VerdeMobility
CHARGING INTO THE FUTURE

USER MANUAL

COMPACT CHARGER

Table of Contents

1 About this document

1.1 Function of this document

The document is only applicable for this EVSE (Ksipra AC Compact), including the variants and options listed in manual. The EVSE from here on in the document is referred to as the EVSE.
The document gives the information that is necessary to do these tasks:
• Installation
• Commissioning

1.2 Target group

The document is intended for qualified installation engineers.

1.3 Language

The original instructions of this document are in English (EN-US). All other language versions are translations of the original instructions.

1.5 Illustrations

It is not always possible to show the configuration of your EVSE. The illustration in this document shows a typical setup. They are for instruction and description only.

1.6 Units of measurement

SI units of measurement (metric system) are used. If necessary, the document shows other units between parentheses () or in separate columns in tables.

1.7 Typographical conventions

The lists and steps in procedures have numbers (123) or letters (abc) if the sequence is important.

1.8 How to use this document

1. Make sure that you know the structure and contents of this document.
2. Read the safety chapter and make sure that you know all the instructions.
3. Do the steps in the procedures fully and in the correct sequence.
4. Keep the document in a safe location that you can easily access.

1.9 General symbols and signal words

Signal word	Description	Symbol
Danger	If you do not obey the instruction, this can cause serous injury or death.	
Warning	If you do not obey the instructions, this can cause injury.	
Caution	If you do not obey the instruction, this can cause damage to the EVSE or to property.	
Note	A note gives more data, to make it easier to do the steps, for example.	
-	Information about the condition of the EVSE before you start the procedure.	
-	Requirements for personnel for a procedure.	
-	General safety instructions for a procedure.	
-	Information about spare parts that are necessary for a procedure.	
Tools	Information about support equipment that is necessary for a procedure.	
-	information about supplies (consumables) that are necessary for a procedure.	
Power Disconnect	Make sure that the power supply to the EVSE is disconnected.	
Technical Guide	Electro technical expertise is required, according to the local rules.	
AC Current	Alternating current supply	

 **Note: It is possible that not all symbols or signal words are present in this document.**

1.10 Special symbols for warnings and dangers

Symbol	Risk type
	General risk.
	Hazardous voltage that gives risk of electrocution.
	Risk of pinching or crushing of body parts.
	Rotating parts that can cause a risk of entrapment

Note: It is possible that not all symbols are present in this document.

1.11 Manufacturer and contact data

Manufacturer
Plot#32, Zone-D/4,
Phase 1 GIDC Estate,
Vitthal Udyognagar INA, Gujarat 388121

1.12 Abbreviations

Abbreviation	Definition
AC	Alternating current
EMC	Electromagnetic compatibility
EV	Electric vehicle
EVSE	Electric vehicle supply equipment
OCPP	Open charge point protocol
PE	Protective earth
PPE	Personal protective equipment
RFID	Radio-frequency identification

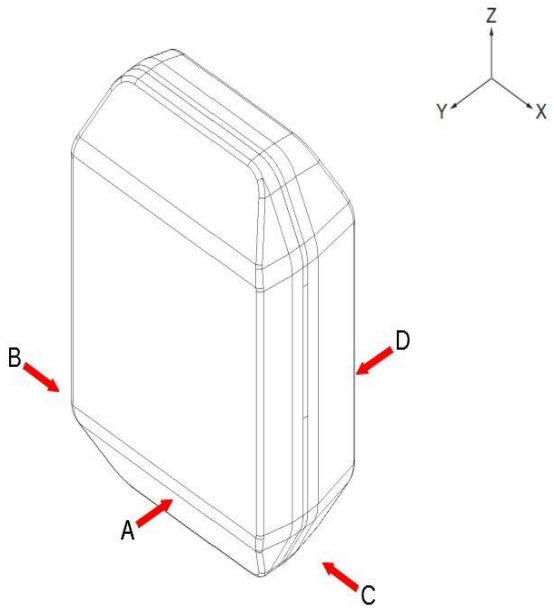
Note: It is possible that not all abbreviations are present in this document.

1.13 Terminology

Term	Definition
Network operating center of the manufacturer	Facility of the manufacturer to do a remote check on the correct operation of the EVSE.
Cabinet	Enclosure of the EVSE, including the components on the inside
Term	Definition
Contractor	Third party that the owner or site operator hires to do engineering, civil and electrical installation work.
Grid provider	Company that is responsible for the transport and distribution of electricity.
Local rules	All rules that apply to the EVSE during the entire life cycle of the EVSE. The local rules also include the national laws and regulations.
Open charge points protocol	Open standard for communication with charge stations
Owner	Legal owner of the EVSE
Site operator	Entity that is responsible for the day-to-day control of the EVSE. The site operator does not have to be the owner
User	Owner of an EV, who use EVSE to charge EV.

Note: It is possible that not all terms are present in this document.

1.14 Orientation agreements



A Front side: face forward to the EVSE during normal use

B Left side

C Right side

D Rear side

2 Description

2.1 Short description

The EVSE (Ksipra AC Compact) is an AC charging station that you can use to supply electricity to an EV. The Ksipra AC Compact offers tailor-made, intelligent and network charging solutions for your company or home. The EVSE can connect to the internet via GSM, Wi-Fi or LAN.

2.2 Intended use

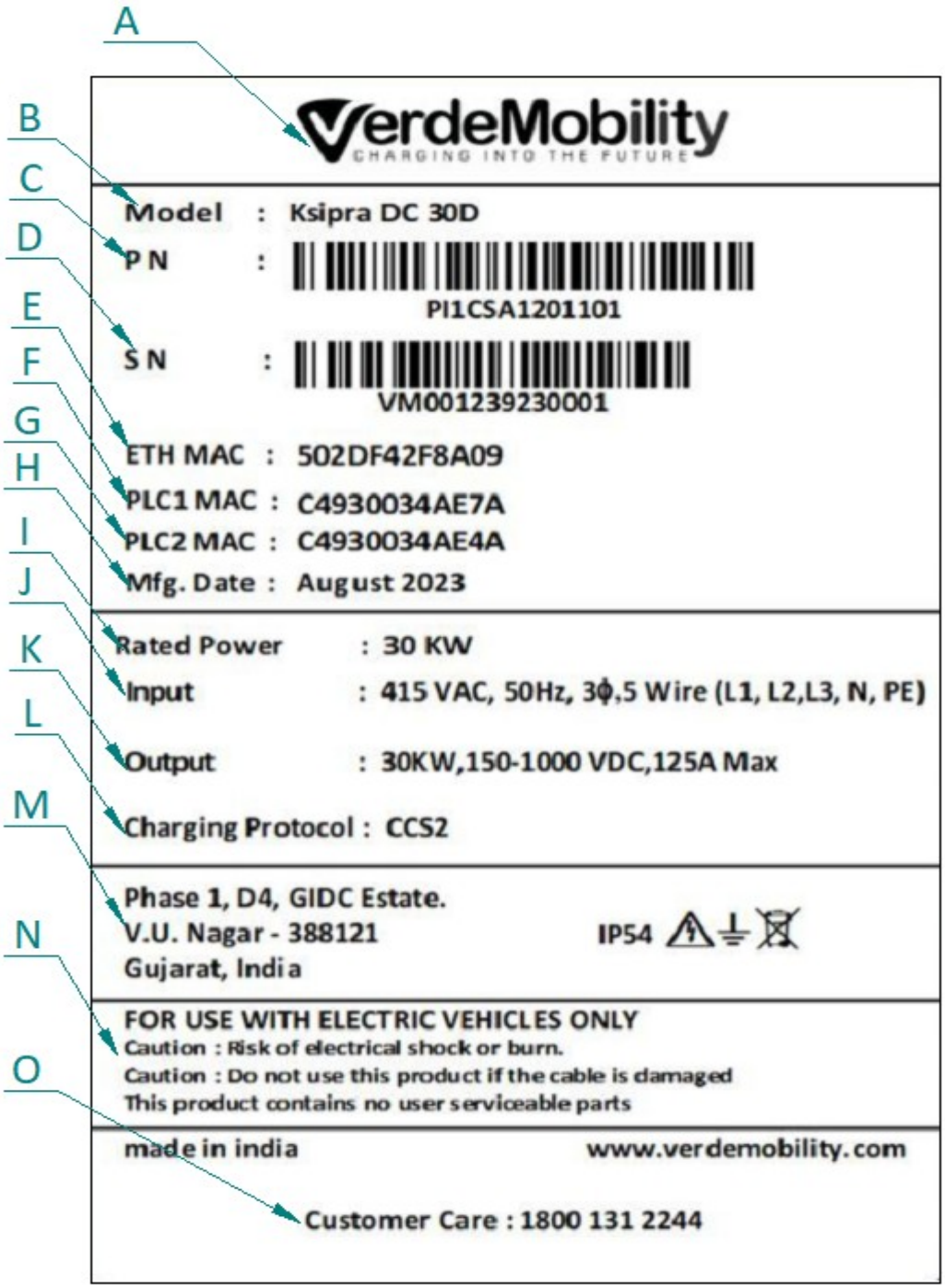
The EVSE is intended for the AC charging of EVs. The EVSE is intended for indoor or outdoor use.
The technical data of the EVSE must comply with the properties of the electrical grid, the ambient conditions and the EV.
Only use the EVSE with accessories that the manufacturer provides or that obey the local rules.
The EVSE AC input is intended for a hardwired installation that complies with the applicable national regulations.

Danger:

General risk

- If you use the EVSE in any other way than described in the related documents, you can cause death, injury and damage to property.
- Use the EVSE only as intended.

2.3 Product label



(1) A- Manufacturer

(2) B- Model Name

(3) C- Barcode with the Part Number of the EVSE

(4) D- Barcode with Serial Number

(5) E- Ethernet MAC Address

(6) F&G- PLC MAC Address

(7) H- Production Date

(8) I- Rated Power

(9) J- EVSE Input Side Rating

(10) K- EVSE Output Side Rating

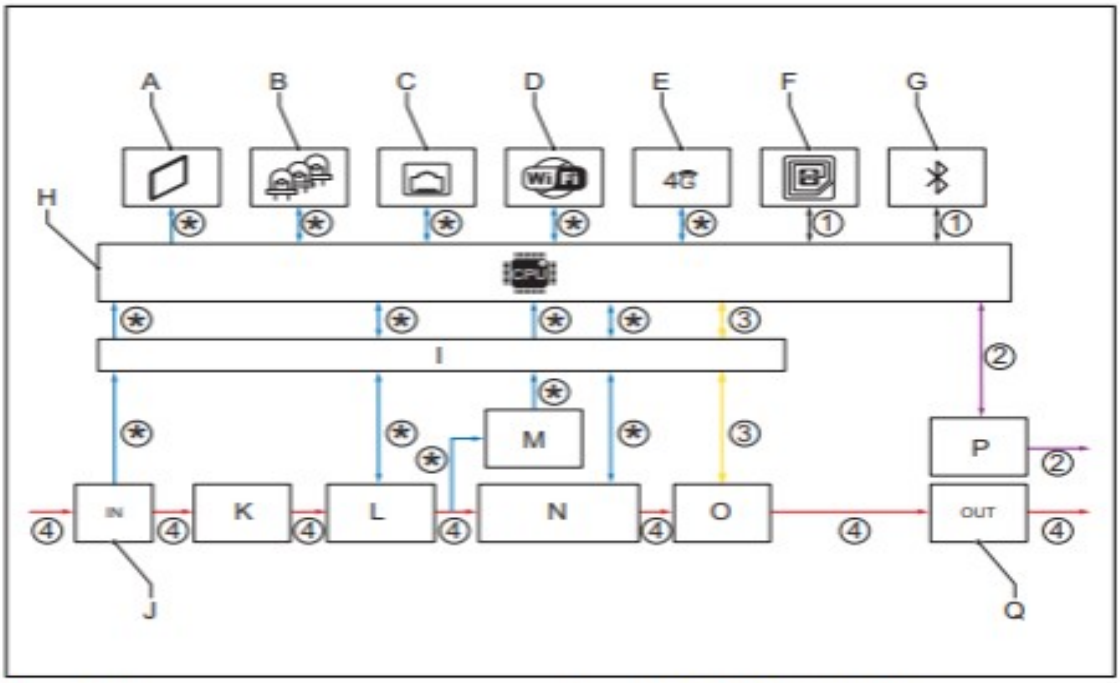
(11) L- Charging Gun Type

(12) M- Address of Manufacturer

(13) N- Safety Identification
(14) O- Customer Care number

Note: The data in the illustration is only an example. Find the product label on your EVSE to see the applicable data.

