

WALLBOX APACHE T2TC - T2TS



Manual installation - maintenance - use

v3

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INTRODUCTION

This manual contains all the necessary information for the safe use of the **Detas EVchargers Apache** system for electric vehicle charging and will guide you to obtain the best performance and use from the system.

Our **Detas EVchargers Apache** charging stations employ the latest technology and provide the most advanced service on the EV charging market.

The **Apache wallbox** is designed to be easily installed both outdoors and in covered private parking lots, in order to charge all the EV brands on the market in MODE 3 (according to the European IEC 61851-1 standard), simply by plugging the connection cable with a type-2 connector.

SAFETY INFORMATION

- The charging station must not be installed in areas with a risk of explosions.
- The charging station is designed to be installed both in open and closed areas. It must always be installed safely and with suitable protections.
- In case the charging station is installed outdoors, it is recommended to employ a roof for direct protection from water.
- Do not install the charging station in areas where it can be damaged by falling objects.
- The wall surface where the charging station will be positioned must withstand the mechanical forces to which it is subjected.
- Do not employ this charging station for purposes other than electrical vehicle charging uses indicated in the IEC 61851 standard.
- Do not modify the unit. In case of modifications, **Detas EVchargers** will reject all responsibility and the warranty will become invalid.
- Follow the electrical safety standards rigorously.
- Do not attempt repairs or manipulations with the charging station connected to electricity.
- Only trained and qualified personnel has access to the low-voltage electrical components inside the device.
- Make qualified technicians only check the charging station every year.
- Remove any item with signs of damage that can be dangerous for a human (broken plugs, lids that do not close, etc...).
- Use only **Detas EVchargers** replacement parts.
- Do not use this product if the EV latch or connector is broken, cracked, open, or showing signs of damage.
- Before proceeding with the installation, make sure that the power supply voltage corresponds to the nominal one for the device and that the quality of the electricity supplied to the Station is compliant with the EN50160 standard.
- Install surge protective devices with an earth connection in the main power switchboard, as prescribed by the installation zone according to the EN62305-1/4 standard.



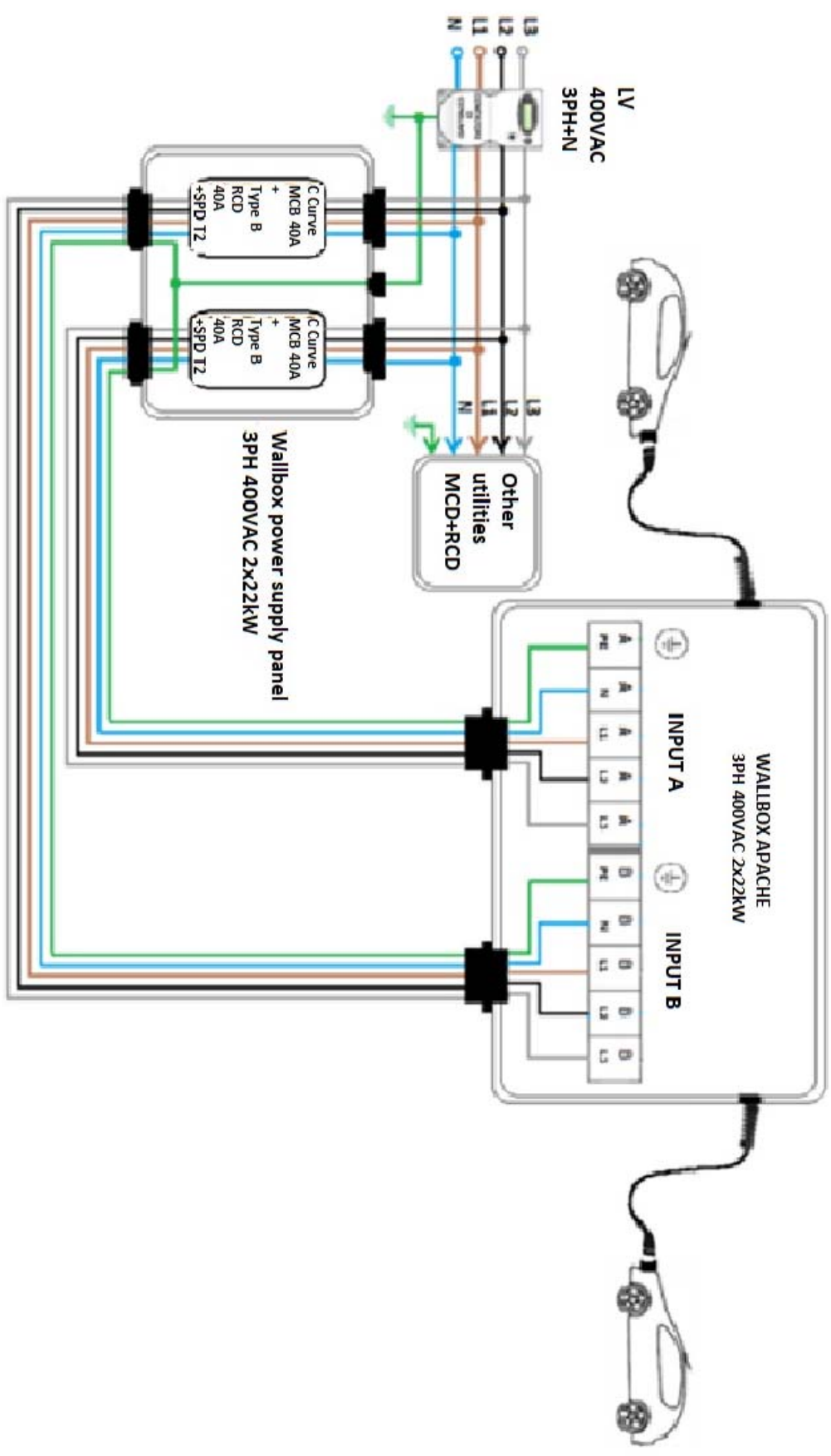
Before proceeding, read the instructions carefully to ensure a correct installation of the charging station.

