Wallbox Prime Classic

T2CRP model

Manual
Installation – maintenance – use

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Installation – maintenance – use

V7.1

Content:

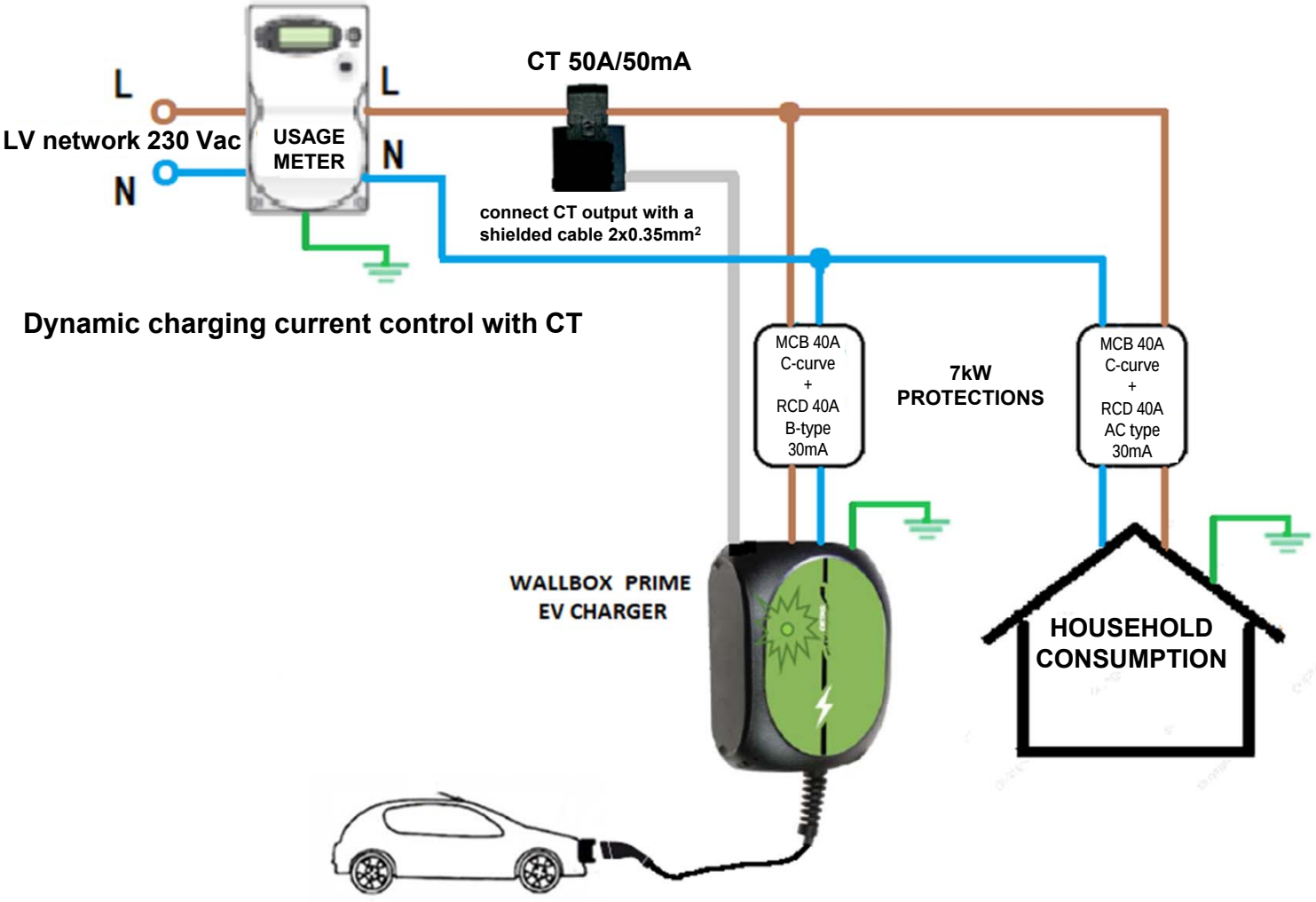
Before proceeding, read the instructions carefully to ensure a correct installation of the charging station.

The 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.

