables that go to the dispenser.



FRONT

H Power Unit template dimensions

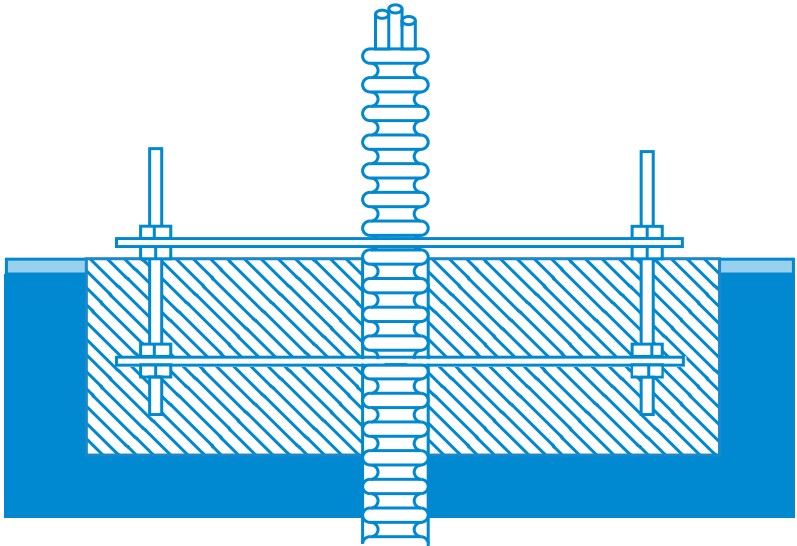


Concrete basement for Power Unit

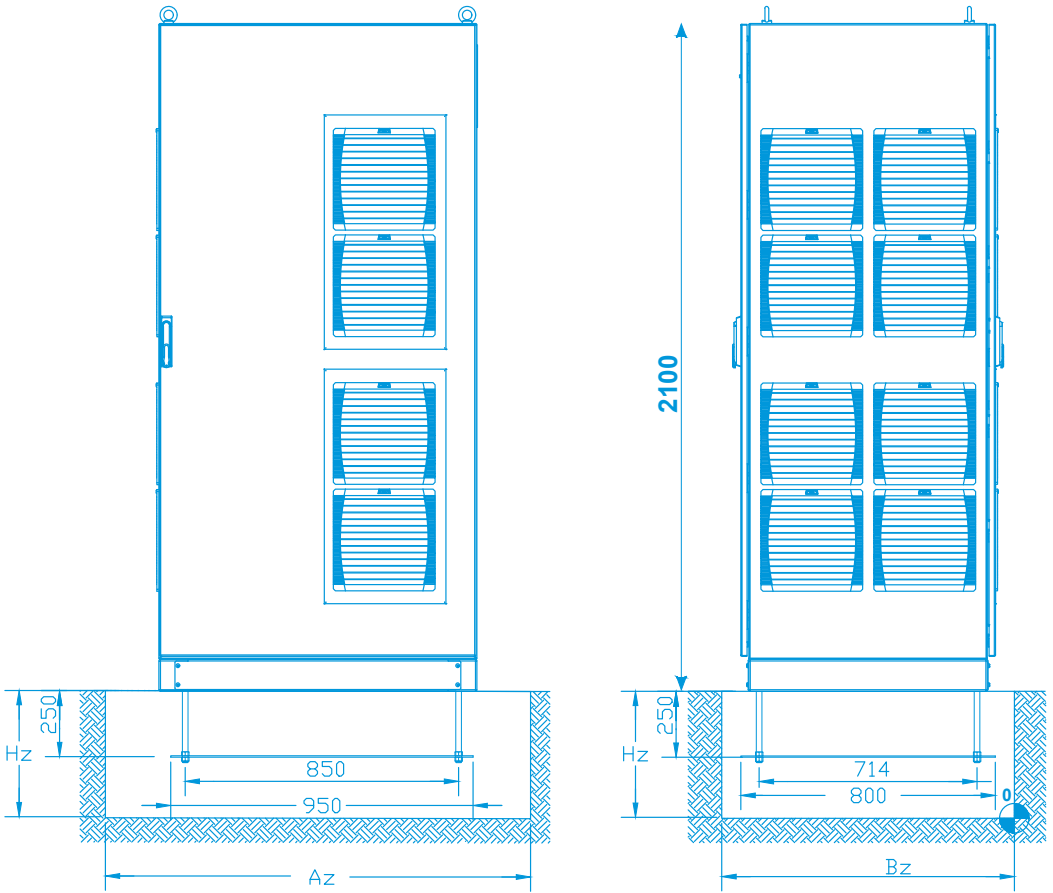


Before fixing the template inside of the concrete basement make sure that front mark must face with the front side of the charger.