The Apache Wallbox installation must be performed only by qualified personnel. During the installation and/or maintenance operations, remove input power and use protective gloves and goggles.

Preliminary operations (warnings)

1. Before proceeding with the Apache WB installation, make sure that the power supply voltage corresponds to the nominal one, and that the quality of the supplied electricity is compliant with the EN50160 standard.
 2. Install surge protective devices with an earth connection in the main power switchboard as prescribed by the installation zone according to the EN62305-1/4 standard.
 3. At the end of the installation, use an appropriate instrument to verify the earth connection's correctness.
 4. Make sure that the Station is installed in an area with GSM network coverage or a Wi-Fi connection. It is a necessary condition for a correct product's operation.
-
1. Full protection via 30mA B-type residual current breakers (RCD) for each output (A and B sides) is integrated within the charging station, so no breaker is necessary in the power switchboard.
 2. It is compulsory to follow the schematics below during the installation process.

WALLBOX



Note: The Wallbox need to be connected

Features

The Apache station can be configured with spiral cables and connectors or sockets with shutter, up to 2x22kW. The charging station's connectors comply with the EN 62196 standard.

High quality materials ensure a long lifespan and withstand the most harsh environments.

The wide frontal side is suitable for graphical design customization with client's labels. On request, the station can be provided with OCPP1.6 control.



Technical details

Specifications

Supply voltage: three-phase with neutral 400VAC \pm 10% 50/60Hz (L1, L2, L3, N, PE)

Mechanical resistance: IK10

Protection degree: IP54

Housing material: Stainless Steel SS304

Operating temperature: from -30°C to +45°C

Storage temperature: from -40°C to +60°C

Operating humidity: from 5% to 95% without condensation

Signaling: RGB color indicator

Network connection: GSM/ WiFi

Payments enabled: on request

Front lock: key







Charging control: Mode 3 according to IEC 6181

Dimensions : 344 x 254 x 183 mm

Weight : 6 kg





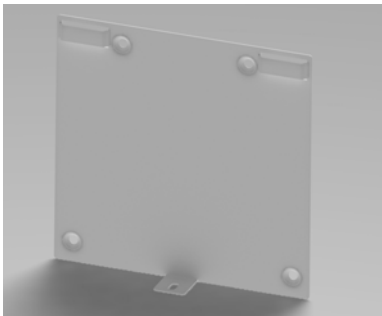
MECHANICAL INSTALLATION

NOT INCLUDED INSTRUMENTS REQUIRED FOR THE INSTALLATION

N.1 Flat screwdriver	N°1 Phillips screwdriver	N°1 Electric drill	N°1 Electric screwdriver	N°1 wall drill D12mm	N°4 M6 Fischer
					

INCLUDED OPTIONAL ACCESSORIES

According to the customized choice, you will find a type2 cable connection or a T2 socket