2.4 Working principle



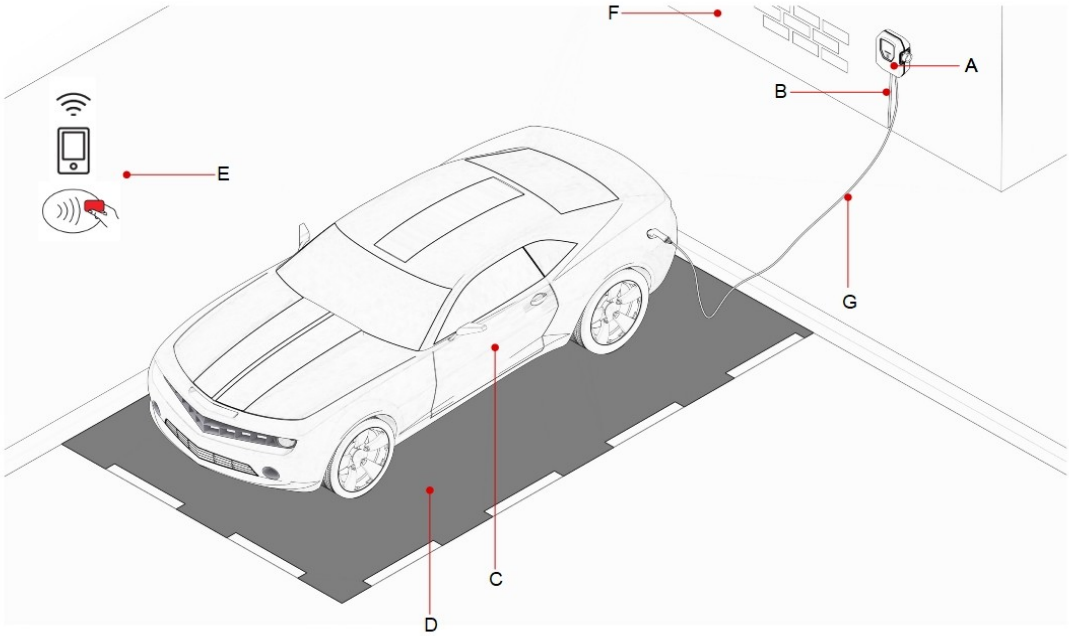
A	LEDs	I	AC/DC power supply
B	Ethernet	J	AC input
C	WiFi	K	Surge protection
D	4G	L	Earth(ground) fault protection
E	RFID	M	AC input metering
F	Bluetooth	N	AC isolation relay
G	CPU system	O	Control pilot
H	Isolation	P	AC output

1. The user initiates a charge session request (black lines).
2. The EVSE verifies the status of the EV (purple lines).
3. The EVSE goes on and AC power goes to the EV (yellow lines).
4. The charge session starts. AC power flows from the power grid to the EV (red lines).
5. The electrical interfaces of the EVSE communicate with the on-board computer (blue lines).

(*): Connections between parts of the EVSE and the CPU system. The arrow shows the direction of the input and output signals.

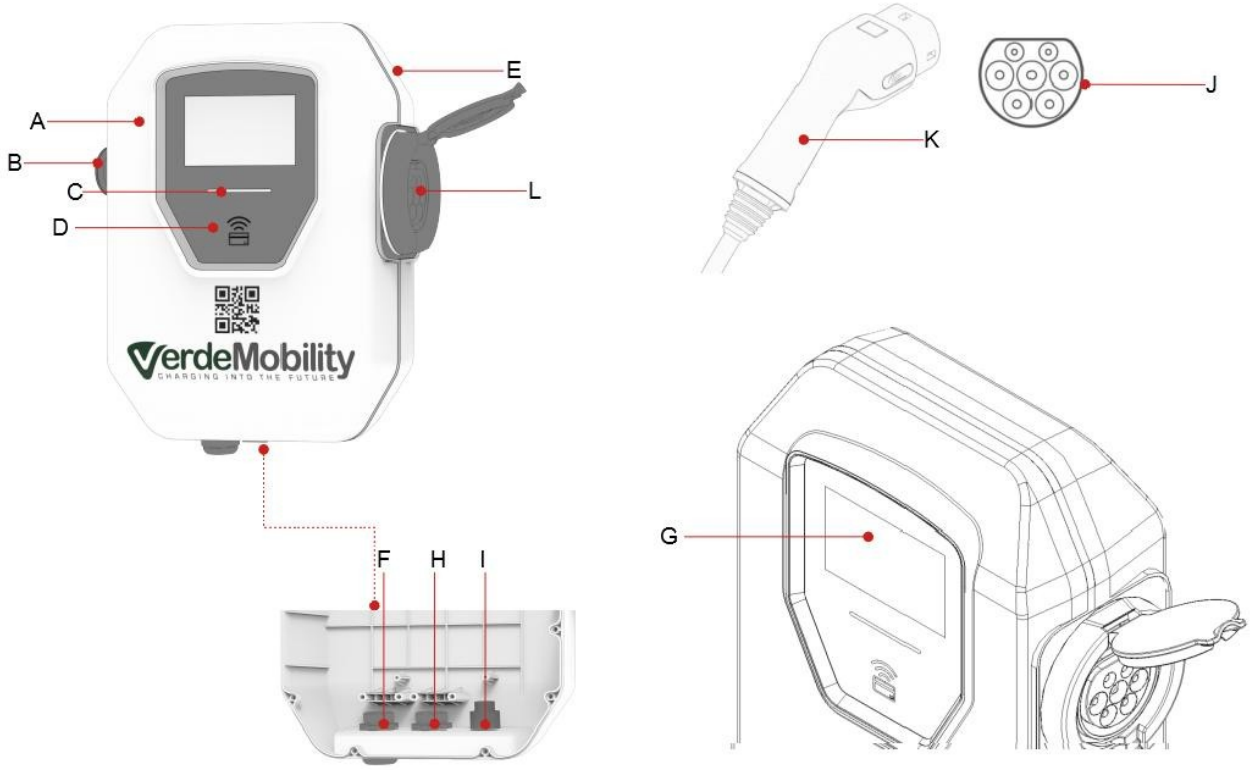
2.5 Overview

2.5.1 Overview of the system



Part	Function
EVSE (A)	Refer to section 2.6.2
Structure (B)	To install the EVSE on and to keep the EVSE in position.
EV (C)	The EV of which the batteries need to be charged
Parking space (D)	Location for the EV during the charge session
RFID card or smartphone (E)	To authorize the user to use the EVSE
AC grid input (F)	To supply the electricity to the EVSE
EV charge cable (G)	To conduct the current from the EVSE to the EV.

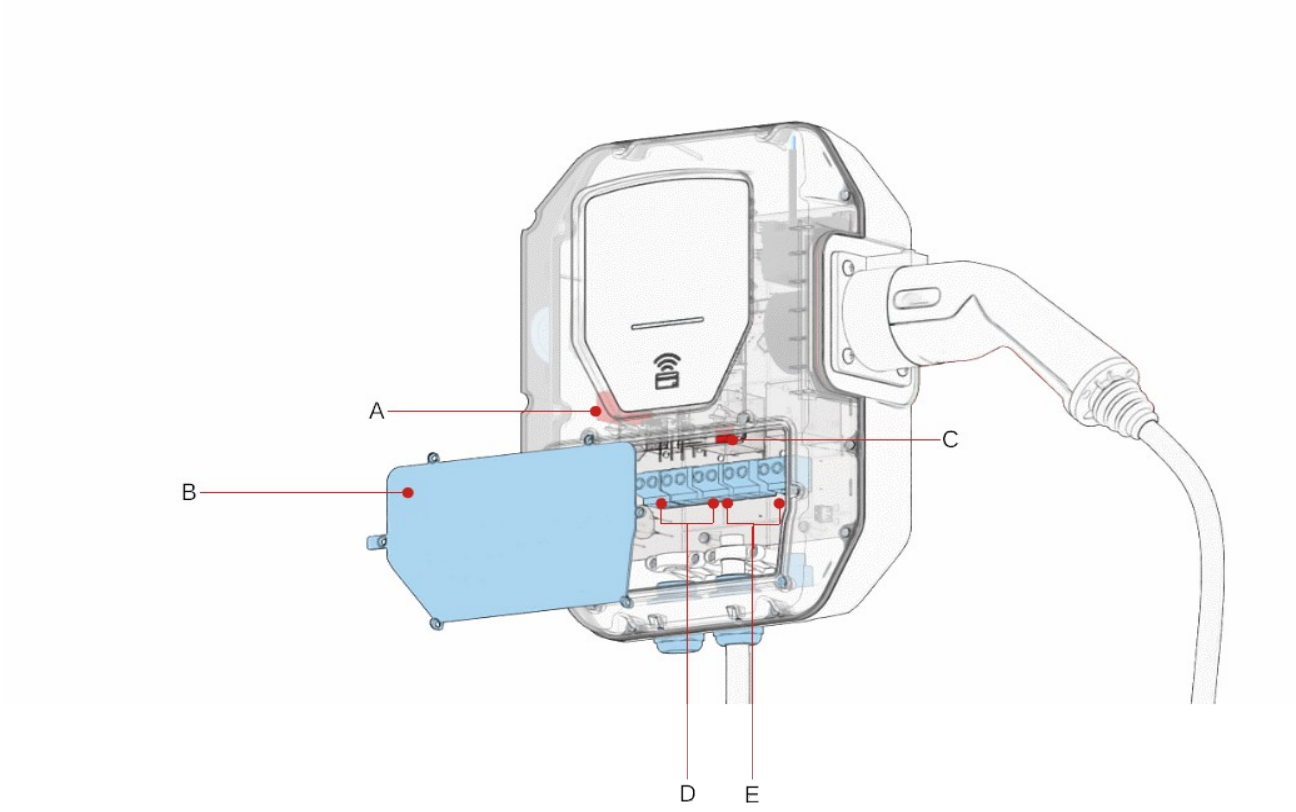
2.5.2 Overview of the EVSE, outside



Part	Function
EVSE Front Enclosure (A)	Ksipra AC Compact Charger Enclosure
Emergency Button (B)	Emergency Push button
LED indicators (C)	To show the status of the EVSE and the charge session.
RFID reader (D)	To authorize the start or stop of a charging session with an RFID card.
EVSE Back Side (E)	To mount the EVSE on wall.
Input Supply Cable (F)	To indicate the input supply cable Gland
Display (G)	Show the Charging sessions and error code on display.

Gun with Cable (H)	For Charge your vehicle used this Gun.
Ethernet (I)	Ethernet Cable Option
Gun (J)	Gun Socket
Handle (K)	Handle used for plug and unplug of the Gun.