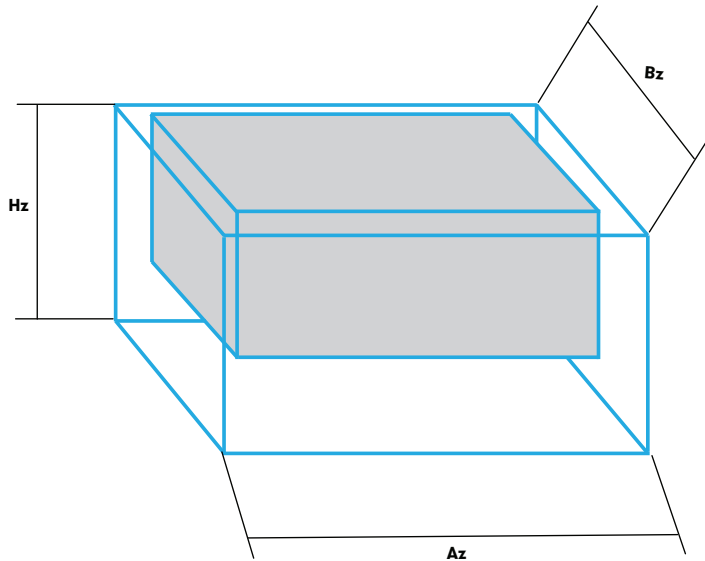
- Once the kit is assembled, it must be placed in the ground. If the Power Unit has to be installed outside and there is no limitation of depth, is recommended to make a concrete base.
- The concrete base shall provide the passage of power cables, it must be done by corrugated tube placed inside the foundation through the mounting template, as it can be seen below.
- Take into account that the supply of the Power Unit comes from the front door. The wiring that connects the Power Unit with the Dispenser can be accessed from the rear door. Keep this in mind when installing the metal plate.



J Concrete basement dimensions for Power Unit



FOUNDATION MEASUREMENTS FOR POWER UNIT



ORIENTATIONAL FOUNDATIONS FOR RAPTION 150			
TYPE OF TERRAIN	Ck (kg/cm ²)	FOUNDATION SIZE (Az x Bz x Hz) cm	COMMENTS
SOFT	5	110 x 95 x 40	For example vegetal not compact terrain
COMPACT	12	110 x 95 x 35	For example mix vegetable land with engraved compactors.
VERY COMPACT	20	110 x 95 x 35	For example mix sand ground with very compacted and paved gravel asphalt.

Note: In the event of any doubt about the terrain regarding the installation of the Charge Point, due to the weight and dimensions, it will be necessary to define a final solution to install the unit. It must be confirmed by a specific technical project made for an architectural firm prior to its installation.

5



Regardless of the electrical characteristics of the power line, be sure to supply to the Charge Point with the necessary electrical features indicated at the unit characteristics label, understood as, supply voltage, grid frequency and required apparent power. In the case that the power line characteristics are different from those required, must do the necessary adaptation of the same to meet this requirement.

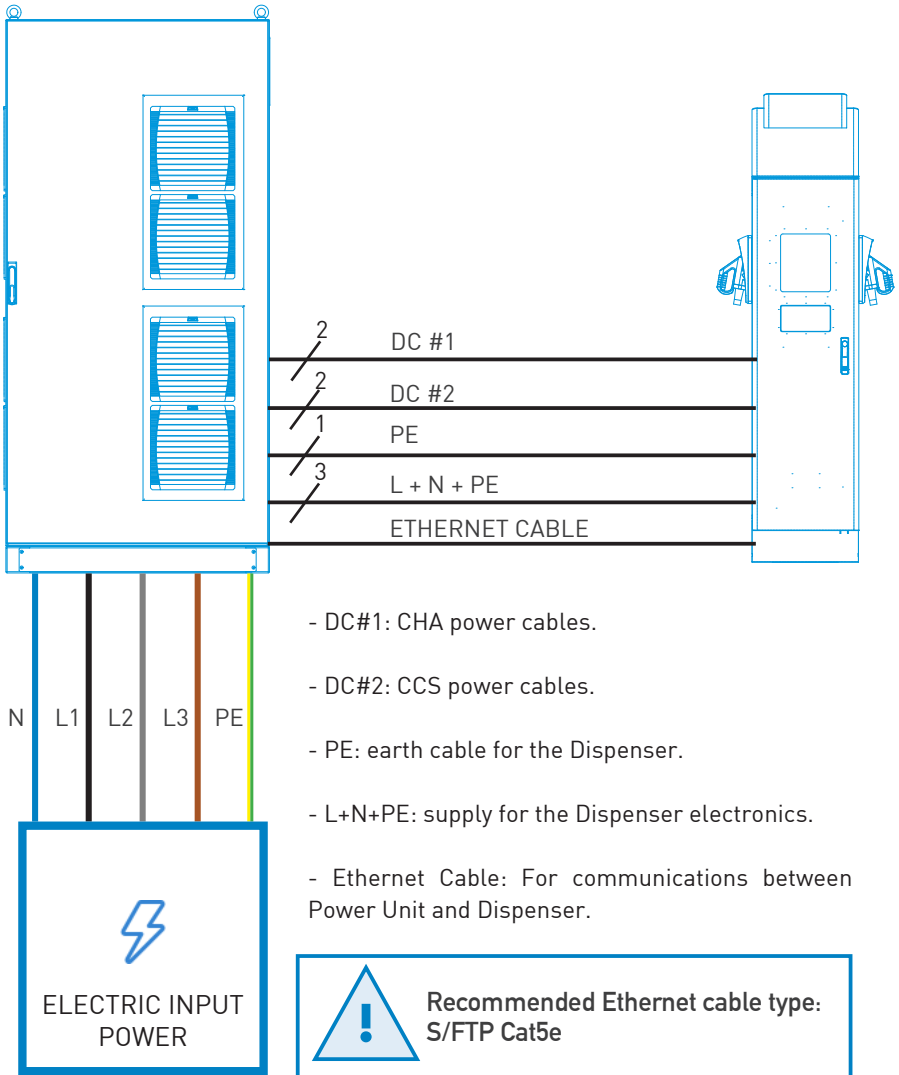
The Charge Point has internal electrical protections in each socket-outlet for the protection of the user against an electrical failure, according to the international standard IEC 61851-1:2017. In order to guarantee the total protection of the users and the installation (power supply line included) in front of any electrical hazard, it is mandatory to install a main circuit breaker (MCB) and a residual current device (RCD) upstream of the charger. These electrical protections and the rest of the installation have to be aligned with the local and national rules and the selectivity of the protections has to be guaranteed at all times.