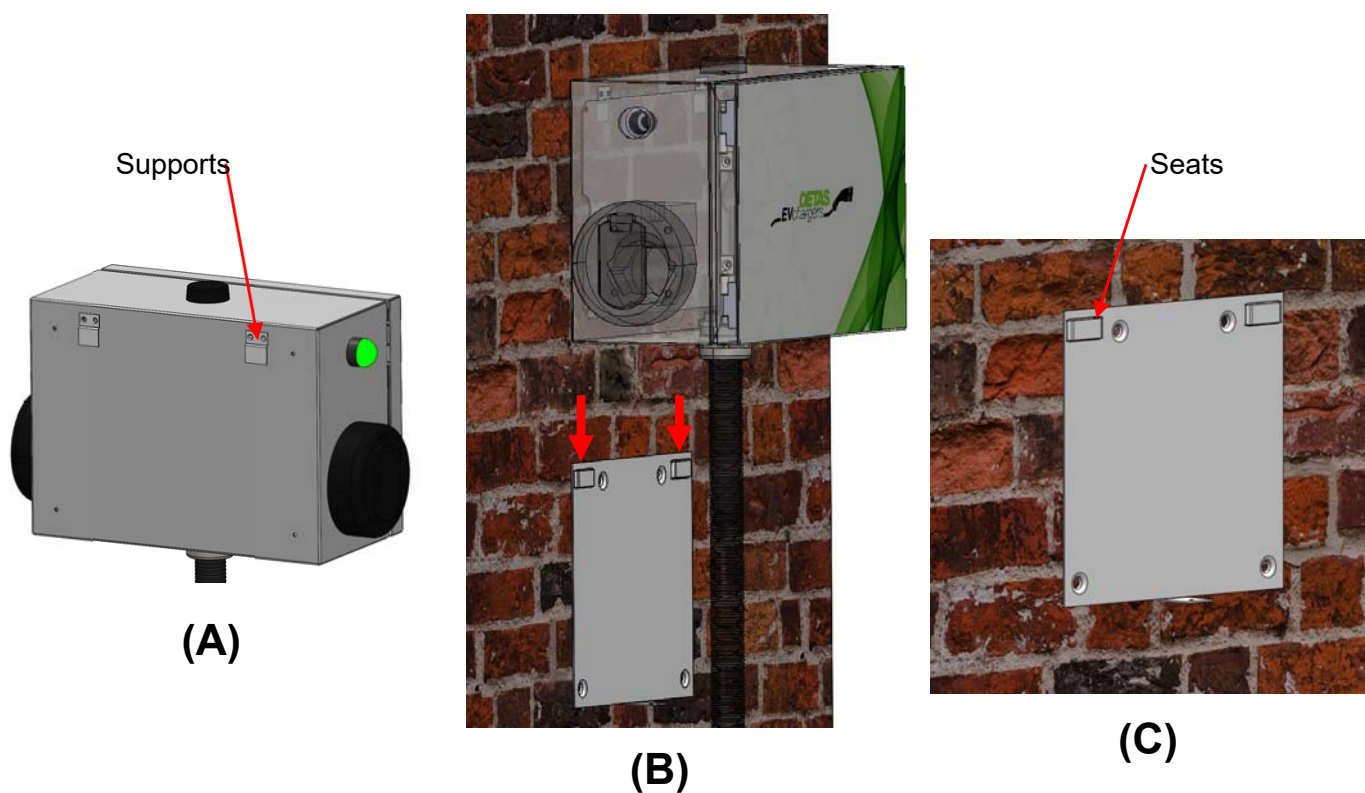
SS wallbox body	T2 socket with shutter / 5mt cable with type 2 connector	M4 screw For safety wall bracket	Door key	Wall bracket
				
N°1	N°2	N°1	N°3	N°1

Installation procedure:

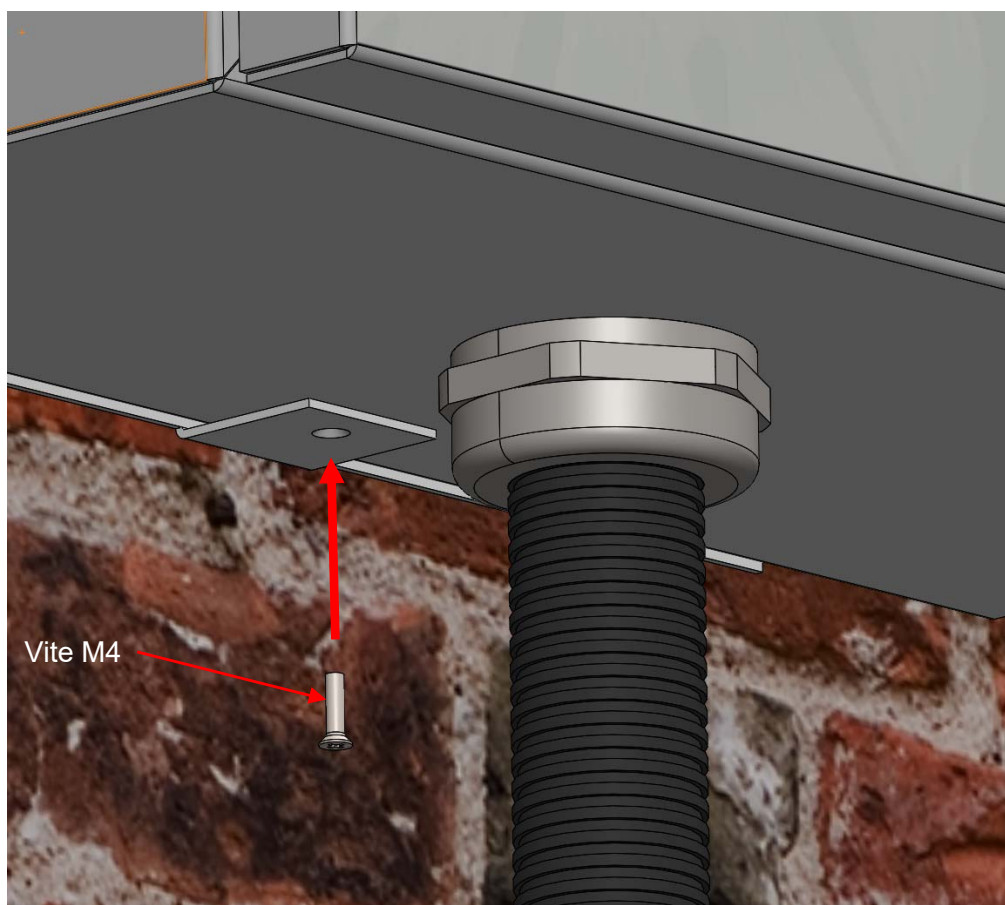
- 1) Drill holes for M6 steel dowel with D6mm drill using the support plate for wallbox as a template for marking the holes
- 2) Remove the screws from the plugs and insert the plugs into the holes made previously.
- 3) Place the plate on the wall with the holes matching the plugs
- 4) Tighten the screws of the plugs and anchor securely (checking the correct tightness of the fastening)