2.5.3 Overview of the EVSE, inside

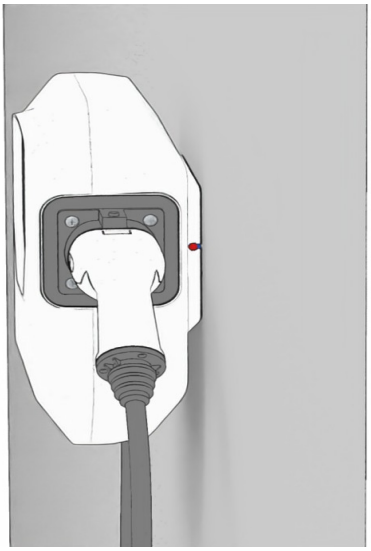


Part	Function
EVSE Front Enclosure (A)	Ksipra AC Compact Charger Enclosure
Maintenance cover (B)	To prevent access to the electrical components of the EVSE
Controller Board (C)	Main Controller Board
Terminal block for dry contacts input and output (D)	Not used
Terminal block for the AC input (E)	To connect the AC input cable from the grid

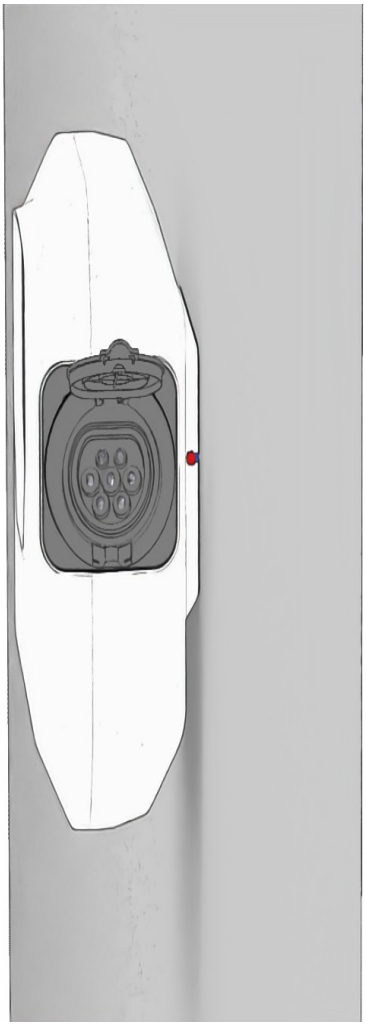
2.6 Options

2.6.1 Display

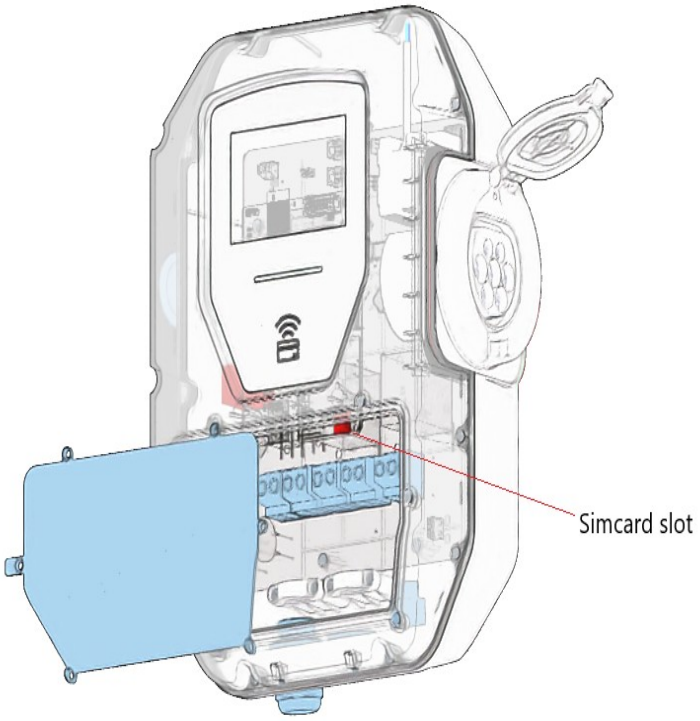
2.6.2 EV charge cable, Type 2



2.6.3 Socket, Type 2



2.6.4 4G Communication



You can connect to a 4G network.

2.6.5 Load management

Load management makes sure that the available electrical capacity of the building or home is not exceeded. A number of devices share a grid connection, that has a maximum capacity. The total power demand of the devices that use the grid connection must not exceed the grid capacity.
The load management feature prevents that the system exceeds the grid capacity

and prevents damage of the fuses. At times when the current demand is high, the EVSE decreases the output of current. The current will increase again when there is availability on the grid.
Also, the load management feature makes sure that the available load is optimally shared.

2.7 Control elements

2.7.1 LED indicators

2.7.2 Status of LED

Status of the LED	Status of the EVSE
Red Color	Error on Display
White Color	Available state
Blue Color	Preparing State
Green Color	Charging State

2.8 Ecargar app to do the commissioning

The *Ecargar* app is available on the *Apple Store* and on the *Google Play Store*.

The app is necessary to do the commissioning.

3 Safety

3.1 Liability

The manufacturer is not liable to the purchaser of the EVSE or to third parties for damages, losses, costs or expenses incurred by the purchaser or third parties.

- Obey the instructions in the related documents.
- Do not misuse or abuse the EVSE.
- Only make changes to the EVSE, if the manufacturer approves in writing of the changes.

This EVSE is designed to be connected to and to communicate information and data via a network interface. It is the sole responsibility of the owner to provide and continuously ensure a secure connection between the EVSE and the network of the owner or any other network.

The owner shall establish and maintain any appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data and installation of anti-virus programs) to protect the EVSE, the network, its system and the interface against any kind of security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information.

The manufacturer is not liable for damages and/or losses related to such security breaches, any unauthorized access, interference, intrusion, leakage and/or theft of data or information.

3.2 Required qualifications for the installation engineer

• The qualified installation engineer fully knows the EVSE and its safe installation.

• The installation engineer is qualified according to the applicable local rules to do the work.
• The qualified installation engineer obeys all local rules and the instructions in the installation manual.
• It is the responsibility of the owner of the EVSE to make sure that all qualified installation engineers obey the local rules, the installation instructions, and the specifications of the EVSE.

3.3 Personal protective equipment

Symbol	Description
	Protective clothing
	Safety gloves
	Safety shoes
	Safety glasses

3.4 FCC compliance statement

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, 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 or more 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

3.5 General safety instructions

• This document, the related documents and the warnings included do not replace your responsibility to use your common sense when you do work on the EVSE.

• Only do the procedures that the related documents show and that you are qualified for.

• Obey the local rules and the instructions in this manual. If the local rules contradict the instructions in this manual, the local rules will apply.
If and to the extent permitted by law, in case of inconsistency or contradiction, between any requirements or procedure contained in this document and any such local rules, obey the stricter between the requirements and procedures specified in this document and the local rules.

3.6 Signs on the EVSE

Symbol	Risk type
	General risk
	Hazardous voltage that gives risk of electrocution
	Risk of pinching or crushing of body parts
	Rotating parts cat can cause a risk of entrapment
	PE

	Sign that means that you must read the manual before you install the EVSE
	Waste from electrical and electronic equipment

Note: It is possible that not all symbols are present on the EVSE.

3.7 Discard the EVSE or parts of the EVSE

Incorrect waste handling can have a negative effect on the environment and human health due to potential hazardous substances. With the correct disposal of this product, you contribute to reuse and recycling of materials and protection of the environment.

• Obey the local rules to discard parts, packaging material or the EVSE.

• Discard electrical and electronic equipment separately in compliance with the WEEE 2012/19/EU Directive on waste of electrical and electronic equipment.

• As the symbol of the crossed out wheeled-bin on your EVSE indicates, do not mix or dispose the EVSE with your household waste, at the end of use. Instead, hand the EVSE over to your local community waste collection point for recycling.

• For more information, contact the Government Waste-Disposal department in your country.

3.8 Safety instructions for earthing

Preliminary requirements

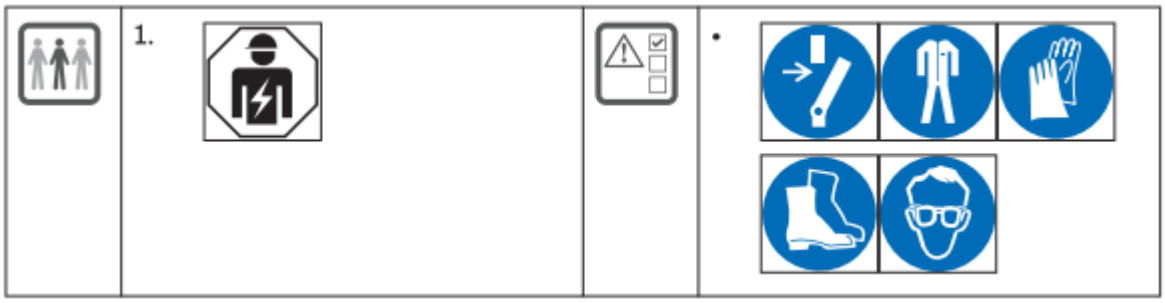
• Make sure that the EVSE is connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

• Make sure that the connections to the EVSE comply with all applicable local rules.

3.9 Special safety instructions

3.9.1 Safety instructions during installation

Preliminary requirements



• Make sure that there is no voltage on the AC input cables during the complete installation procedure.

• Keep unqualified personnel at a safe distance during installation.

• Only use electrical wires of sufficient gauge and insulation to handle the rated current and voltage demand.

• Make sure that the load capacity of the grid is in accordance with the EVSE.

• Earth the EVSE correctly.

• Make sure that the wiring inside the EVSE is protected from damage and cannot get trapped when you open or close the cabinet.

• Make sure that water cannot enter the cabinet.

• Protect the EVSE with safety devices and measures that the local rules specify.

• If it is necessary to remove safety devices, immediately install the safety devices after the work.

• Put on the correct personal protective equipment.

3.10 Special safety instructions

3.10.1 Additional important safety instructions

Warning: Obey the basic precautions for electric products, including the instructions in this section.

Caution: To reduce the risk of fire, connect this EVSE only to a circuit provided with 40 A maximum branch circuit overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70.

• Read all the instructions befor you use this EVSE.

• Make sure that adults supervise this EVSE is when it is used around children.

• Do not put fingers into the EV connector.

• Do not use this product if the flexible power cord or EV charge cable is frayed, has broken insulation, or any other signs of damage.

• Do not use this EVSE if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.

• Install an insulated grounding conductor that is identical in size, insulation material, and thickness to the grounded and ungrounded branch-circuit supply conductors, except that it is green with or without one or more yellow stripes, as part of the branch circuit that supplies the EVSE.

• Connect the grounding connector of the previous bullet point to earth at the EVSE or, when supplied by a separately derived system, at the supply transformer.

• For the AC power input wiring installation.

• For the torque requirements for the screws of the terminal block for the AC power.

4 Installation

4.1 General installation procedure

Preliminary requirements

	1. All required permits to agree with the local rules are granted. 2. The AC input cable is available.		• There is no voltage on the AC input cable during the complete installation procedure.
	• Tools for installation. Refer to section 11.7.		

Procedure

1. Unpack the EVSE.
2. Prepare the site.
3. Do the mechanical installation.
4. Do the electrical installation.
5. Install the cabinet cover.
6. Do the commissioning procedure.

4.2 Unpack the EVSE

1. Open the box.
2. Remove the EVSE from the box.
3. Remove all packaging material from the EVSE.
4. Discard the packaging material.
5. Make sure that all parts are delivered according to the order.
6. Do an inspection of the EVSE and the parts for installation for damage.
7. If you find damage or the parts are not according to the order, contact the local representative of the manufacturer (VerdeMobility EV Infrastructure).

5 Site preparation

5.1 Select the site

1. Find a suitable site on a wall. For the specifications of the wall.
2. Make sure that the correct power supply is available. For the power supply specifications.
3. Obey the space requirements.

5.2 Prepare the site

Preliminary requirements

1. The site must be suitable to install the EVSE. Refer to section 5.1.

Note: Information for MID certified EVSE:

- The meter is intended to be installed in a Mechanical Environment 'M1', with Shock and Vibrations of low significance, as per 2014/32/ EU Directive.
- The meter is intended to be installed in Electromagnetic Environment 'E2', as per 2014/32/EU Directive.

Procedure

1. Make sure that the space and the airflow around the EVSE are sufficient.
2. Make sure that the correct cables are available at the site.
• Ethernet cable.