The proper earthing system must be **TT or TN-S**. The ground loop impedance measurement for the entire installation must be less than **80 ohms**. The earth resistance of the charging point could be less if required by national regulations. It is recommended to maintain these conditions over the years, therefore, technically competent personnel will carry out the verification of the installation of grounding, at least once a year, at the time when the terrain is drier.

Before starting wiring connection for the Charge Point, have to be checked the following important elements:

- After unpacking the Charge Point, ensure that all electrical components are in good condition.
- It is recommended to strictly follow the current regulations to determine the appropriate section of the power cables to feed the Charge Point and at any time as a minimum comply with indicated in the Technical Data here below.
- Make sure the switch (MCCB or fuses) from the main electrical panel from the installation are cutting the electricity supply during Charge Point installation.
- After the installation, you must seal all holes inside the Charge Point to prevent access of dirt, foreign objects, animals, etc.

Wiring



*Maximum distance of the installation between power unit and dispenser is 30m

Power Unit

1- Power connection for the Power Unit- Metal plate - :

In order to make a secure cable installation is necessary to use the metal plate provided. In the case of not using this metal plate and any damage to internal components arises due to the entry of dirt, animals or any other external element, Circontrol will reject the warranty of the unit.



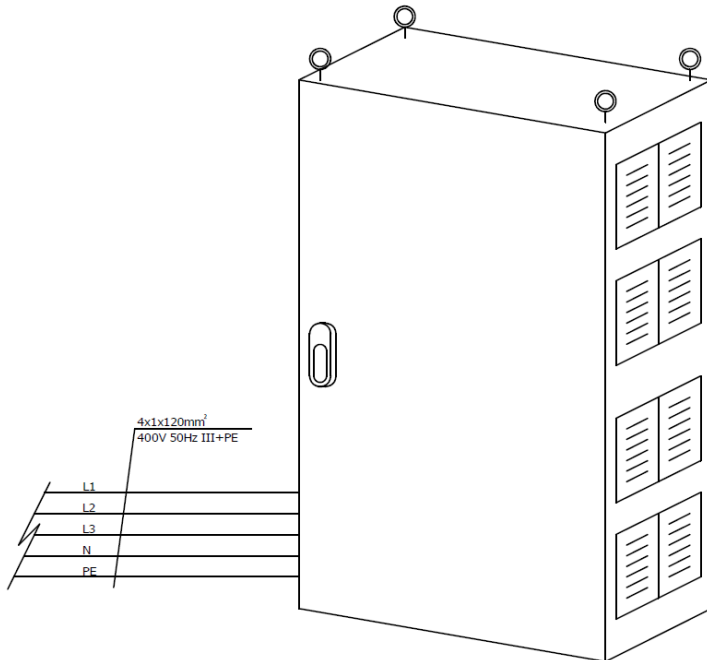
Steps:

- 1- Locate the power input entrance in the bottom of the Power Unit. Accessed from the back door.
- 2- Remove the metal plate.
- 3- Assembly the metal plate provided. It is recommended to install a cable glands (not supplied).
- 4- Corrugated tube should be cut at metal plate.