Insert the wallbox rear supports (image A) by sliding the wallbox from top to bottom (image B) in the appropriate seats of the support plate (image C).

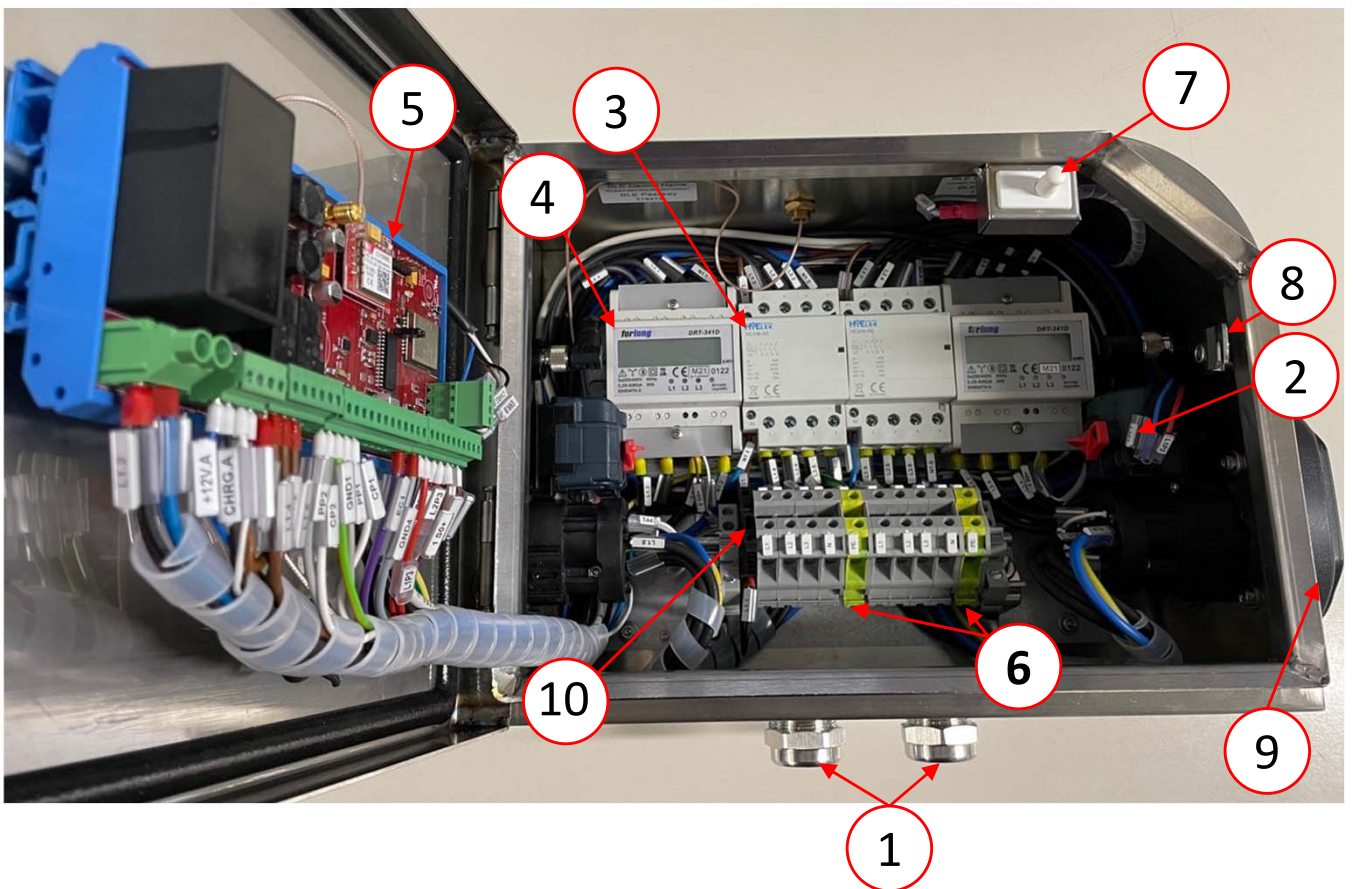


Screw the M4 countersunk screw (included in the supplied options) into the bottom of the plate to securely fix the wallbox.