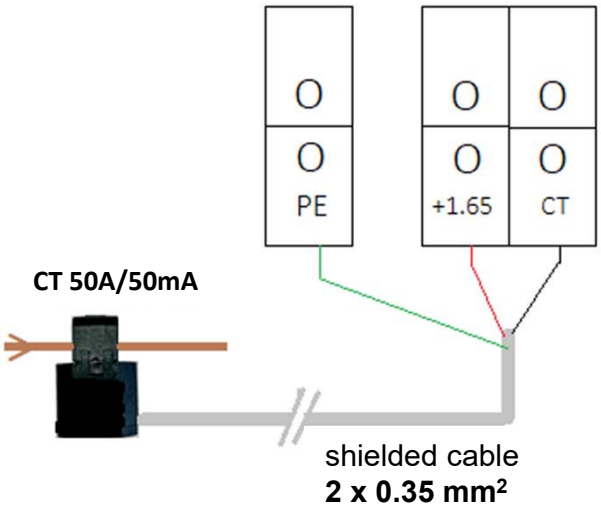
0 Preliminary operations (Warnings)

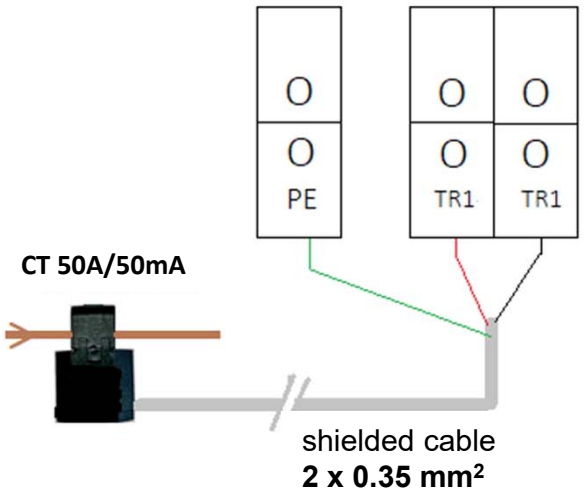
1. Before proceeding with the wallbox installation, make sure that the power supply voltage corresponds to the nominal one, and that the quality of the supplied electricity is compliant with the EN50160 standard.
2. Install surge protective devices with an earth connection in the main power switchboard 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. It is compulsory to follow the schematics below during the installation process:

single-phase 230Vac 7kW max. (32A)



The output cable of the current transformer (CT) is not polarized.
Connect the two cables to the terminals in the wallbox indicated as +1.65 / CT or TR1 / TR1.
Use a shielded cable, its shield has to be connected to the PE terminal.





5. The switchboard that powers the wallbox should include a C-curve magnetothermic circuit breaker (MCB) for protection against overloads and short circuits and a 30mA B-type residual current breaker (RCD).

6. For current transformer (CT) connections use a shielded cable (**cat 5 ftp shielded ethernet cable**). The recommended maximum cable length for a correct operation is 40m, for longer distances please request technical support.

7. Make sure that the wallbox is installed in an area with GSM network coverage or a Wi-Fi connection (only at 2.4Ghz). It is a necessary condition for a correct product's operation.If the signal is too low you can buy an additional external antenna. Pls contact us.

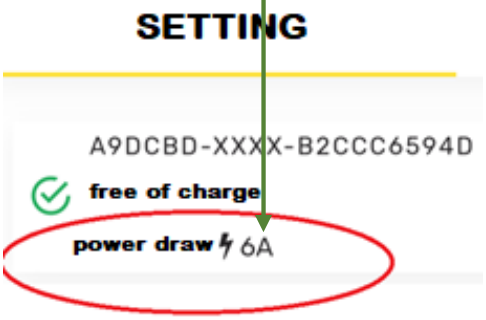
8. At the first activation, the installer has to call the number +39 0302594120 to verify and proceed with the wallbox registration, otherwise it will not function.

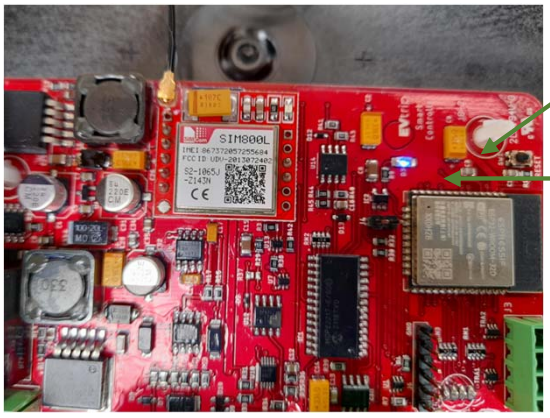
9. Use the App to set the output power in order to not exceed the home available KW.

10. At the end of the installation, it is highly recommended to test the operation of the current transformer (CT) by using the App to verify that consumption data is correct.