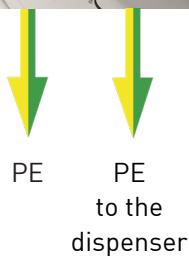
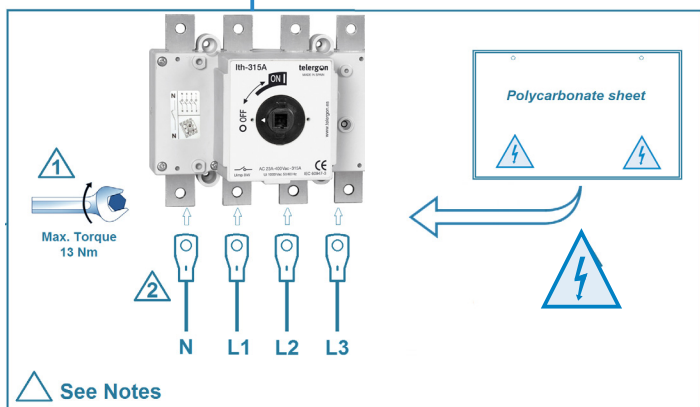
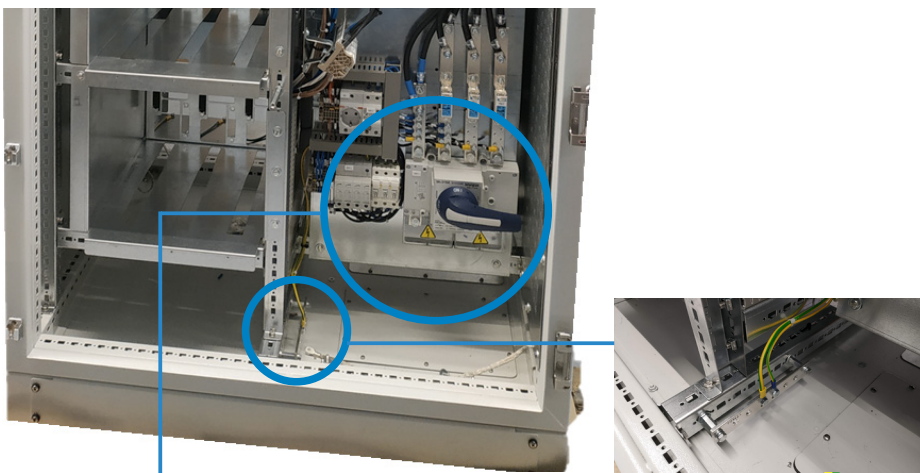
2 - Power connection for the Power Unit- Scheme - :

Power cabinet must be supplied with:

1. Three phases + Neutral (230/400V 50Hz)
2. Earth cable



3 - Power connection for the Power Unit - Connecting supply cables - :



Notes:

1- Use the M8 screw and washer provided in order to connect the electric terminals. The maximum tightening torque has to be 13Nm

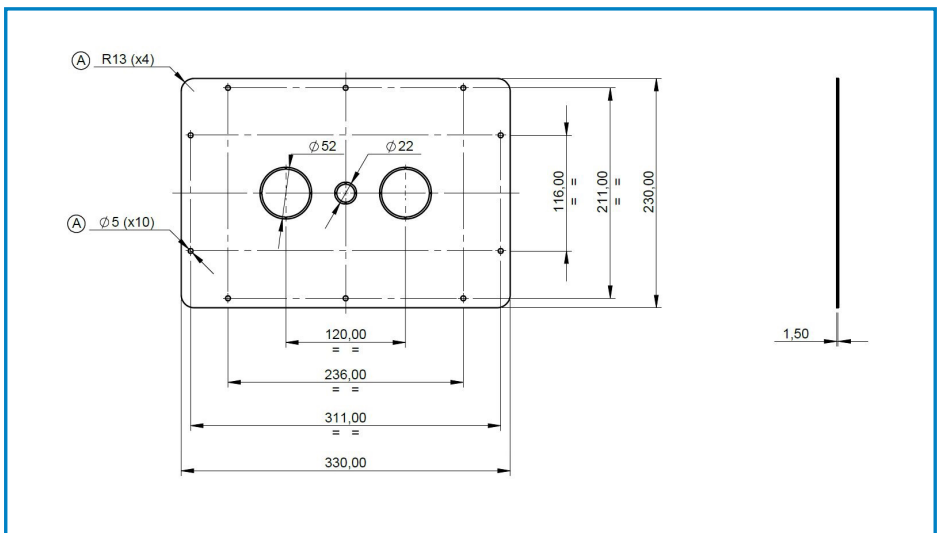
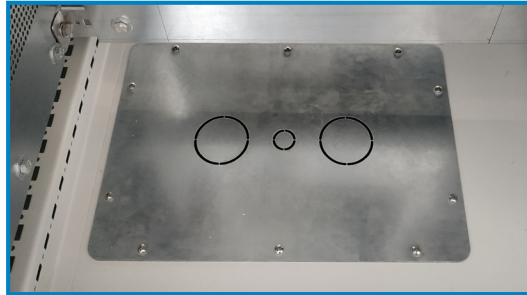
2- Use a M8 metallic electric terminal aligned with the required cable cross section according with the power of the Charge Point (Max. 150 mm²). See this requirement in the data sheet.

3- After connecting the power supply, place the sheet protection over the circuit breaker.

4- Keep in mind the earth connection. Earth cable to Dispenser must be taken from here.

4 - Power output from the Power Unit- Metal plate - :

In order to make a secure cable installation is necessary to use the metal plate provided. In the case of not using this metal plate and any damage to internal components arises due to the entry of dirt, animals or any other external element, Circontrol will reject the warranty of the unit.