6 Mechanical installation

6.1 General mechanical installation procedure

Note: The mounting screws and plugs that are included in the delivery are serviceable for a brick wall. If you want to mount the EVSE on a different type of wall, contact your local representative of the manufacturer (VerdeMobility EV Infrastructure).

1. Prepare the holes for the mounting screws.

2. Install the upper mounting screws.

3. Install the EVSE on the site.

6.2 Prepare the holes for the mounting screws

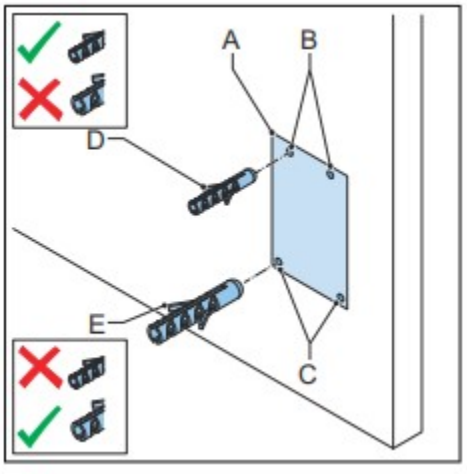
Preliminary requirements

	• Spirit level • Drill		• Installation template. Refer to section 11.6. • Plugs for the upper mounting holes. Refer to section 11.6 • Plugs for the lower mounting holes. Refer to section 11.6.

Procedure

1. Hold the installation template (A) against the wall.
2. Make sure that the installation is level.
   Use the spirit level.
3. Mark the location for the mounting holes (B) and (C).
4. Drill the upper mounting holes (B) and the lower mounting holes (C).

Note: For the diameter of the holes, refer to the plugs for the upper and lower mounting holes.



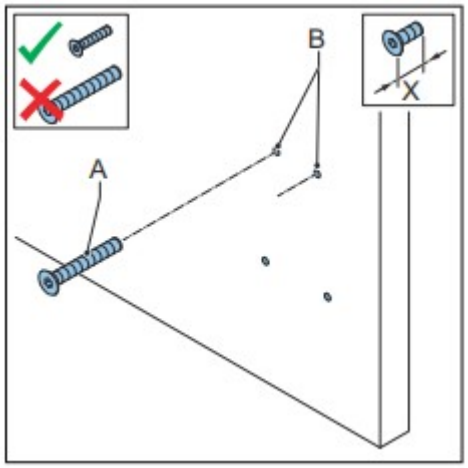
5. Insert the plugs for the upper mounting holes (D) in the upper mounting holes.
6. Insert the plugs for the lower mounting holes (E) in the lower mounting holes

6.3 Install the upper mounting screws

Preliminary requirements

	1. The plugs for the upper and lower mounting screws are installed.		• Upper mounting screws. Refer to section 11.6.

Procedure



1. Install the upper mounting screws (A) in the upper holes (B).

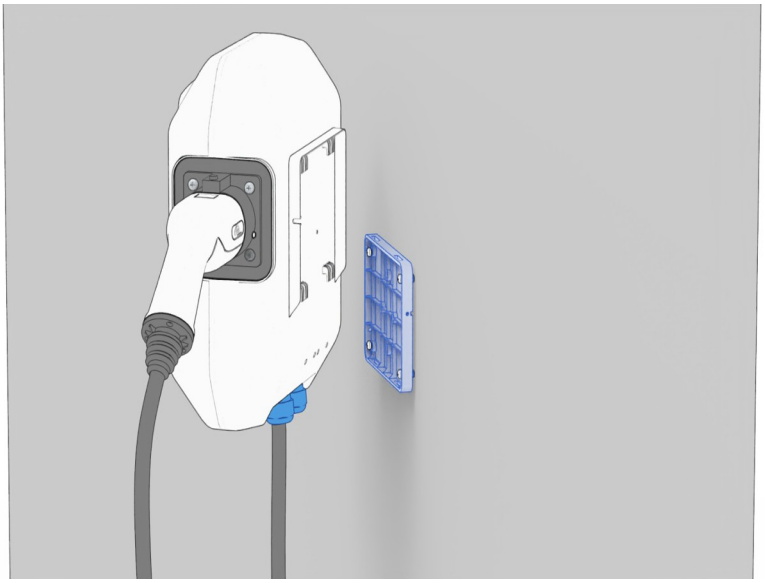
2. Make sure that a length (X) of the screws stays out of the wall. This length outside the wall is necessary to suspend the EVSE.

6.4 Install the EVSE on the wall

Preliminary requirements

	1. The upper mounting screws are installed.		• Lower mounting screws. Refer to section 11.6.

Procedure



1. Fit mounting plate on the wall by Anchor fastener (M6)
2. Hang the EVSE on mounting plate

7 Electrical installation

7.1 General electrical installation procedure

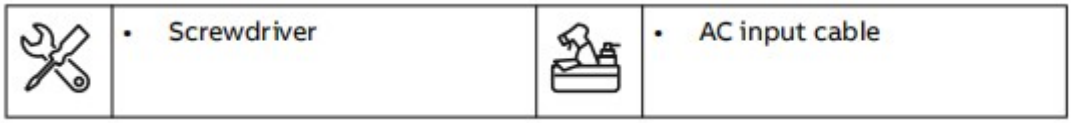
Preliminary requirements

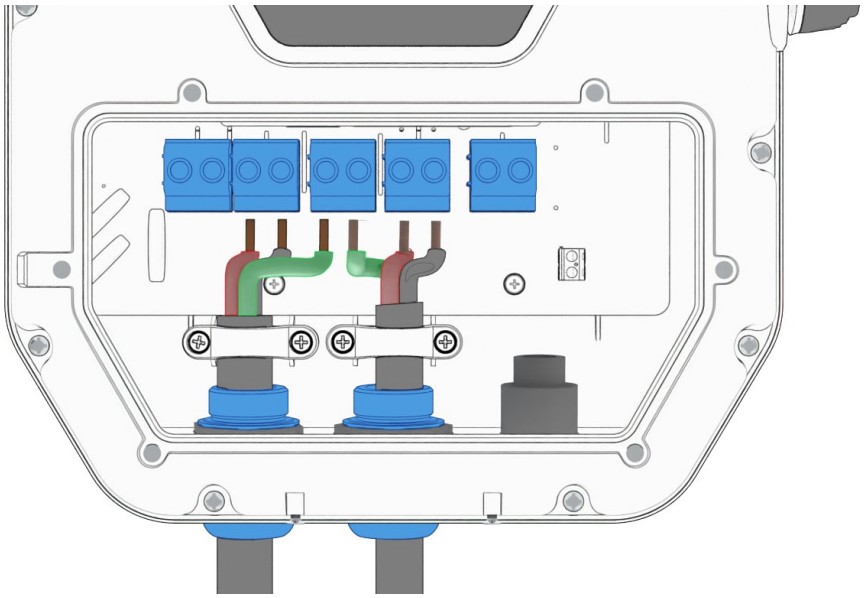
Procedure

1. Remove the maintenance cover.
2. Install the AC input cable.
   - Insert the AC input cable.
   - Connect the AC input cable.
3. Install the Ethernet cable.
   - Insert the Ethernet cable.
   - Connect the Ethernet cable.
4. If you want to use the internet, insert the M2M SIM card.
5. If necessary, replace the EV charge cable.
6. Install the maintenance cover.

7.2 Insert the AC input cable

Preliminary requirements





Procedure

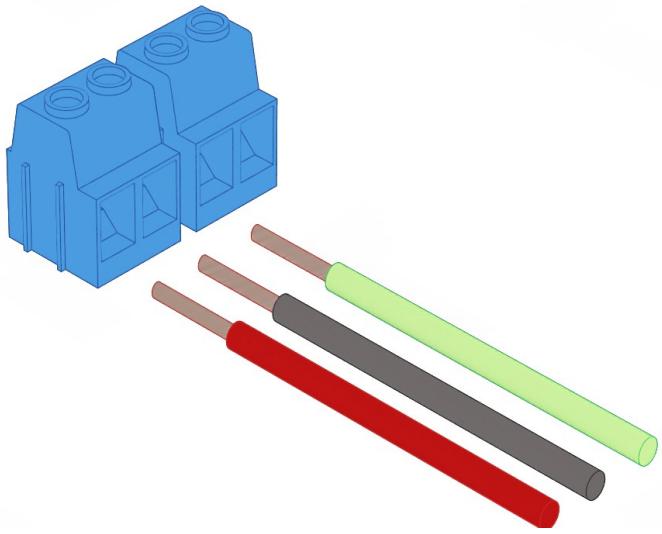
1. Loose the cable gland.
2. Pass the cable through the gland.
3. Tight the cable gland

7.3 Connect the AC input cable

7.3.1 Connect the AC input cable, 1 phase

Preliminary requirements

	• Torque screwdriver		• AC input cable (1 phase)



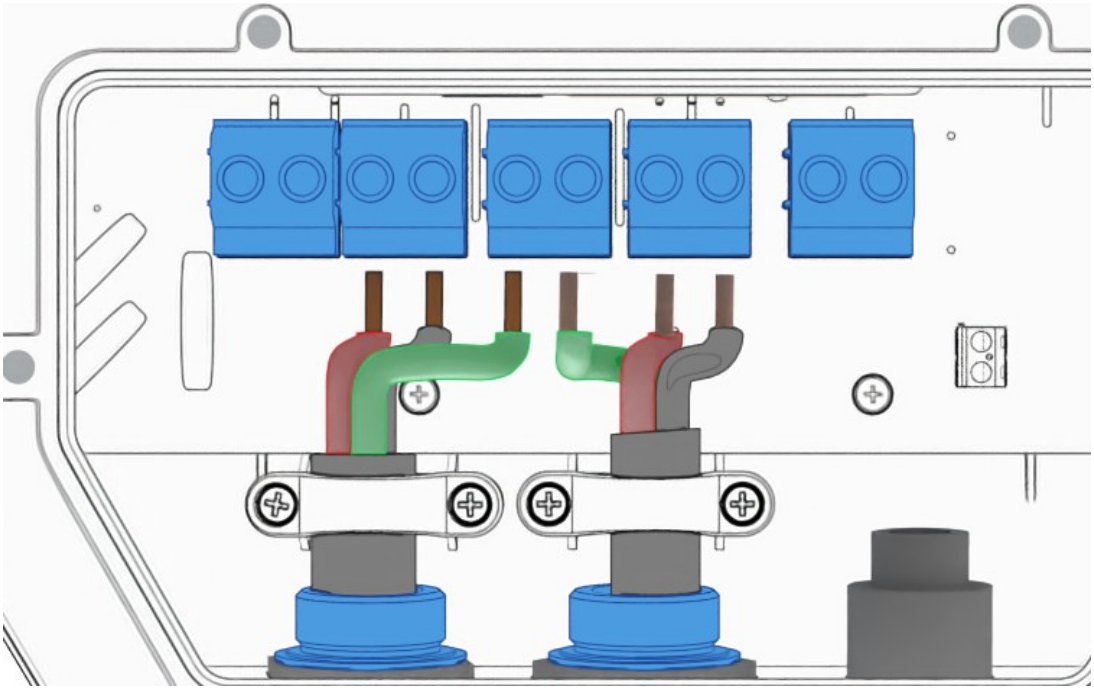
Procedure :

1. Loosen the screws.
2. Strip the wires.
3. Insert the cable connector into the terminal block.
4. Connect the below wires:
   1. Earthing wire
   2. Neutral wire
   3. AC input wire
5. Tighten the screws to the correct torque.