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

12. If the blue LED on the wallbox board is not blinking, push RESET for 1 second to make it blink again. Otherwise, call +39 0302594120 and request support.





1 INTRODUCTION

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

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

The ***Wallbox Prime*** charging system 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.

2 SAFETY INFORMATION

- The wallbox must not be installed in areas with a risk of explosions.
- The wallbox is designed to be installed both in open and closed areas. It must always be installed safely and with suitable protections.
- In case the wallbox is installed outdoors, it is recommended to employ a roof for direct protection from water.
- Do not install the wallbox in areas where it can be damaged by falling objects.
- The wall surface where the wallbox will be positioned must withstand the mechanical forces to which it is subjected.
- Do not employ this wallbox 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 wallbox 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 wallbox 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 wallbox 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.

Notes:
The **Prime** wallbox mainly employs Type 2 sockets.
The charging station connectors are compliant with the EN 62196 standard.
It is forbidden to lengthen/join the connector wires without authorization from the manufacturer.
No operations are allowed apart from those described in the present manual for solving plug-related problems.

TYPE 2

3 SPECIFICATIONS

Input voltage: single-phase 230VAC ± 10% 50/60Hz (L,N,PE)

Mechanical resistance: IK09

Protection degree: IP65

Housing material: PC

Operating temperature: from -25°C to +45°C

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

Operating humidity: from 5% to 95% without condensation

Network connection: IoT GSM / WiFi (2.4Ghz)

Signaling: RGB color indicator

Meters: MID certified

Payments enabled: On request

Dimensions: 205 x 255 x 112 mm

Weight: 4 kg

Pedestal for wallbox: On request

4 MECHANICAL INSTALLATION

4.1) INSTRUMENTS REQUIRED FOR THE INSTALLATION (NOT PROVIDED)

N°1 Flat screwdriver	N°1 Philips screwdriver	N°1 Electric drill	N°1 Electric screwedriver	N°1 wall drill bit D9mm	N°6 Fischer M4
					

4.2) MECHANICAL INSTALLATION PROCEDURE

1. Open the frontal screws. The correct screwdriver to be used is a small flat one, such that it can enter into the screw by insertion until the bottom of the slot, where the plastic is thicker.
   If a large flat screwdriver is used, it will stop at the top of the screw, which can become damaged because there the plastic thickness is smaller.

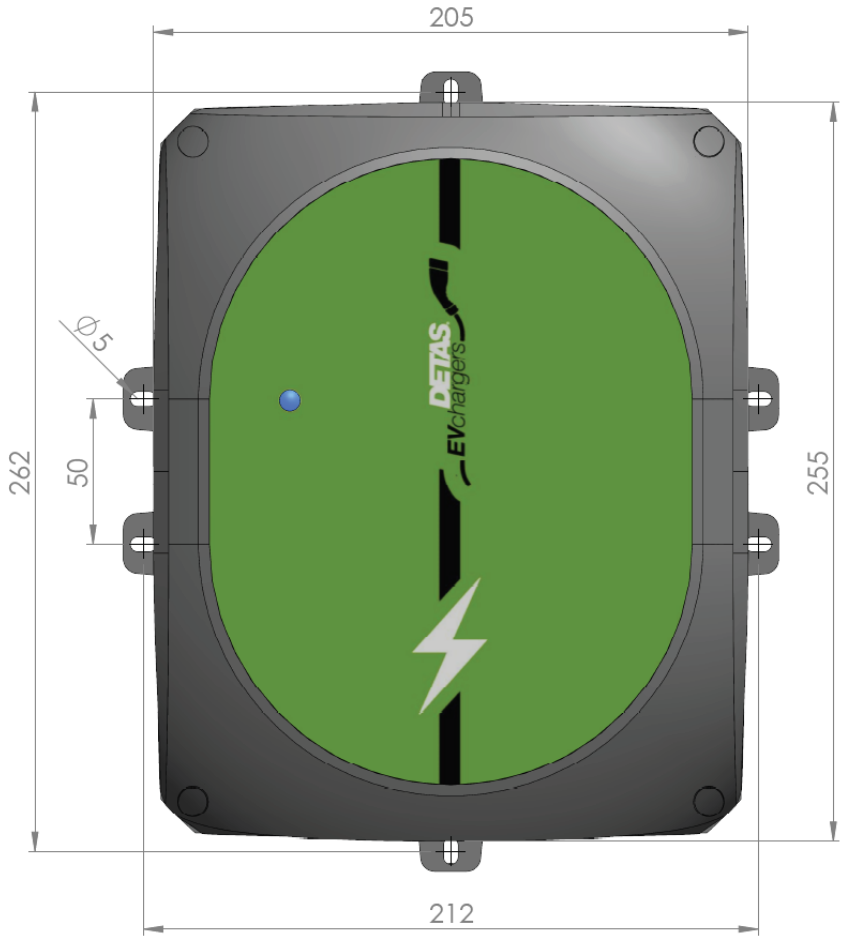
2. Open the lid towards the right by paying utmost attention not to tear the connection cables