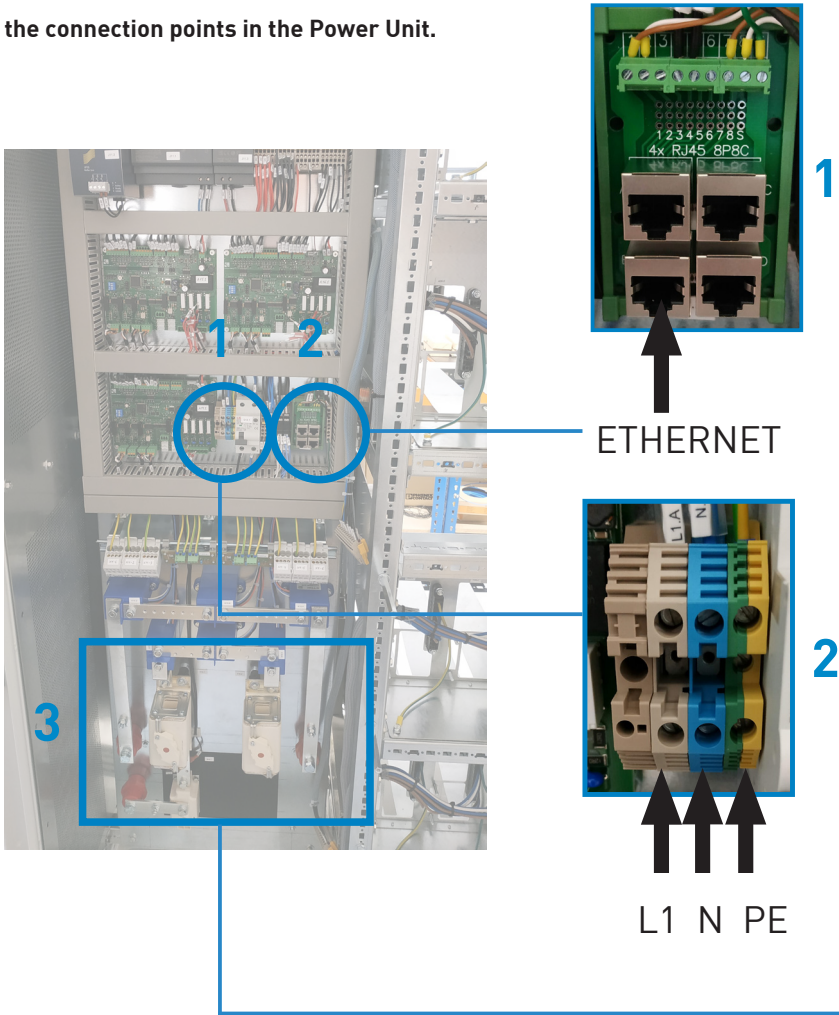


Steps:

- 1- Locate the power output in the Power Unit in the bottom of the Power Unit. Accessed from the front door.
- 2- Assembly the metal plate provided. It is recommended to install a cable glands (not supplied) in pre-holes position.
- 3- Corrugated tube should be cut at metal plate.

5 - Power output connection from Power Unit - Connecting Cables - :

Locate the connection points in the Power Unit.