7.3.2 Secure the cables

Preliminary requirements

	• Torque screwdriver		• Strain relief for the cable



Procedure

1. Secure the cables with the strain relief.

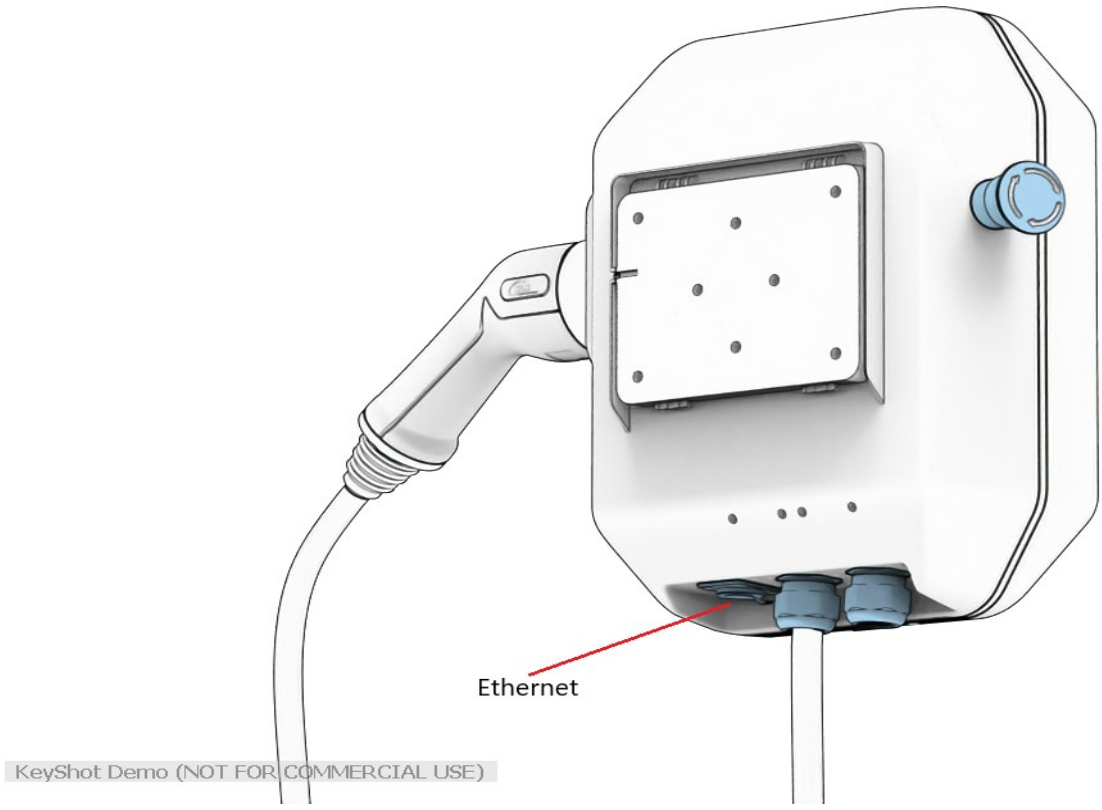
2. Install the two screws of the strain relief.

7.4 Communication connections

7.4.1 Insert the Ethernet cable

Preliminary requirements

1. The cabinet cover is removed. Refer to section 9.1.
2. The maintenance cover is removed. Refer to section 9.3.



Procedure

1. Remove the grommet from the EVSE.
2. Make a hole in the center of the grommet.
3. Install the grommet.
4. Put the Ethernet cable through the cable inlet hole.

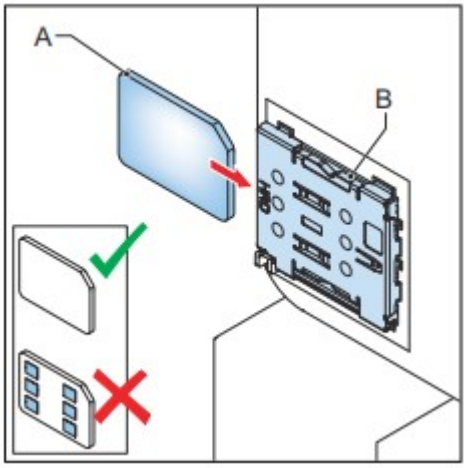
7.4.2 Insert the Nano-M2M SIM card

Preliminary requirements

	• A Nano-M2M SIM card from the provider of the mobile network. Refer to section 11.12.

Procedure

1. Insert the M2M SIM card (A) into the socket (B). Make sure that the position of the connection points is correct.



8 Commissioning

8.1 General commissioning procedure

Preliminary requirements

	• Mobile device

Warning: Only use this commissioning procedure for domestic use of the EVSE and commissioning with the *eCarger* app. For all other methods of commissioning, do not do the commissioning. Contact your local representative of the manufacturer.

Procedure

1. Download the *eCarger* app.
   - For an Android OS mobile device, go to Google Play Store.
   - For an iOS mobile device, go to Apple Store.

2. Energize the EVSE.
3. Set up the EVSE.

8.2 Energize the EVSE

1. Turn on MCB to supply the power to the EVSE.

Warning:
Hazardous voltage

- Be careful when you work with electricity.
- The power supply comes on.
- A series of self-checks start, to make sure that the EVSE works correctly and safety.
- If the EVSE detects a problem, red LED turn on.

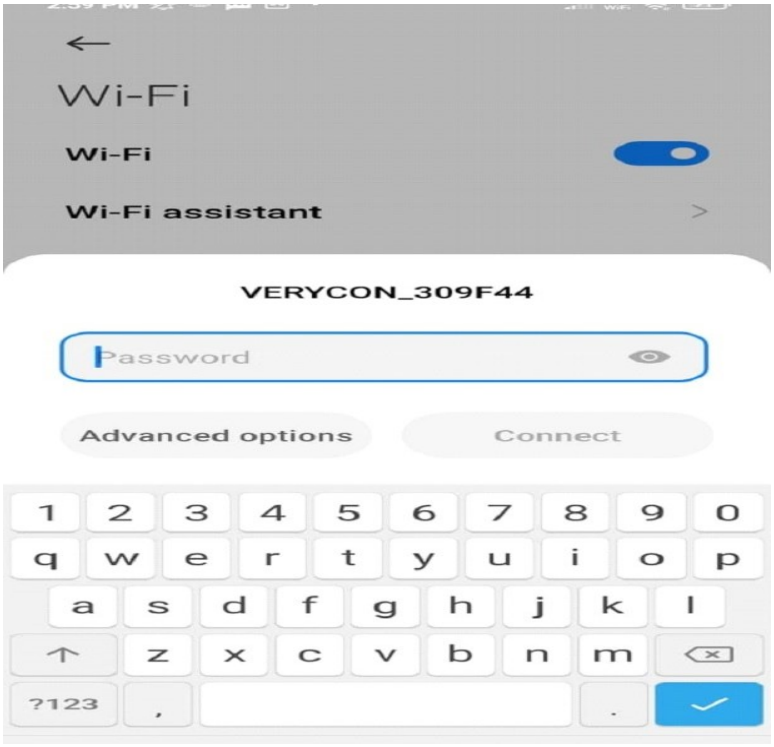
Commissioning

- It was based on two ways of Commissioning.

(1) Online configuration
(2) Offline configuration

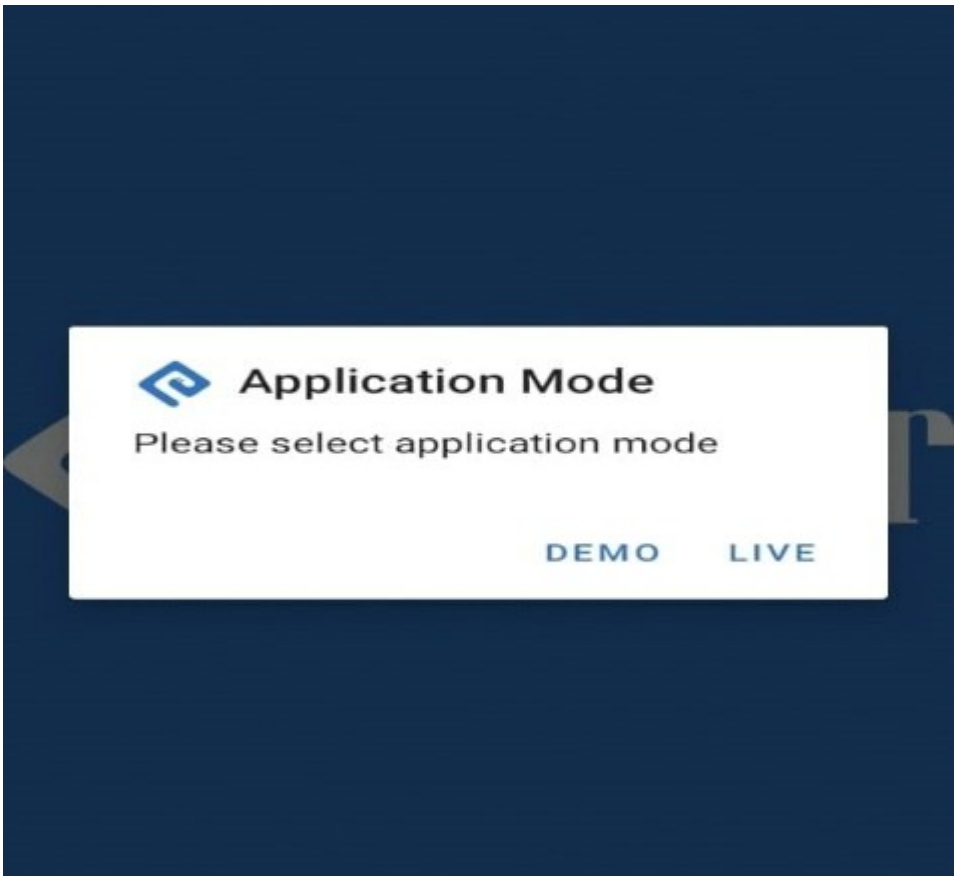
Commissioning steps via eCargar Application.

First Turn on the Mobile Wi-fi then you can see VERYCON_XXXXX Wi-fi on screen then connect it by password. Password will be given by manufacture. After entering the password Wi-fi connected with your Phone. Below figure show verycon controller connected with your phone via Wi-fi.



• Open eCargar application

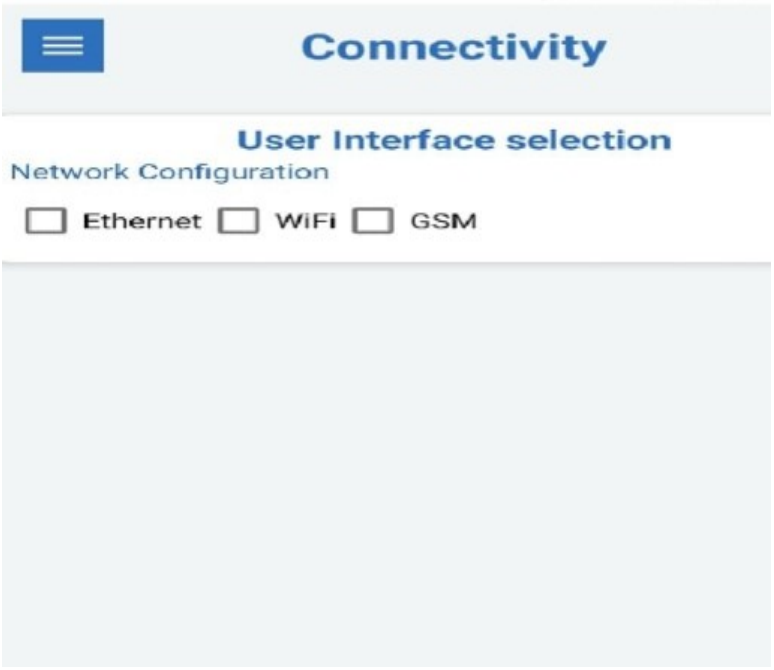
• Select Live mode



Connectivity

• Application asks for authentication Password. after enter password it will redirect to connectivity section for network configuration it will choose any of three for internet connection prefer based on Internet connectivity available.