3. Mount the Wallbox on the wall (see wall-mounting dimensions on page 8)

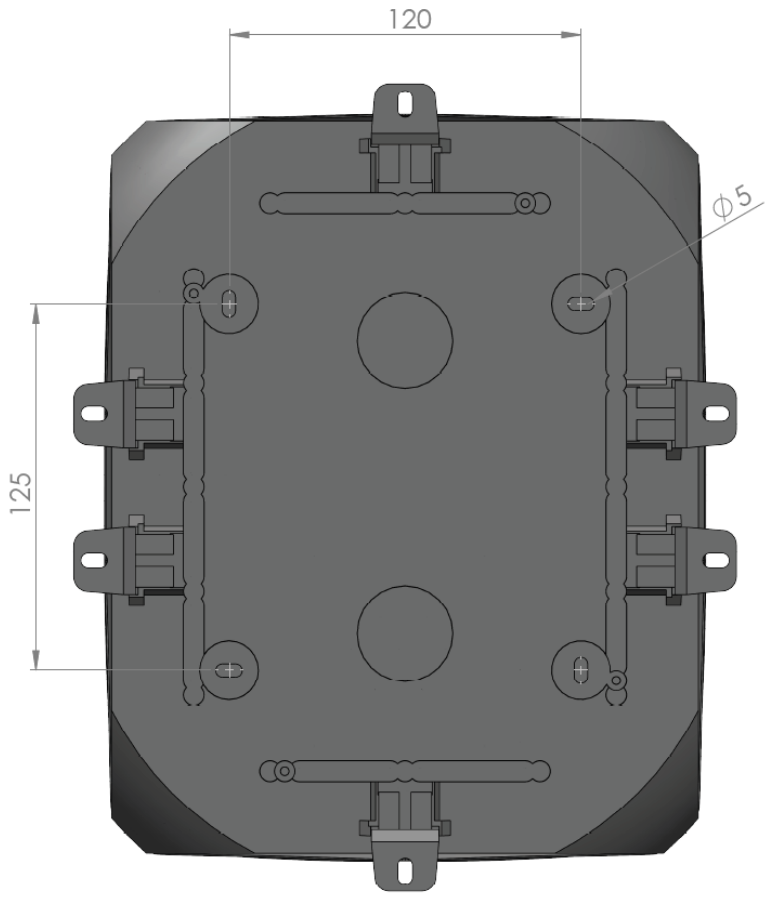
   A. Using Fischer M4 / drill-bit diameter 9 mm wall anchors
   Warning:
   - It is recommended to use a screwdriver to execute the last fixation turns
   - Make sure that the electric screwdriver does not damage the cables

   B. Using the provided side brackets for a protrusion fixation 

4.3) WALL MOUNTING DIMENSIONS



Front view
(external mounting)



Rear view
(internal mounting)