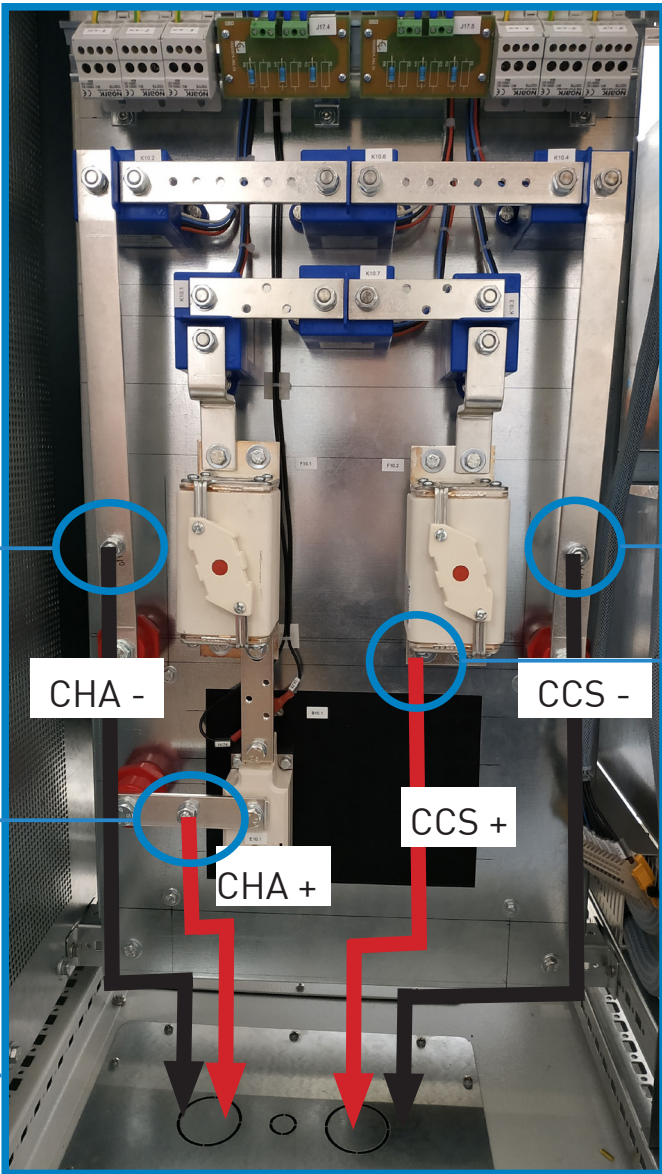
3

M10
18 Nm

M10
18 Nm

M10
18 Nm

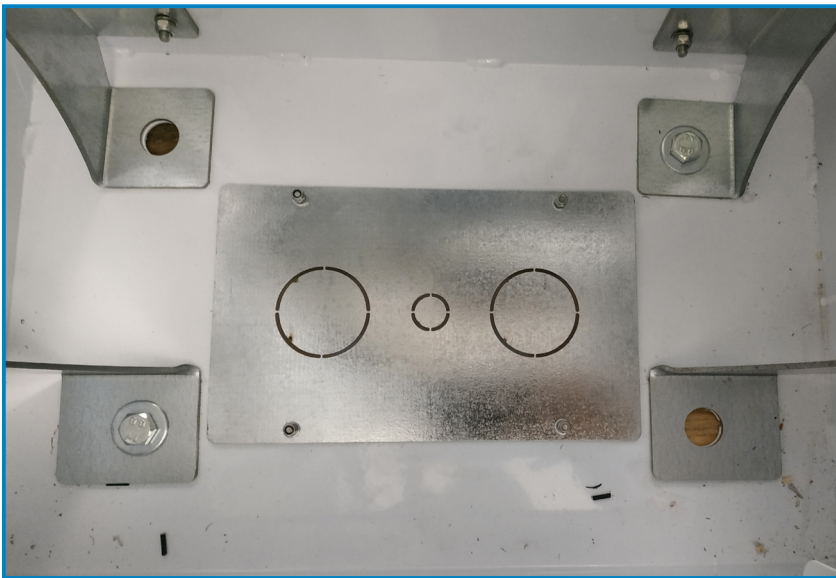
M6
7,5Nm



Dispenser

1 - Power connection for the Dispenser- Metal plate - :

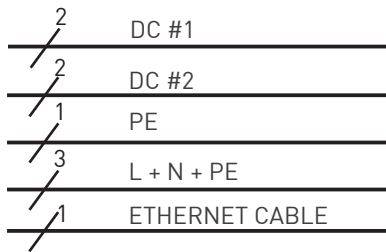
In order to make a secure cable installation is necessary to use the metal plate provided. In the case of not using this metal plate and any damage to internal components arises due to the entry of dirt, animals or any other external element, Circontrol will reject the warranty of the unit.




Steps:

- 1- Locate the power output in the Power Unit in the bottom of the Power Unit. Accessed from the front door.
- 2- Assembly the metal plate provided. It is recommended to install a cable glands (not supplied) in pre-holes position.
- 3- Corrugated tube should be cut at metal plate.

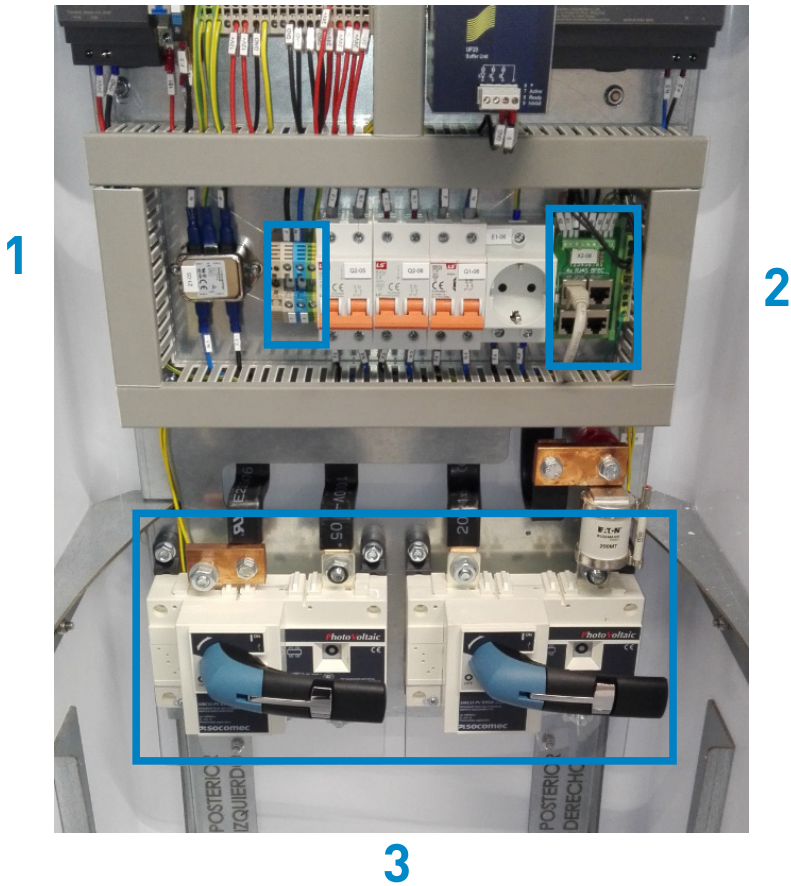
2 - Wiring connection for the Dispenser- Scheme - :