a. Ethernet
b. Wi-Fi
c. GSM card



(a) Ethernet

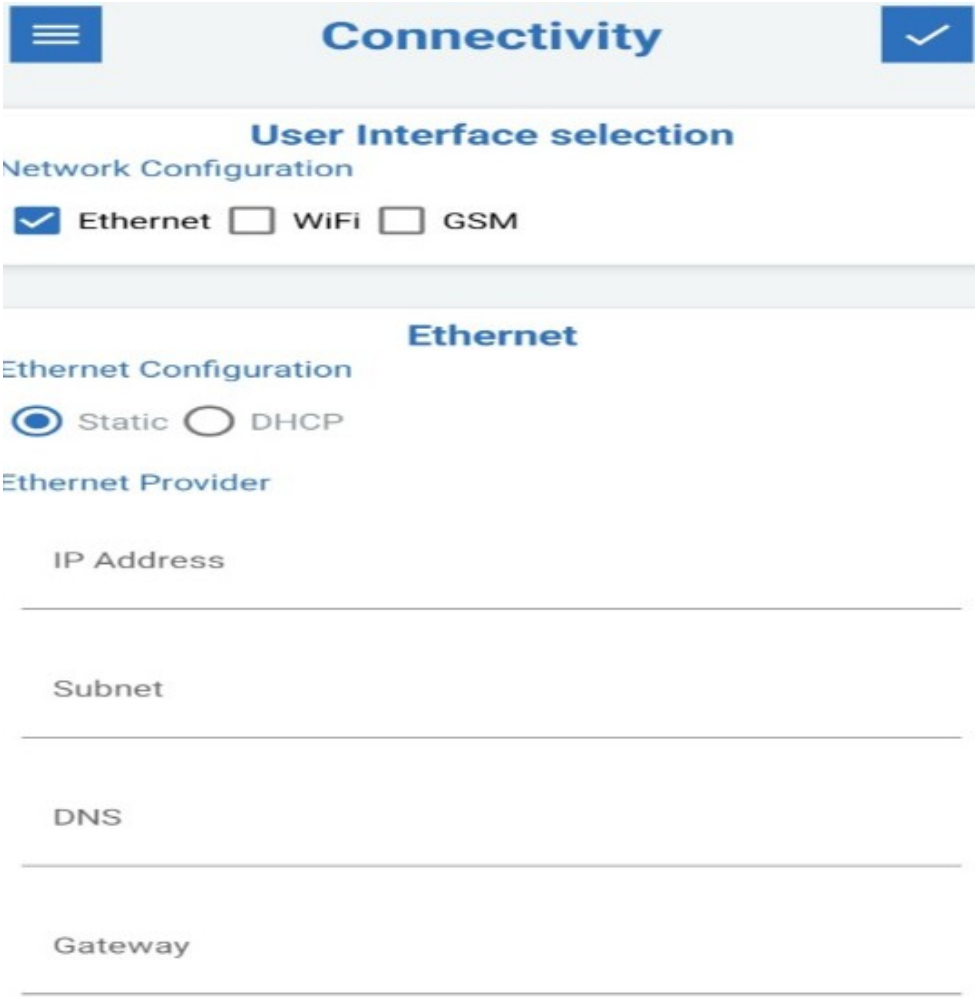
if you select Ethernet then connect Ethernet cable to your Charger panel shown in below figure.

After the connect Ethernet cable select Ethernet option in connectivity.

For Ethernet configuration there are two option **(1) static and (2) DHCP**

(1) Static

If you select static option then fill the following data (1) IP Address (2) Subnet (3) DNS and (4) Gateway Following figure show it.

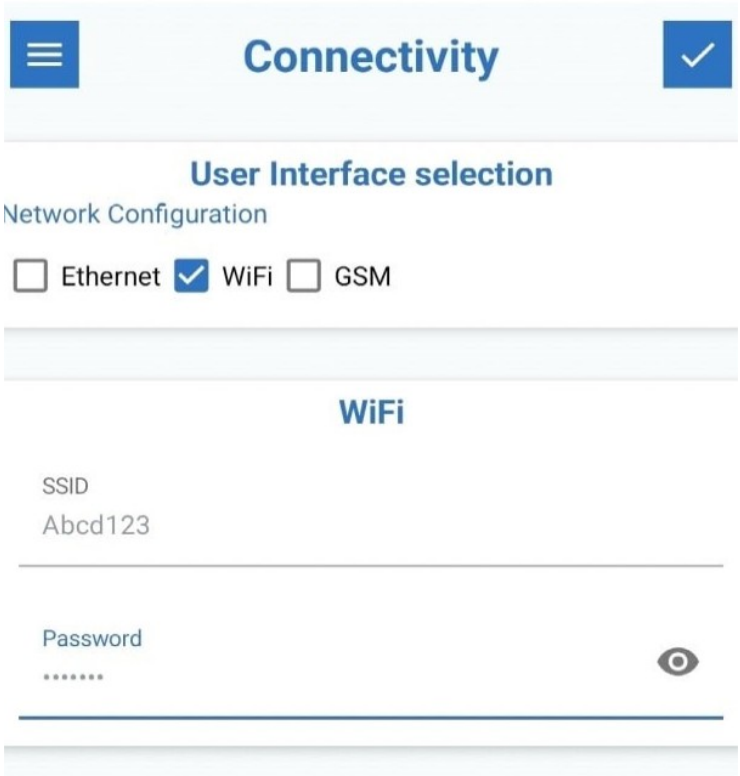


(2) DHCP

If you select DHCP then It is used on Internet Protocol networks and automatically assigns an IP address to the devices connected to the network using a client-server architecture. Following figure show it.

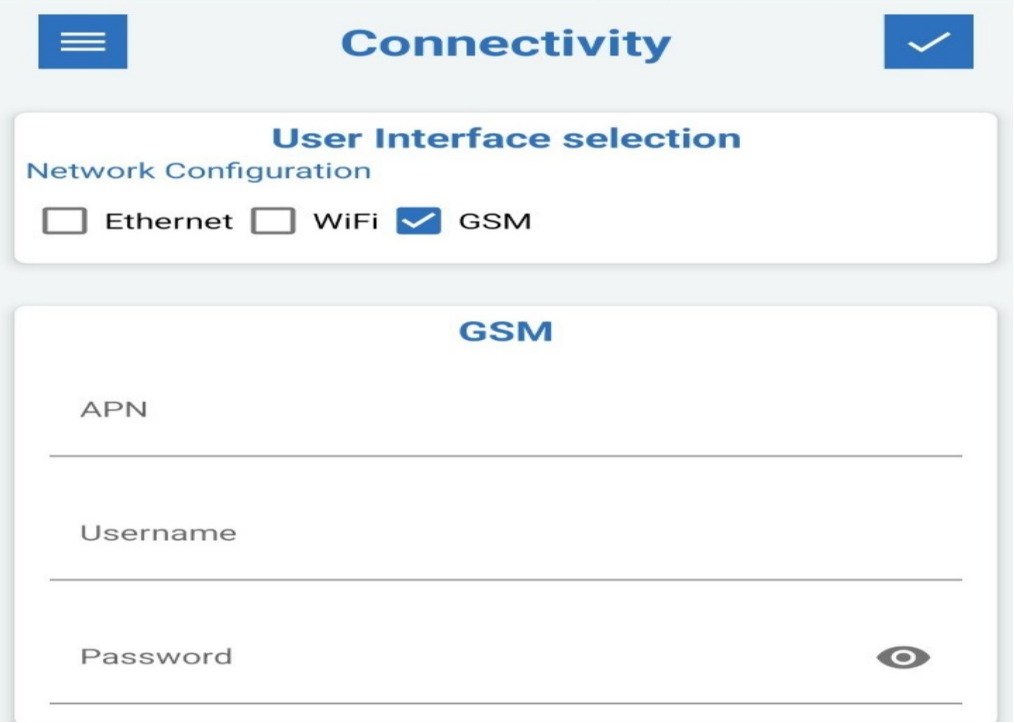
(b) Wi-Fi

if you select Wi-Fi option then write SSID number and Password from connected Wi-Fi shown in below figure.



(C) GSM

if you select GSM card then insert GSM card in GSM socket and write Access point name in APN option then write Username and password for connectivity by GSM card.

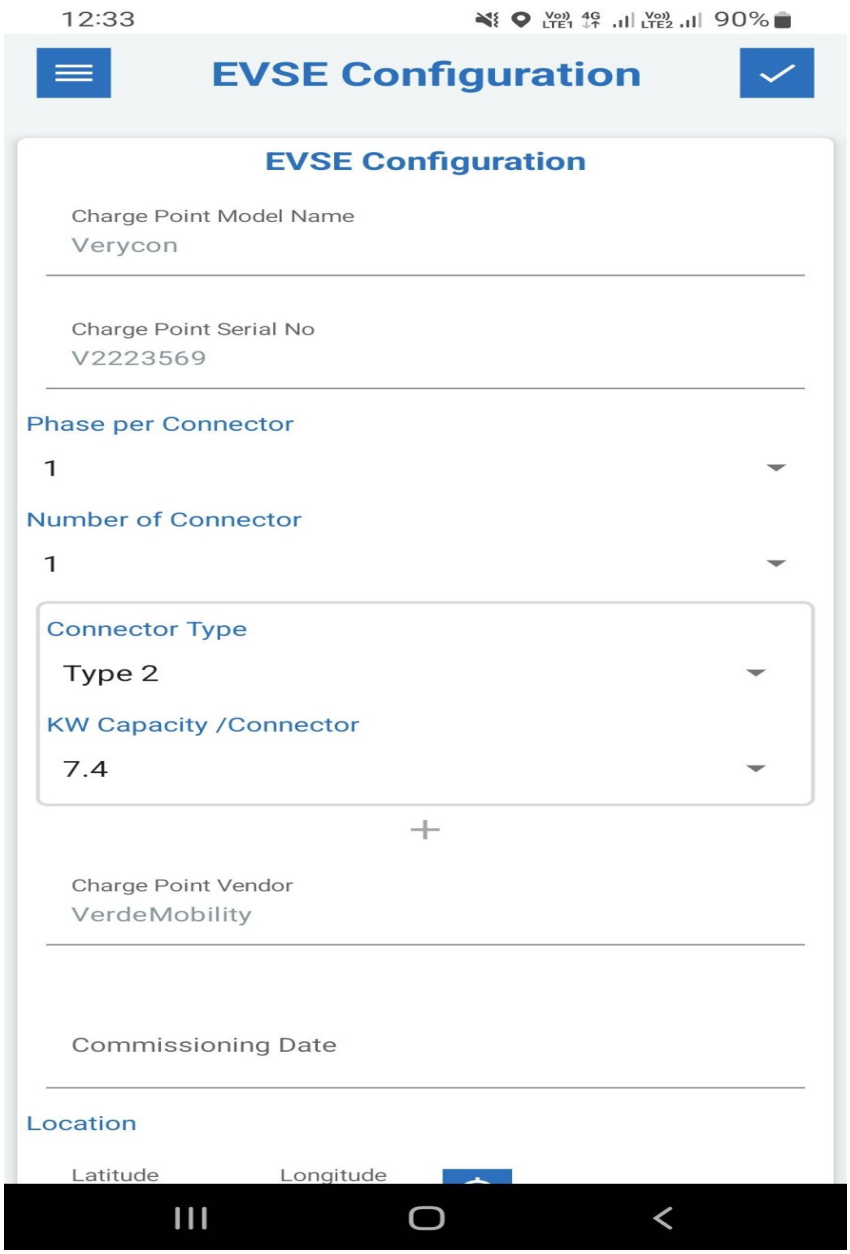


- **Energy calibration**

It will show the value of each Phase of voltage, current and energy shown in below figure.

• **EVSE configuration**

a. write Kispra AC Compact Charger in charge point model name.
b. write the charge point Sr. no from Controller board.
c. select phase per connector if 1 phase then select 1 if 3 phase then select 3.
d. Number of connectors select according number of connector available on charger from 1 to 3. we have Ksipra AC Compact Charger so we have selected 1 connectors. one for Type2 connector capacity of 7.4KW.