COMPONENTS DESCRIPTION

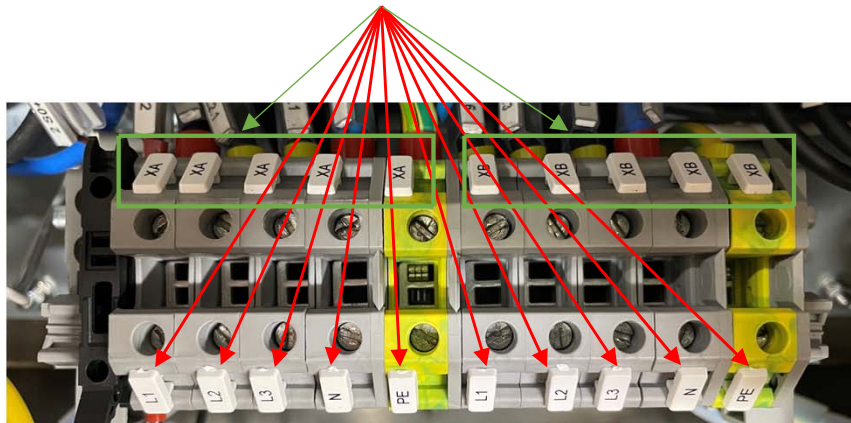
1. Cable input power
2. Interlock
3. Contactor
4. MID certified meter
5. Control board
6. Input terminal blocks L1, L2, L3, N, PE.
7. Safety switch
8. Door lock
9. Socket or cable output
10. Fuse holder



ELECTRICAL INSTALLATION

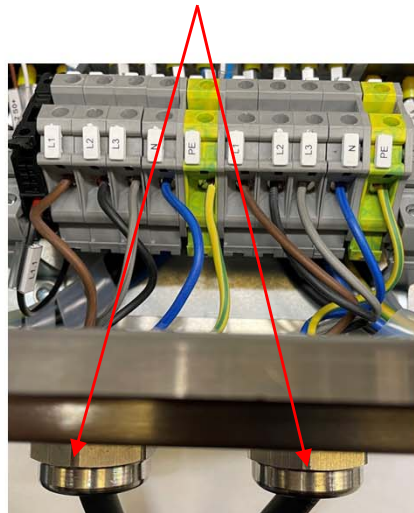
Installation procedure:

Check that all the labels of the terminals are positioned correctly (as shown in the image below) and that they have not fallen during transport

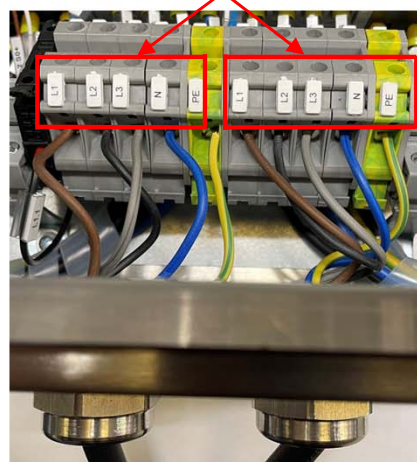


The **XA** terminal blocks power the control board and side A while the terminal blocks **XB** power side B

Route the AC power cables through the free cable glands of the wallbox.



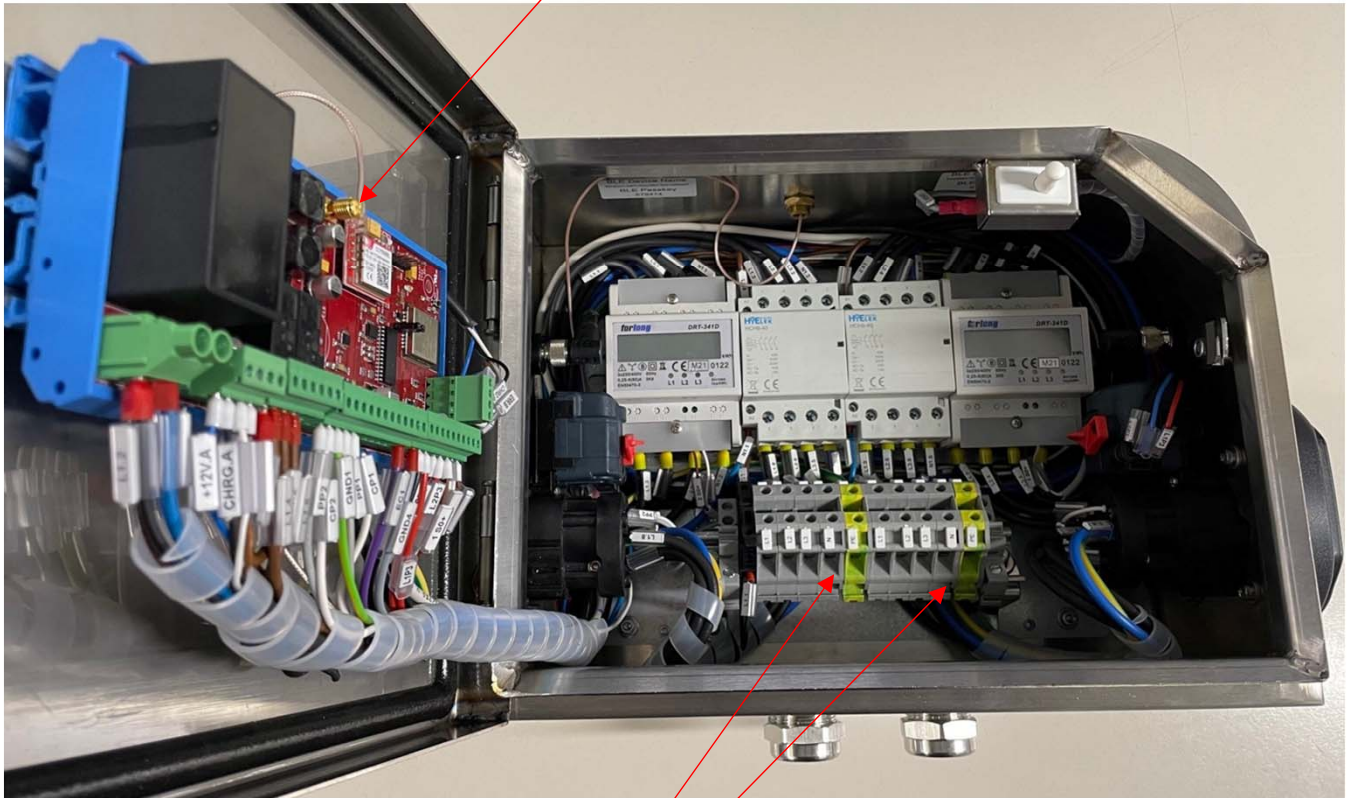
Connect the power supply cable L1, L2, L3, N, PE to the respective terminals.