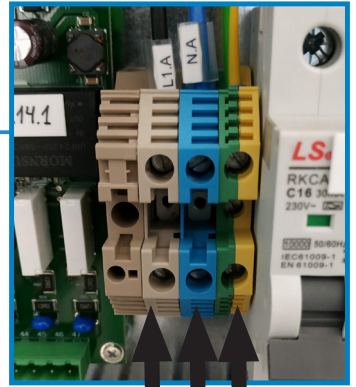
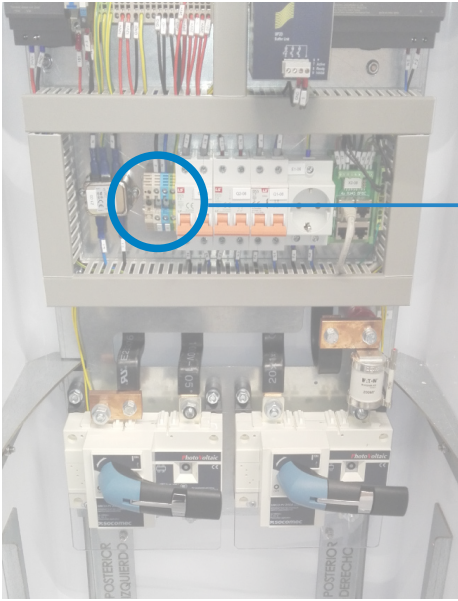
 Recommended Ethernet cable type:
S/FTP Cat5e

3 - Power input connection to Dispenser - connecting cables - :

Locate the connection points in the Dispenser.

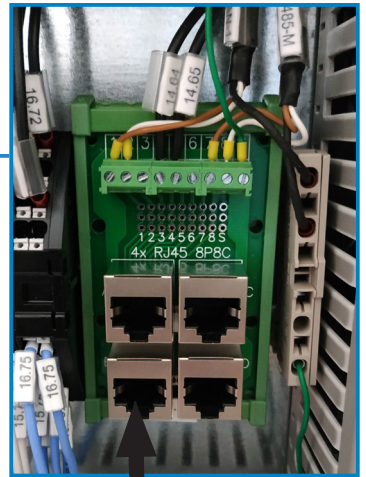
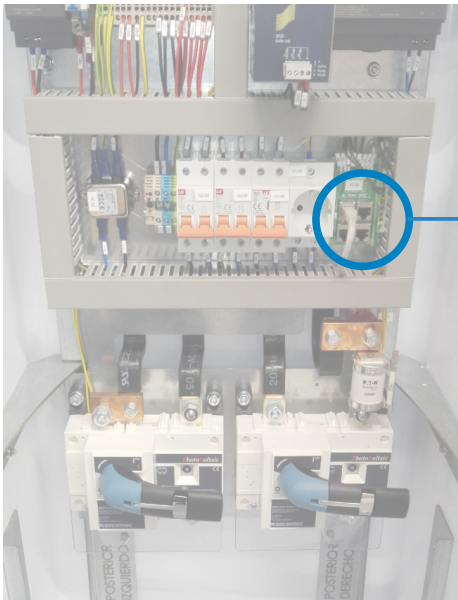


1



L1 N PE

2

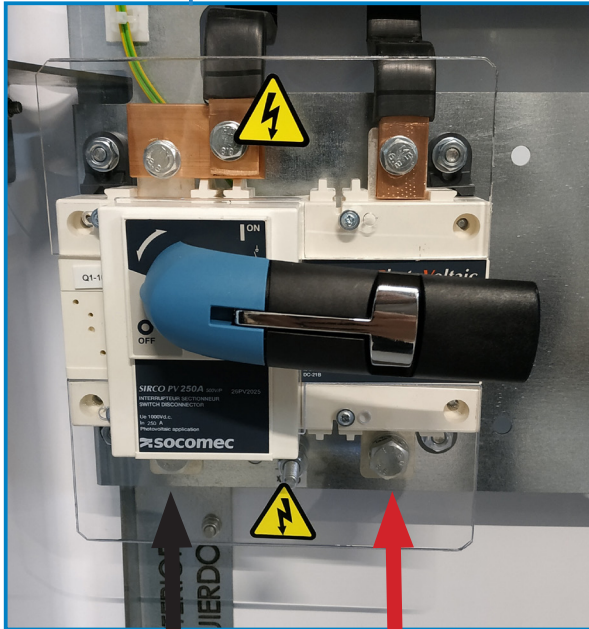


ETHERNET

3



Note: Use the M10 screw in order to connect the electric terminals. The recommended tightening torque has to be 23 Nm.



CCS -

CCS +

3



Note: Use the M10 screw in order to connect the electric terminals. The recommended tightening torque has to be 23 Nm.



CHA- PE CHA +

Wiring section

WIRING CROSS SECTIONAL AREA RECOMMENDATIONS				
From	To	Cables	Minimum cross sectional area*	Maximum cross sectional area supported
PU	Dispenser	2x DC + 2x DC -	95~120mm ² **	120mm ²
PU	Dispenser	1x PE	50mm ²	120mm ²
PU	Dispenser	L + N + PE	2,5mm ²	2,5mm ²
-	PU	L1+ L2 + L3 + N + PE	120mm ²	185mm ²

(*) Minimum cross sectional area according to IEC-60364-5-52 Selection and erection of electrical equipment - Wiring systems and different cable manufacturers recommendations.

The final section might be different if the installation method is another one, at any case, it has to be calculated by the installer, taking into account the cable materials, the conditions of installation and distances.

() Take into consideration the distance between the power unit and the dispenser. It affects the final cross sectional area to be used.**

Note that DC cables from Power Cabinet to the Dispenser may support values until 920Vdc and 250A. Protection of these cables must be selected according to this data.