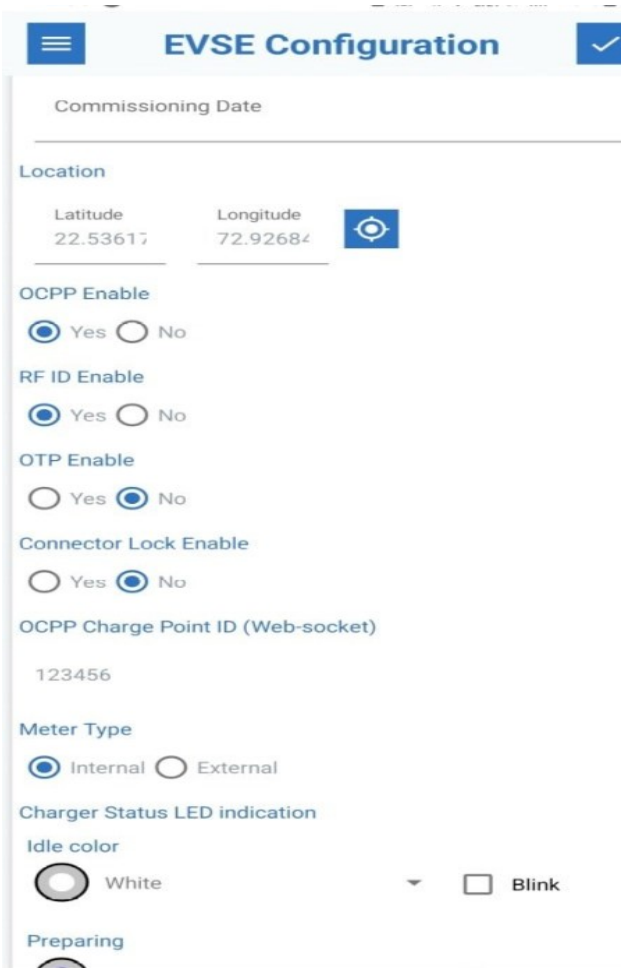


e. Write commissioning date.
f. Location auto detected from eCargar application.

Above all steps are same for online configuration and offline configuration in eCargar app.

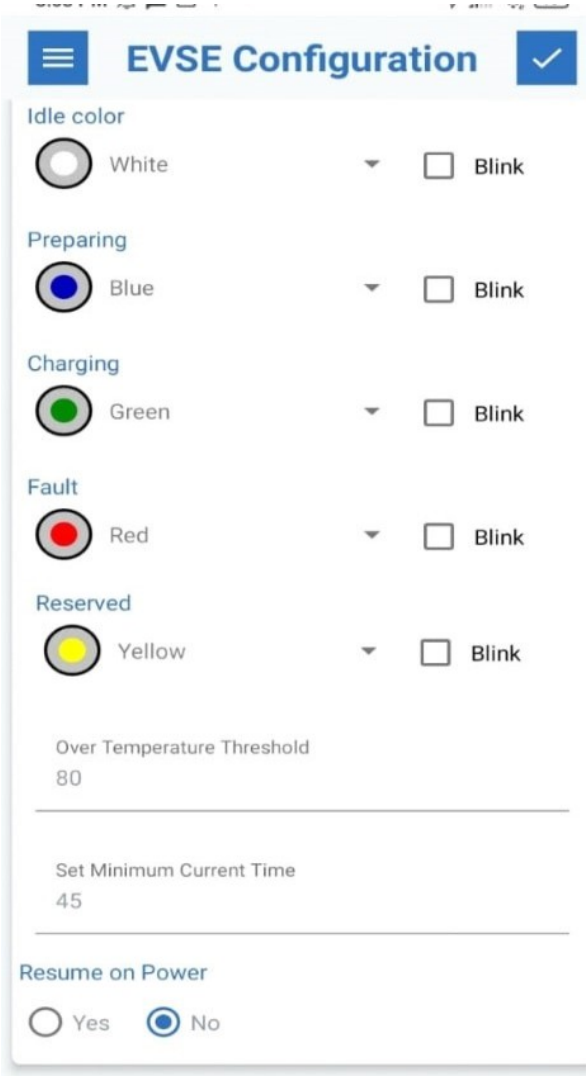
(1) Online configuration

- Select Yes in both OCPP Enable and RF ID Enable for online configuration.
- OTP Enable option select for your requirement.
- Select NO for Connector Lock Enable for online configuration.
- Select Internal meter type.



- Different LED indicator colour shown different status of charger.

a. For Idle condition for LED indicate White colour.
b. When charger will ready after Commissioning then LED indicate blue colour it’s a preparing condition.
c. After the RFID card taped on screen after few seconds charger start the charging and LED indicate green colour.
d. LED indicate red colour when any fault occurs in charger for examples High voltage, Leakage current high, Emergency switch push etc.
e. Reserved for Yellow colour.



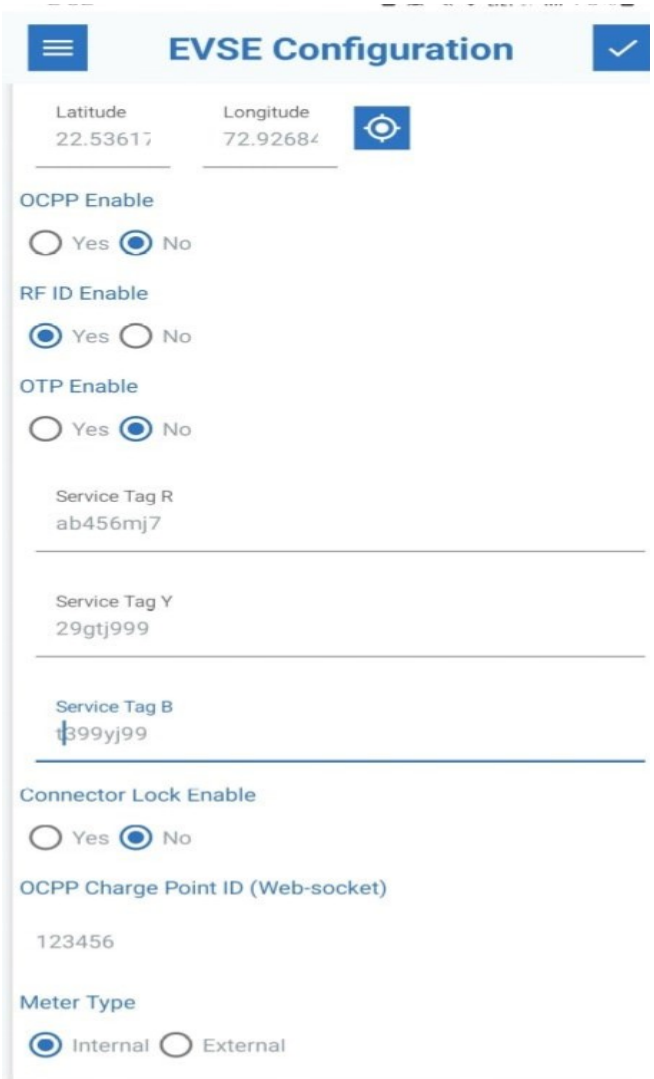
• Over Temperature Threshold set at 80. charger automatically off condition if Threshold temperature reach to 80.
• set Minimum current time set to 45.
• Resume on Power select for your according requirement after the all data fill up right hand side on top end corner select Right sign for final configuration.

(2) Offline configuration divided into two parts.

a. Local RFID
b. Plug and Play

(a) Local RFID

• only one change needed NO select in OCPP Enable and YES select in RF ID Enable in EVSE configuration for offline configuration shown in following figure.

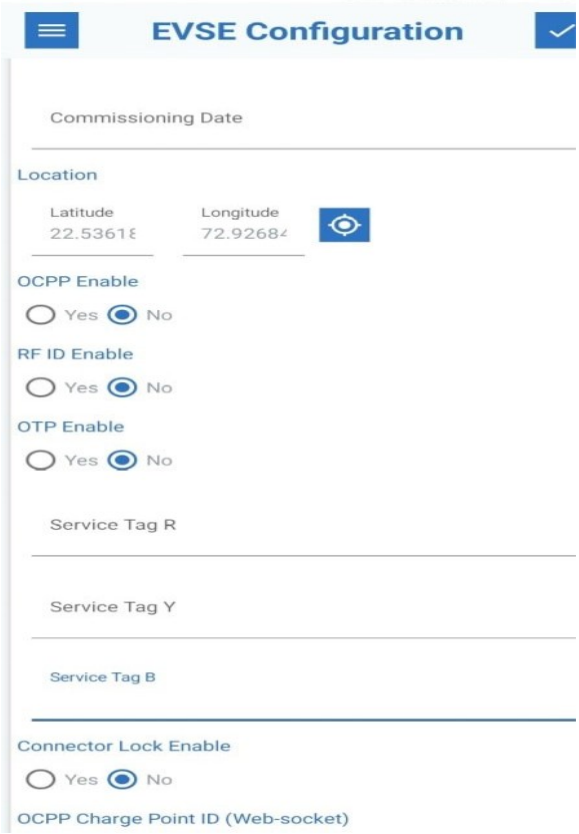


• OTP Enable option select for your requirement.

• Select NO for Connector Lock Enable for online configuration.
• write service tag code 8 digit from RFID card. every connector has separate RFID card so write every 8-digit RFID code in each service tag code.
• swipe your card to activate. Contactless card-based chargers, activate by tapping your card. start charging using your phone via eCargar Application.

(b) Plug and Play

• All the steps are same as above only one change needed only NO select in OCPP Enable, RF ID Enable and OTP Enable in EVSE configuration.
• No data write in service Tag R, service Tag Y and service B for Plug and play charging. Below figure show EVSE configuration for plug and play charging.

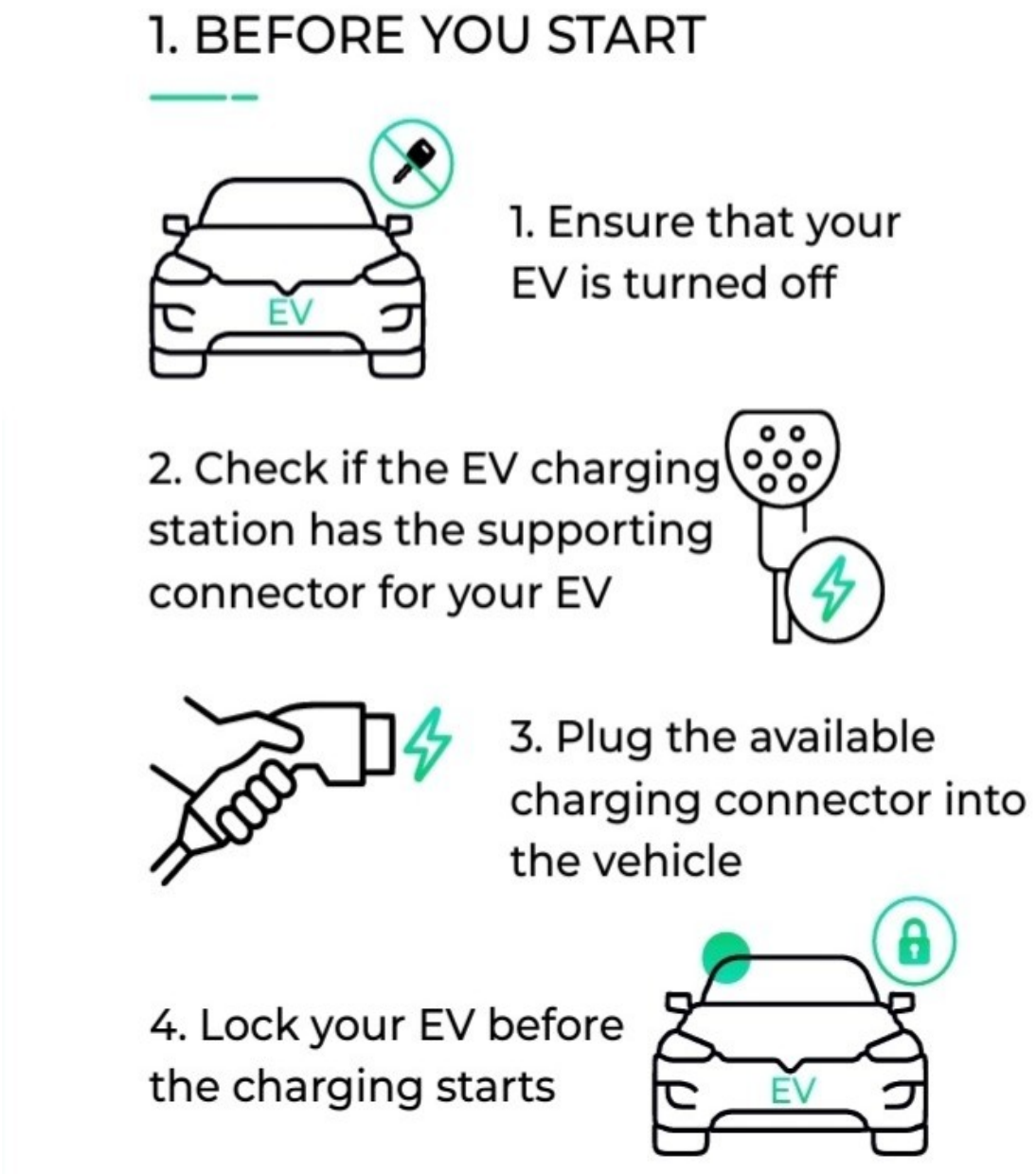


• In Plug and Play charging simply plugged-in sockets and start the charging.