The cables shown here are for example only

Note: The terminal blocks for wiring the AC power supply support cable sizes up to 16mm². If there is a considerable distance between the junction box with the relative MCB and RCD and the wallbox, it must be necessary to increase the section of the cables according to the relevant calculation.

Make sure that the antenna is correctly inserted in the appropriate connector and has not detached during transport



After connecting the power supply, check the neutral terminals to make sure they are connected correctly

Note: for the installation of the safety device upstream of the wallbox we suggest for each side:
1pc AUTOMATIC MCB SWITCH 4 POLES 400Vac 40A CURVE C, BREAKING POWER 10kAN
1pc PURE AUTOMATIC DIFFERENTIAL SWITCH (RCCB) 3 POLES + NEUTRAL 400Vac 40A
TYPE B 30mA, BREAKING POWER 10KA

Or

RCBO (Residual current operated Circuit Breaker with Overcurrent protection) 40A threephase Type B
(Detas code 5010000250)

LED INDICATION

STEADY RED LED	GREEN STEADY LED	BLUE STEADY LED
Offline / generic error	Ready to charger	Charging

CHARGING PROCEDURE

Check that the LED light indicator is green: indicates that the unit is available and ready for charging



Model with cable (plug&Charge function activated)

Conenct the **Wallbox cable** to start the charging process



Model with socket

Check that the LED light indicator is green: indicates that the unit is available and ready for charging