Verification

Once completed the entire installation procedure, check the following points:

- Complete the Commissioning checklist.
- Check that all the MCB, RCD, Main Circuit Breaker and Disconnectors are powered on.
- Check that all safety labels are correctly placed.
- Close the Charge Point's doors. The Charge Point has a security switch (anti-tamper protection) installed that will avoid any charging session if the doors are opened.
- Check that all beacons are illuminated in green.
- Verify that each EV connector is in good condition.
- Make sure the ventilation air flow is correct and there is not any obstruction at the air inlets and outlets.
- Check for abnormal noise while charging a vehicle.

Last steps

B How to use and configure

In order to use and configure the Charging Station there is an User Manual. To get it, download it from the Expert Area or send a mail to ps-support@circontrol.com.

Note: Ask Circontrol PS-Support Department in order to register in the Circontrol Expert Area.

7

GENERAL SPECIFICATIONS

Compliance	CE / Combo-2 (DIN 70121; ISO15118) IEC 61851-1; IEC 61851-23 CHAdeMO compatible
Enclosure rating	IP54 / IK10
Enclosure material	Stainless steel
Operating temperature	-10 °C to + 50 °C
Ambient temperature storage	- 20 °C to + 60 °C
Operating humidity	5 % to 95 % Non-condensing
Rated diversity factor	0,8

CHARGE POST

Network connection	Recommended S/FTP Cat5e
Interface protocol	OCPP 1.5 (1.6 J optional)
RFID system	ISO / IEC14443A / B MIFARE Classic / DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz
Display HMI	8" anti vandal touch screen
Power limit control	DC by software
DC cable length CCS	3,4 meters
DC cable length CHAdeMO	3,4 meters
Lights for status indication	RGB colours indicator
Dimensions (D x W x H)	378x420x2067mm
Weight	115 kg
Operational noise level	Not perceptible
AC Meter	Compliant with the EN 50470 (MID European standards) or IEC 62052-11

Technical Data

POWER UNIT





AC power supply	3P + N + PE
AC Voltage	400 V AC +/- 10%
Maximum AC input current	237 A / 160 A*
Required power supply capacity	164 KVA / 110 kVA
Power Factor (pu)	> 0,98
Efficiency (pu)	94 % at nominal output power
Frequency (pu)	50 / 60 Hz
Cooling system	Forced air
Operational noise level	< 55 dBA
Electrical input protection	Main circuit disconnection
Overcurrent protections (pu)	MCB curve C
Safety protection (pu)	RCD Type B
Dimensions (D x W x H)	800x1000x2100mm
Weight	420 kg

OPTIONAL DEVICES

Wireless Communication	4G LTE /WiFi Hotspot/GPRS/GSM
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)
Cable Length	5.3m (all cables)
Anti-vandal connector protection	CHAdEMO, CCS (mechanical connector locking)
RFID Extension	Legic Advant / Legic Prime ISO 15693/ISO 18092. Sony FeliCa
Low temperature Kit	- 30°C to + 50°C

*Raption 150 Lite Models

Models Specifications





Rapton 150 Models	CCS250 ⁽¹⁾	CCS200 CHA125	CCS250 CHA200	CCS250 CCS250 ⁽¹⁾
Maximum output power	CCS:150 kW ⁽²⁾	CCS:150 kW ⁽³⁾ CHA:50 kW	CCS:150 kW ⁽²⁾ CHA:50 kW ⁽⁴⁾	CCS:150 kW ⁽²⁾ CCS:150 kW ⁽²⁾
Output voltage range	CCS:100-920V	CCS:100-920V CHA:100-500V	CCS:100-920V CHA:100-500V	CCS:100-920V CCS:100-920V
Maximum output current	CCS:250A	CCS:200A CHA:125A	CCS:250A CHA:200A	CCS:250A CCS:250A
Connection				

⁽¹⁾ Also available with cable of 200 A (max output power: 150 kW @920 V or 80 kW @400 V)

⁽²⁾ 150 kW @720-920V or 100 kW @400V

⁽³⁾ 150 kW @750-920V or 80 kW @400V

⁽⁴⁾ HW ready up to 100 kW by FW update

Rapton 150 Lite Models	CCS250 ⁽¹⁾	CCS200 CHA125	CCS250 CHA200	CCS250 CCS250 ⁽¹⁾
Maximum output power	CCS:100 kW	CCS:100 kW ⁽²⁾ CHA:50 kW	CCS:100 kW CHA:50 kW ⁽³⁾	CCS:100 kW CCS:100 kW
Output voltage range	CCS:100-920V	CCS:100-920V CHA:100-500V	CCS:100-920V CHA:100-500V	CCS:100-920V CCS:100-920V
Maximum output current	CCS:250A	CCS:200A CHA:125A	CCS:250A CHA:200A	CCS:250A CCS:250A
Connection				

⁽¹⁾ Also available with cable of 200 A (max output power: 100 kW @920 V or 80 kW @400 V)

⁽²⁾ 80 kW @400V

⁽³⁾ HW ready up to 100 kW by FW update





Need help?

In case of any query or need further information, please contact our **Post-Sales Department**



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CIRCONTROL
Mobility & eMobility

CIRCONTROL
Raption 150 Series
INSTALLATION MANUAL

A comprehensive guide on
how to install and verify your
Raption 150 Charging Station.

V1.8, February edition 2021