5 COMPONENTS DESCRIPTION

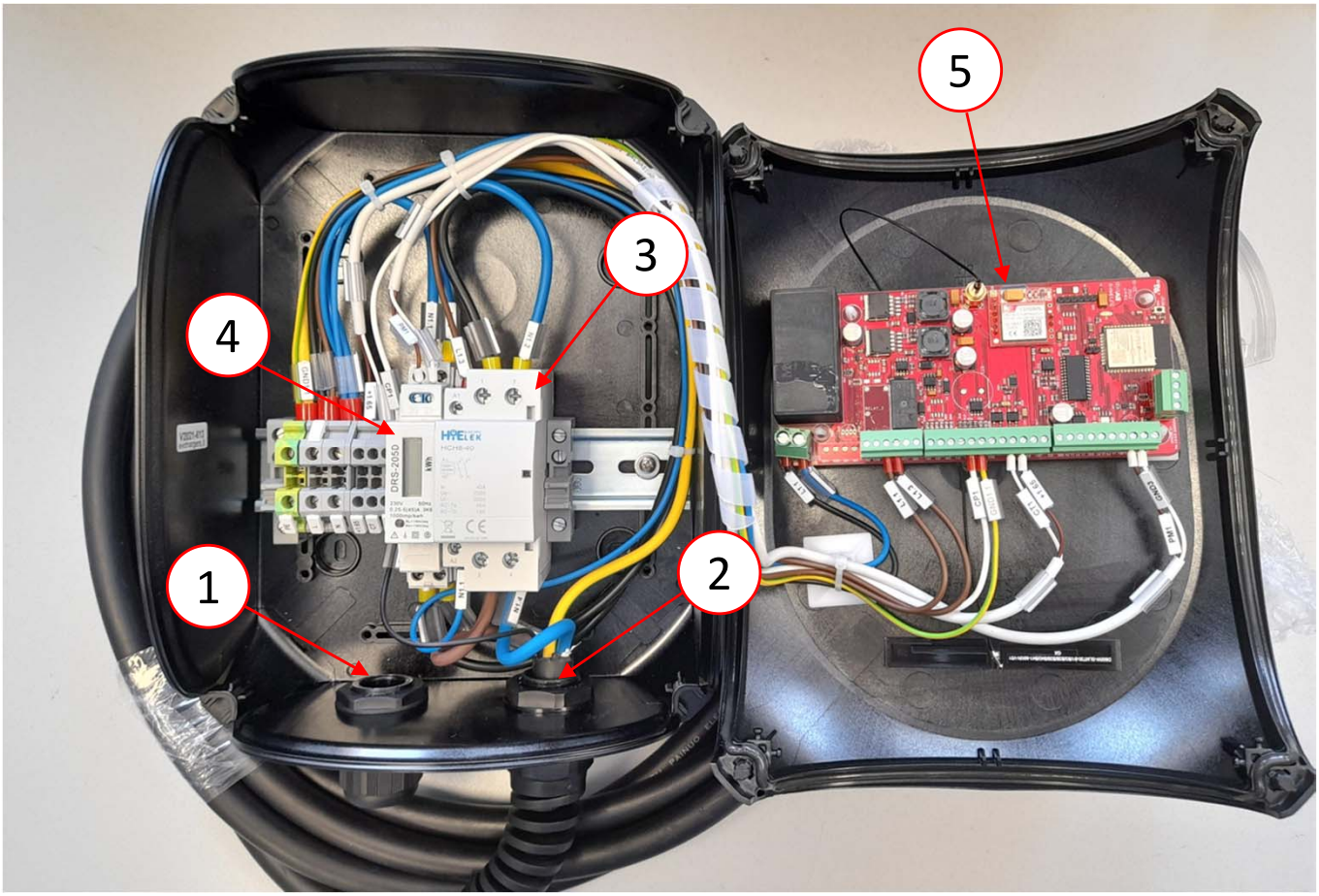
1 Power supply cables inlet

2 Vehicle connection cable outlet

3 Single-phase relay

4 MID certified meter

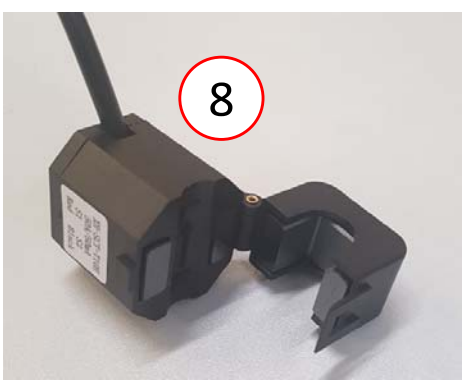
5 Control board

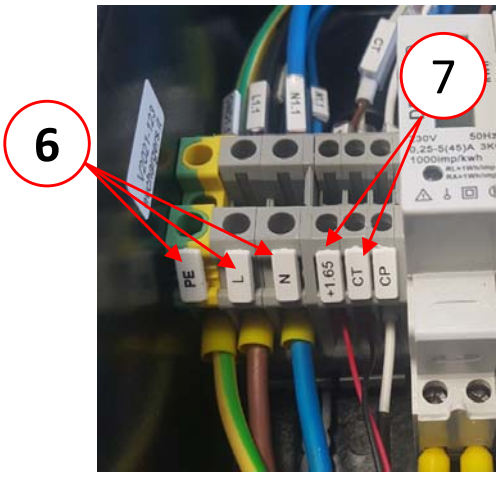


6 Power supply terminals **L** , **N** , **PE**

7 Toroid connection terminals **+1,65** , **CT** (non-polarized)

8 **Toroid** for power regulation

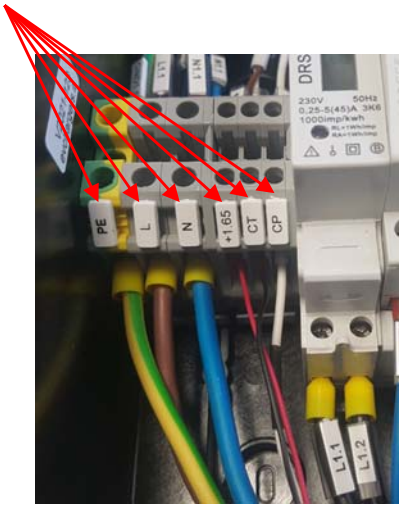