Product Features and Operation

Operation

All operational states including start/stop charging from Socket and Start/stop charging from Gun.



9 Troubleshooting

9.1 Troubleshooting procedure

1. Try to find a solution for the problem with the aid of the information in this document.
2. If you cannot find a solution for the problem, contact your local representative of the manufacturer.

9.2 Troubleshooting table

Problems	Error codes	Possible causes	Solution
1) Ethernet IP configuration failure	1	If error code 1 shows its meaning Ethernet configuration fail.	Contact with manufacturer
2) Fail to start Wi-Fi AP	2	If error code 2 shows its meaning Wi-Fi AP start to fail.	Contact with manufacturer
3) Fail to start commissioning	3	If error code 3 shows its meaning commissioning failure.	Contact with manufacturer
4) Commissioning task fail	4	If error code 4 shows its meaning commissioning task fail.	Contact with manufacturer
5) Commissioning timer creation fail	5	If error code 5 shows its meaning commissioning time over and charger not start.	Contact with manufacturer
6) File Operation fail	6	If error code 6 shows its meaning File operation fail.	Contact with manufacturer
7) Memory fail	7	If error code 7 shows its meaning memory fail.	Contact with manufacturer
8) Power failure	8	If error code 8 shows its meaning Power not available in input side charger.	1.If a power failure from DESCOM then wait for power resume. 2.If a power supply continues from DESCOM side and not occurs at MCB input side then check the input supply cable from grid connection to MCB input connection.

9) Ethernet lost IP	10	If error code 10 shows its meaning Ethernet lost IP	Check Ethernet cable and contact with internal network team.
10) Wi-Fi SSID/Password is NULL	12	If error code 12 shows its meaning wi-fi SSID/password shown to NULL.	Re-configuration using eCargar application and provide proper SSID/Password of Wi-Fi router.
11) Wi-Fi STA disconnect	13	If error code 13 shows its meaning wi-fi STA disconnect	Check the Wi-Fi router connectivity.
12) Wi-Fi STA lost IP	14	If error code 14 shows its meaning Wi-Fi loses its IP	Check the Wi-Fi router connectivity and contact with internal network team.
13) Ethernet stack memory allocation fail.	15	If error code 15 shows its meaning Ethernet stack memory allocation fail.	Contact with manufacturer
14) Ethernet cable is disconnected	16	If error code 16 shows its meaning Ethernet disconnect	Check Ethernet cable connected or not.
15) Ethernet is disconnected with network	17	If error code 17 shows its meaning Ethernet not connected with network	If Ethernet is connected then check router/switch connection.
16) GSM task allocation memory fail.	18	If error code 18 shows its meaning GSM task allocation memory fail.	Contact with manufacturer
17) GSM module communications error.	19	If error code 19 shows its meaning GSM module communications fail	Contact with manufacturer
18) GSM sim is not present.	20	If error code 20 shows its meaning GSM sim is not present	Please check GSM sim insert or not.
19) APN validation fail.	21	If error code 21 shows its meaning APN validation fail.	Contact with GSM sim card Provider.
20) GSM not connected with network	22	If error code 22 shows its meaning network loss with GSM	Check Network connectivity and Internet connectivity.
21) GSM IP lost.	23	If error code 23 shows	Check Network connectivity and

		its meaning GSM lost its IP	Internet connectivity.
22) Not able to initialize MODBUS if external meter is selected	27	If error code 27 shows its meaning Not able to initialize MODBUS if external meter is selected	Check the meter RS485 connection.
23) Not able to read from MODBUS meter in case of verycon1	28	If error code 28 shows its meaning Not able to read from MODBUS meter in case of verycon1	Check the meter RS485 connection.
24) Verycon1 product is selected but external meter is not set	29	If error code 29 shows its meaning Verycon1 product is selected but external meter is not set	Re-configuration using eCargar application again and set proper meter parameter.
25) Fail to read/write from LCD	30	If error code 30 shows its meaning Fail to read/write from LCD	Contact with manufacturer
26) Ping fails and packets received/lost information	31	If error code 31 shows its meaning Ping fails and packets received/lost information	Check the internet connectivity.
27) Problem in opening OCPP related files	32	If error code 32 shows its meaning OCPP files not opening	Contact with manufacturer
28) Problem in writing OCPP related files	33	If error code 33 shows its meaning OCPP files not write	Contact with manufacturer
29) Invalid WebSocket URL	34	If error code 34 shows its meaning WebSocket URL Invalid.	Re-configuration using eCargar application and provide proper URL with port no.
30) GPIO operation failed	35	If error code 35 shows its meaning GPIO operation failed.	Contact with manufacturer
31) Connector lock failure 1	39	If error code 39 shows its meaning connector does not work.	Check the solenoid lock and lock connection.
32) Ev communication error 1	40	If error code 40 shows its meaning Vehicle not start charging	Check connection of PP and CP wires.

33) Internal Error 1	41	If error code 41 shows its meaning internal error of charger	Contact with manufacturer
34) Over current 1	42	If error code 42 shows its meaning There is an overload on the EV side.	1.. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly
35) Over Voltage 1	43	If error code 43 shows its meaning input voltage AC side too high	1.Check the input voltage from the back-end. 2.If the voltage is higher than 264Vac for a limited period of time, wait for grid to re-establish an adequate voltage value.
36) Power meter failure 1	44	If error code 44 shows its meaning, a problem occurs in the power meter	
37) Under voltage 1	45	If error code 45 shows its meaning a problem occurs due to low voltage at input terminals end	1.shutdown equipment when under voltage occurs preventing damage. 2. Check Input voltage at MCB side.
38) Connector lock failure 2	46	If error code 46 shows its meaning connector does not work.	Check the solenoid lock and lock connection.
39) Ev communication error 2	47	If error code 47 shows its meaning Vehicle not start charging	Check connection of PP and CP wires.
40) Internal Error 2	48	If error code 48 shows its meaning internal error of charger	Contact with manufacturer
41) Over current 2	49	If error code 49 shows its meaning There is an overload on the EV side.	1.. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly
42) Over Voltage 2	50	If error code 50 shows its meaning input voltage AC side too high	1.Check the input voltage from the back-end. 2.If the voltage is higher than 264Vac for a limited period of time, wait for grid to re-establish an adequate voltage value.

43) Power meter failure 2	51	If error code 51 shows its meaning, a problem occurs in the power meter	
44) Under voltage 2	52	If error code 52 shows its meaning a problem occurs due to low voltage at input terminals end	1.shutdown equipment when under voltage occurs preventing damage. 2. Check Input voltage at MCB side.
45) Connector lock failure 3	53	If error code 53 shows its meaning connector does not work.	Check the solenoid lock and lock connection.
46) Ev communication error 3	54	If error code 54 shows its meaning Vehicle not start charging	Check connection of PP and CP wires.
47) Internal Error 3	55	If error code 55 shows its meaning internal error of charger	Contact with manufacturer
48) Over current 3	56	If error code 56 shows its meaning There is an overload on the EV side.	1.. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly
49) Over Voltage 3	57	If error code 57 shows its meaning input voltage AC side too high	1.Check the input voltage from the back-end. 2.If the voltage is higher than 264Vac for a limited period of time, wait for grid to re-establish an adequate voltage value.
50) Power meter failure 3	58	If error code 58 shows its meaning, a problem occurs in the power meter	
51) Under voltage 3	59	If error code 59 shows its meaning a problem occurs due to low voltage at input terminals end	1.shutdown equipment when under voltage occurs preventing damage. 2. Check Input voltage at MCB side.
52) High Temperature	60	If error code 60 shows its meaning temperature inside the charger it's too high	1.Do a check of the operation temperature on the product label. If the ambient temperature is too high, the EVSE will decrease the output

			current automatically. 2. If it is necessary, install the EVSE in an environment with a lower ambient temperature. 3. Make sure that the voltage from the grid is not more than specified. 4. If you cannot solve the problem, do not use the EVSE. Contact your local company representative or a qualified electrical contractor 5. Check proper ventilation available or not. 6. set Threshold temperature at 80*c in eCargar application.
53) Emergency stop	61	If error code 61 shows its meaning, the charger does not start	Check the Push button (Mushroom Red) On or Off.
54) Wi-Fi signal weak	65	If error code 65 shows its meaning signal not connected with Wi-Fi	Contact the internet network provider team.
55) GSM signal weak	66	If error code 66 shows its meaning signal not connected with GSM	Contact the internet network provider team.

9.3 De-energize the EVSE

1. Turn off MCB that supplies the power to the EVSE.
2. Wait for minimum 1 minute.

10 Technical data

INPUT POWER	
Input Voltage (AC)	230 Vac +10% or -6%
Input Frequency	50Hz
Wires	Single Phase
OUTPUT POWER	
Output Connector	Type 2 AC (IEC 62196-2)

Number Output	1
Output Current	32A Max Per output
Output Rating	240 Vac
ENVIRONMENT	
Ambient Temperature	0*C to 55*C
Storage Temperature	-20*C to 60*C
Altitude	<2000 mtr
Humidity	5% to 95%, non-condensing
USER INTERFACE AND CONTROL	
Display	4.3inch Graphical LCD
Language	English
Push Button	Emergency Stop (Mushroom Red)
User Authentication	Using Mobile Application or User Interface/ QR Code/ RFID Card/ Password Login
Visual Indication	RGB LEDs
RFID Specifications	RC 522 RFID Reader ISO/IEC 14443A/MIF ARE
PROTECTION	
Protection	Over Current, Under Voltage, Over Voltage, Residual Current, Surge Protection, Short Circuit, Ground Fault Protection, Emergency Shutdown with Alarm, Over Temperature, Protection Against Electric Shock
COMMUNICATION	
Connectivity and CMS	OCPP v 1.6 over 10/100 Base-T Ethernet (Standard), GSM Modem (4G) and Wi-Fi
Charger and Vehicle	Type 2 AC as per IS 17017
MECHANICAL	
IP Rating	IP 54
Shell Material	CRCA Sheet
Cooling	Natural Cooled
Product Dimension(L*W*H)	306mm*134mm*350mm

Certification	ARAI Certified
Product Weight	26kgs
PRODUCT PACKAGING WEIGHT	
Wooden Box	Additional 6-7 kgs
Corrugated Box	Additional 2-3 kgs

Note: If the above problems cannot be solved, please contact the Manufacture.