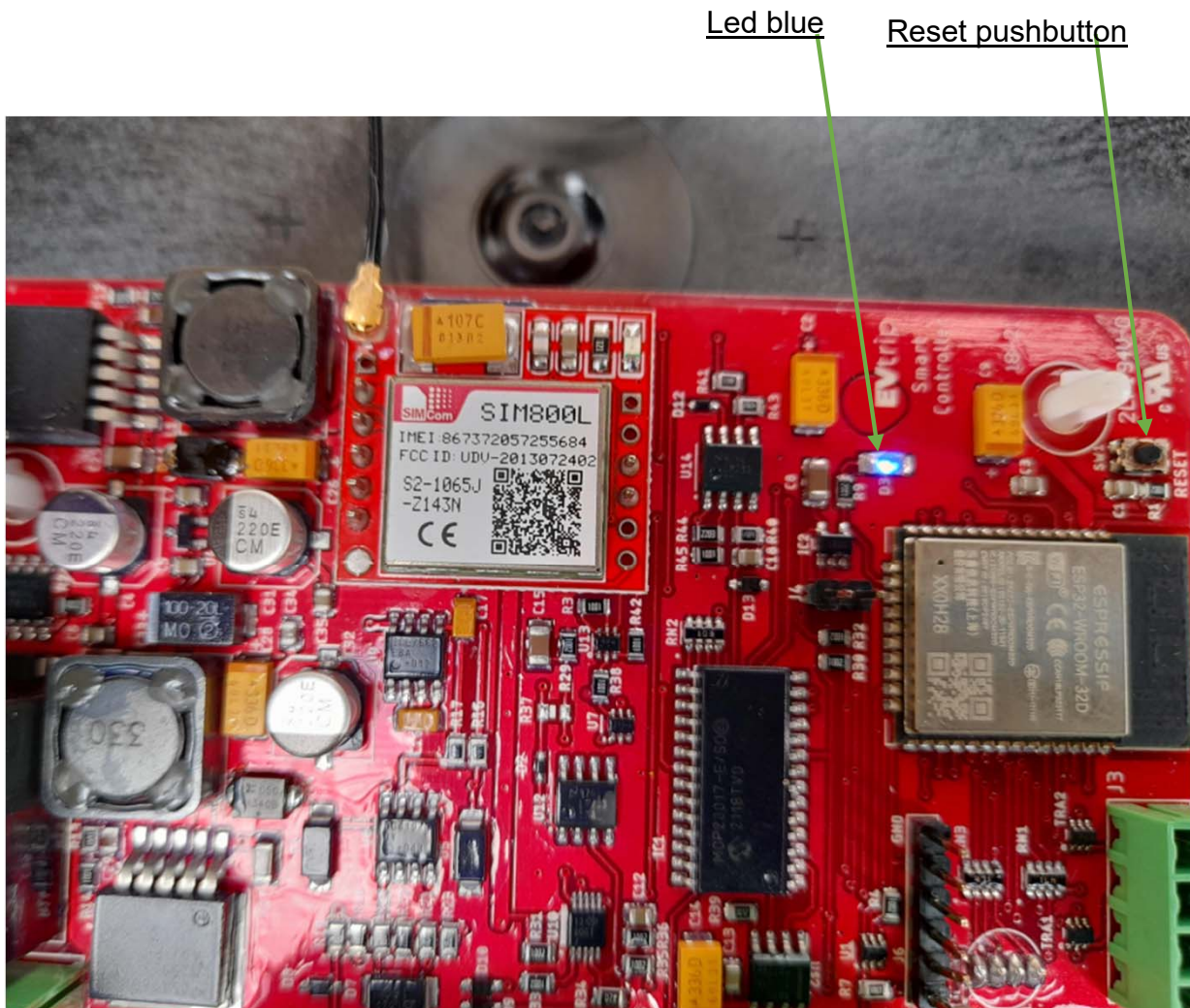


At the first activation, the installer has to set up a whatsapp/Skype/call to verify and proceed with the Station's registration, otherwise it will not function.

In case the Station is not working, disconnect the power supply, wait for 20 seconds, and power it up again.

If the blue LED on the Station's board is not blinking, push RESET for 1 second to make it blink again. Otherwise request support.

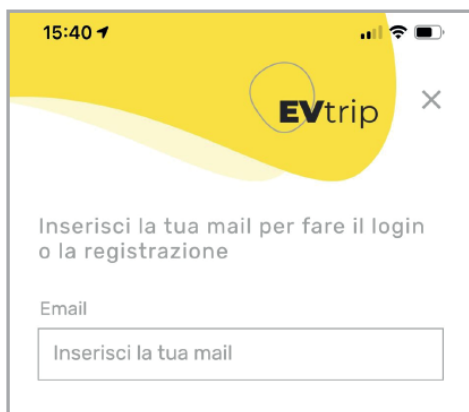
To activate the load balancing between the 2 output or between more station pls email to your key account at Detas or write your requirements at info@evchargers.it



Download the **EvTrip** App from Play Store or Apple Store on your smartphone, or directly scan the following QR code:



Use your email address to register within the app.

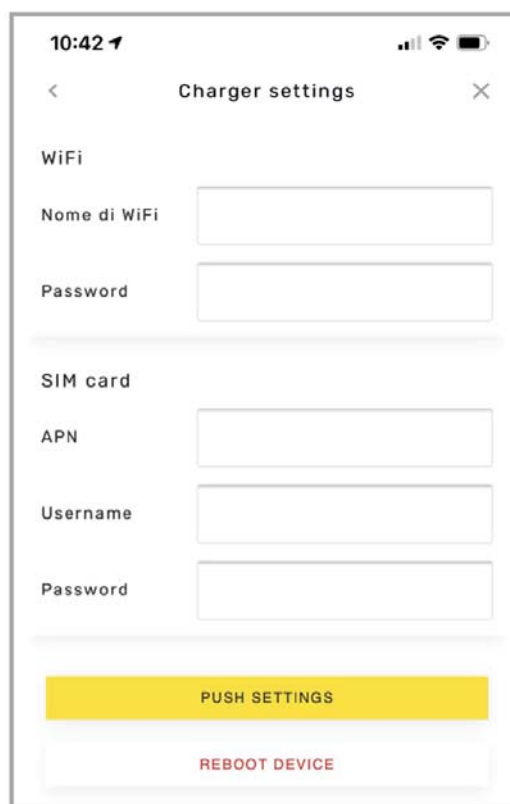
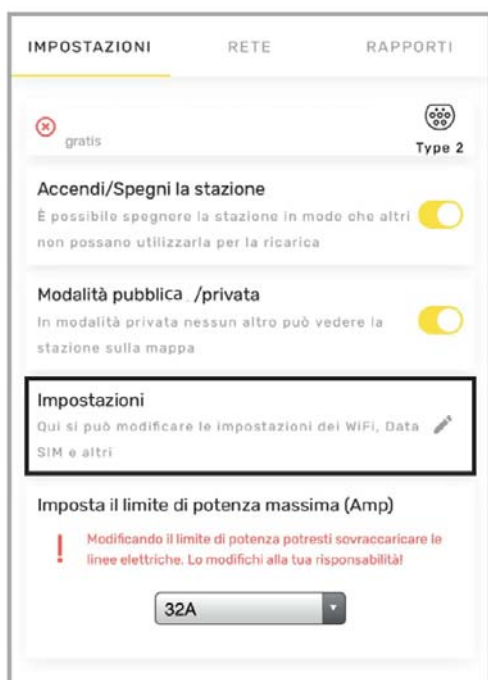