6 ELECTRICAL INSTALLATION

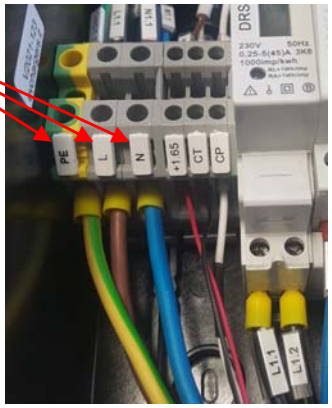
Installation procedure:

1) Verify that all the terminal labels are correctly positioned (as in the image below) and have not fallen off during transportation.



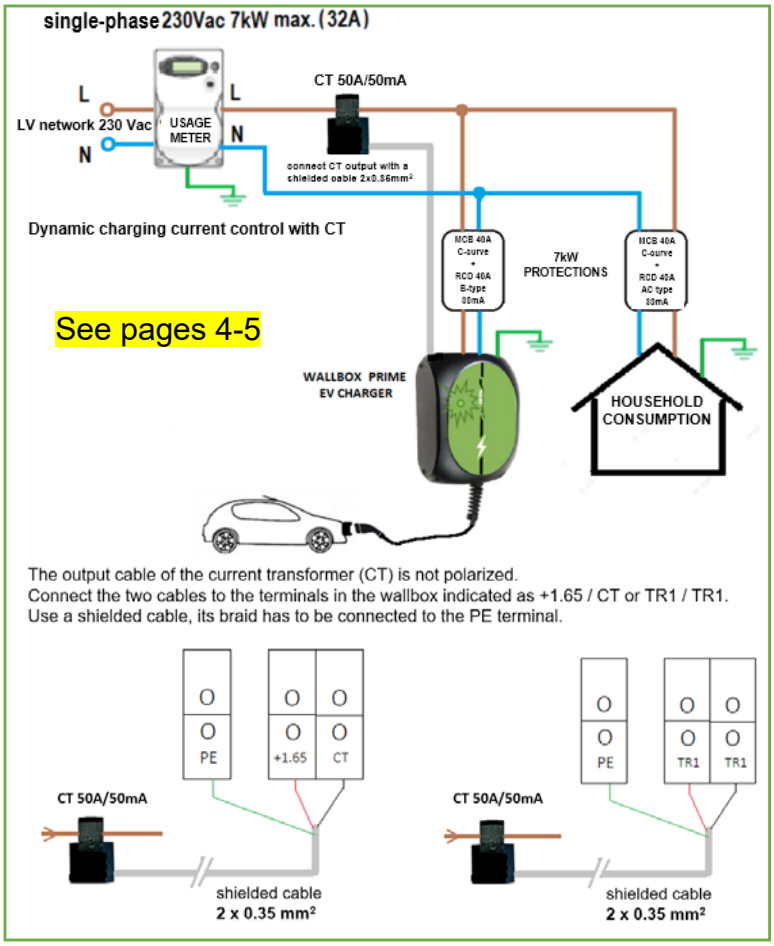
2) Insert the **AC** supply cables and the transformer cable into the free wallbox cable gland.

3) Connect the power supply **PE** , **L** , **N** to the respective terminals.

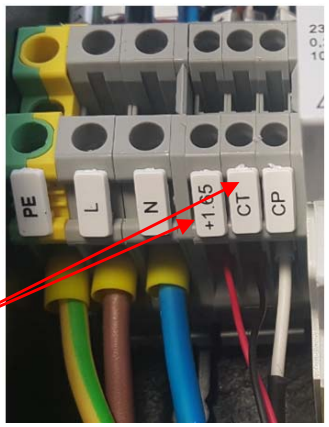


Note: the screw terminal for AC supply cabling is compatible with cables up to 10 mm^2. Using a cable with single sections of at least 6 mm^2 is recommended. In case the distance between the junction box and the respective magnetothermic and residual current breakers is greater than the standard distance, it may be necessary to increase the section of the employed cables according to a suitable calculation.

4) Open the provided toroid and put only one wire of the power supply line (L or N) through it, right after the usage meter (see schematics below).



Transformer opening direction

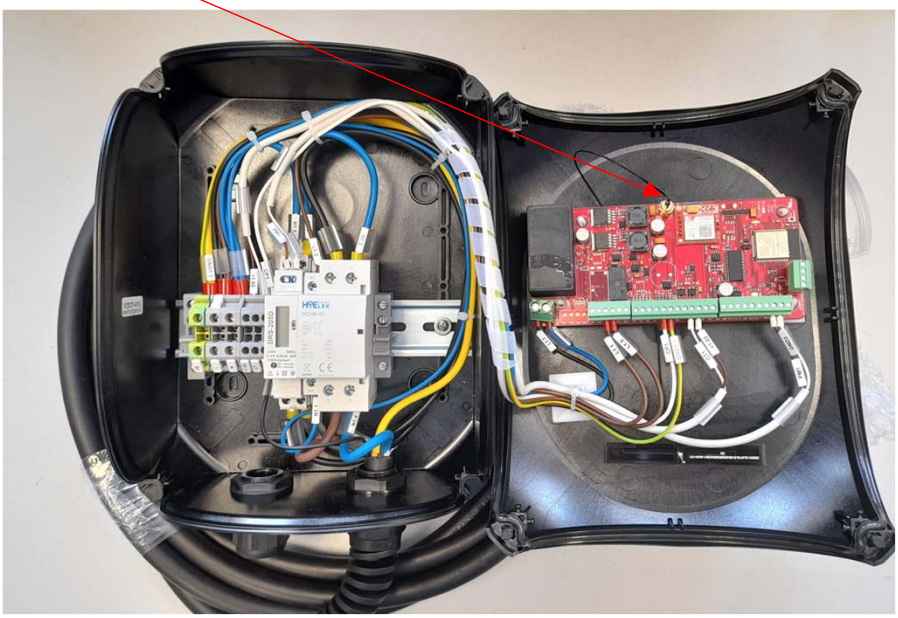


5) Connect the toroid cables to the terminal board +1,65 – CT

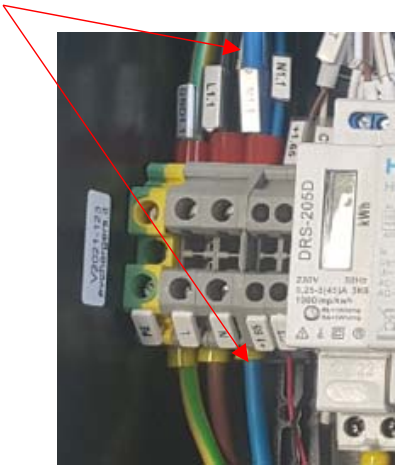
Notes:

for the toroid extension cable, use only a shielded cable cat 5 ftp

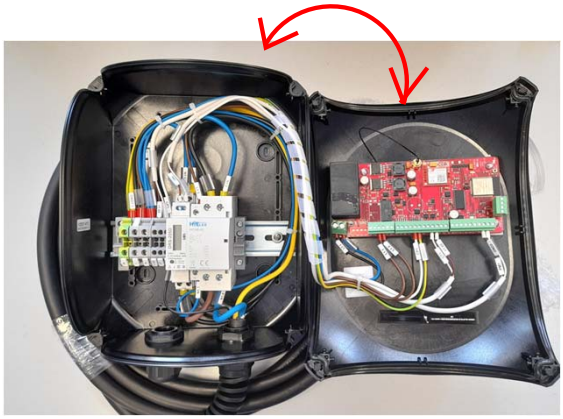
6) Verify that the antenna is correctly inserted into the appropriate connector and that it has not detached during transportation



7) Once the power supply is connected, perform a verification at the neutral terminal to ensure a correct connection



8) Close the wallbox lid and carefully fasten the plastic screws.