Send an email to info@evchargers.it indicating the following details:

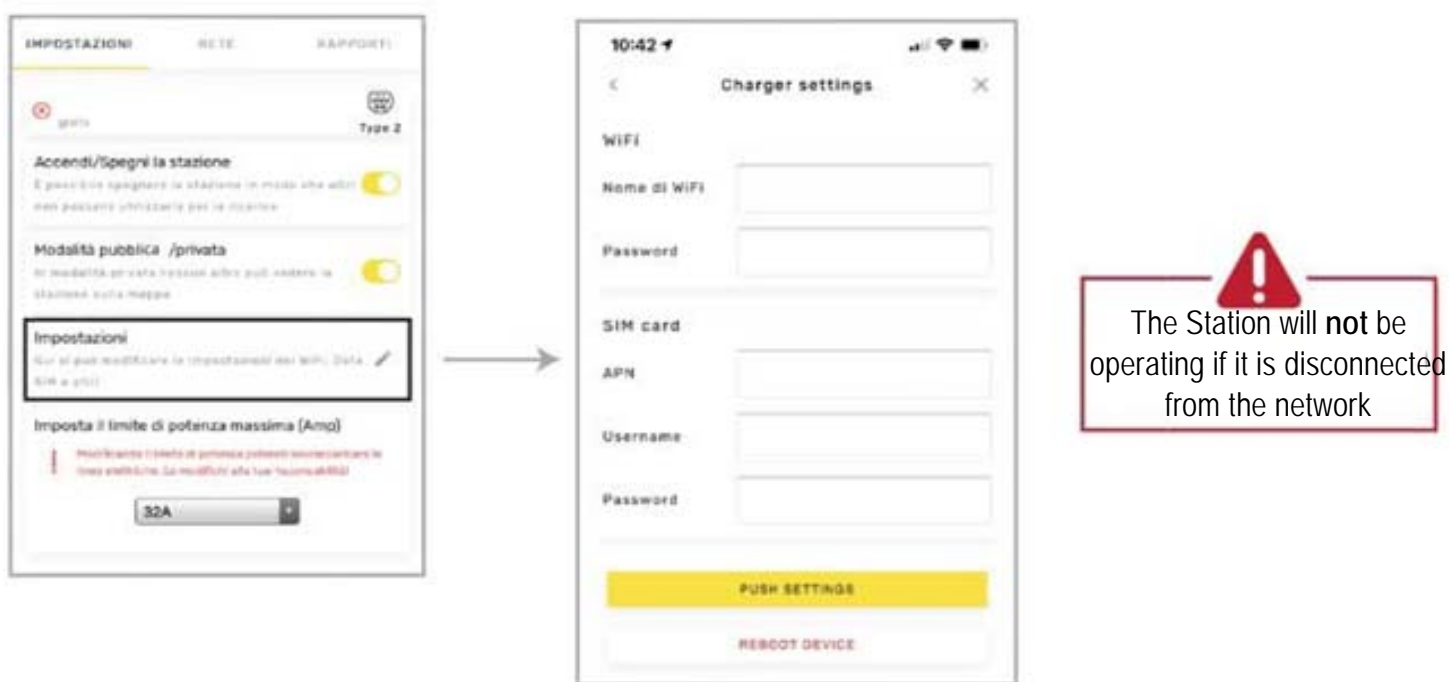
- Name
- GPS coordinates
- BLE Device Name (a unique code located inside the charging station)

Connect the Station to the smartphone via bluetooth in order to manage its settings.

Note: During the pairing, it will be necessary to enter the “**BLE Passkey**” on the smartphone. This code is located on a label inside the Apache WB.



Connect the Apache WB to the network using a WiFi connection or a data SIM card, if available.



Notes:

It will now be possible to set the output power, the default value is 32A

- The LED can be green or green/red (if no connection is available)
- Wait for 30 seconds
- Connect the cable to the car, the charging process will begin within 15 seconds and the LED will turn blue or blue/red (if offline)
- Stop the charging from the car or from the app

PERIODIC CONTROLS

The Apache Wallbox need to be periodically verified by performing routine checks and maintenance operations.

In particular, daily maintenance contents and operations forbidden to unauthorized personnel are:

- It is forbidden to access the charger files or turn on/off the power supply for the non-professionals/not-in-charge personnel.
- Do not use floating cables, connecting cables or bridges.
- Verify the operating state of the charging station monthly regarding RCCB, switches, charge connectors, modules, etc.
- Use a dry cloth to wipe the connector dirt monthly, leaving the plug dry and clean.
- Verify the tightening of all the cable connectors for all the internal components yearly.

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