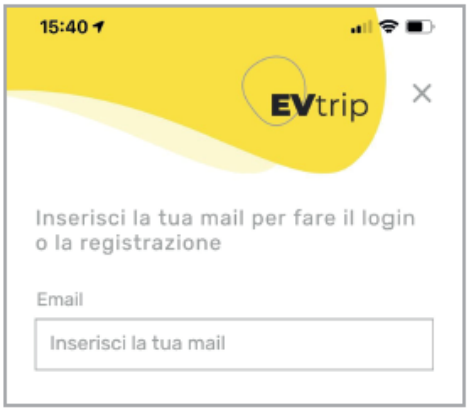


Note: for the electrical safety device installation to protect the wallbox, a 40A 30mA magne-tothermic residual circuit breaker (C-curve for the MCB and B-type for the RCD) is recommended. The corresponding product code in the EVchargers catalog is 245.

7 POWER REGULATION PROCEDURE

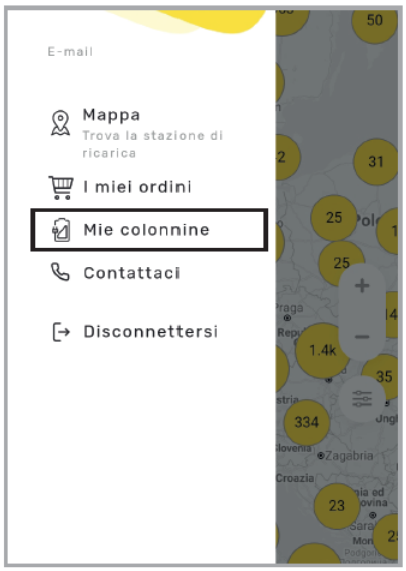
1. Download the EvTrip App from Play Store or Apple Store, or directly scan the QR code below

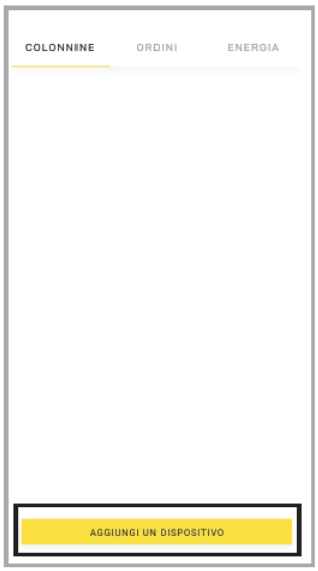
2. Complete the registration within the App



3 Add the charger to the account

N.B. you will be asked to enter the "BLE Passkey" located inside the Wallbox





* The ID code, together with the "BLE Passkey" are located inside the WallBox

4 Connect the Wallbox via bluetooth

5 It will then be possible to select the output power

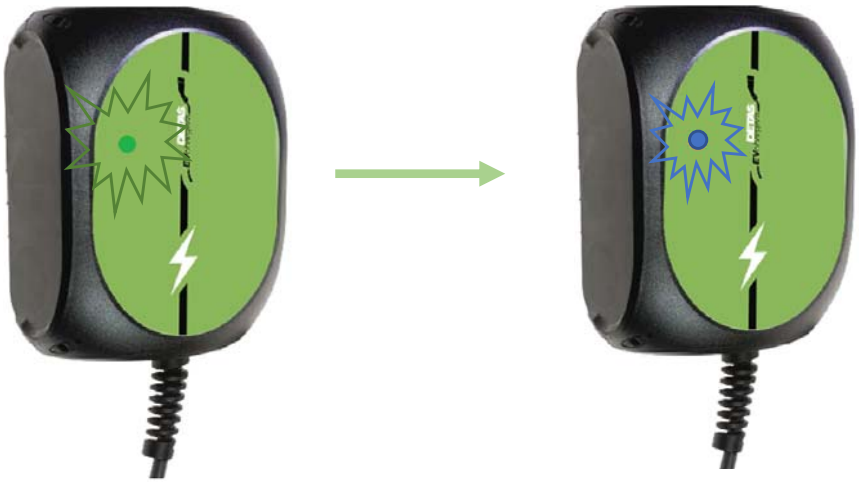
6
- The LED can be green or green/red (if no connection is available)
- Wait for 30 seconds
- Connect the cable to the car, the charging process will begin within 15 seconds and the LED will turn blue (blue-red if offline)
- Stop the charging from the car or from the App

8 LED INDICATORS

RED LED Offline / Connection ongoing / Generic error	**GREEN LED** Connected, ready for charging	**BLUE LED** Charging
		

9 CHARGING PROCEDURE

(9.1) When the green light is flashing, it means that the unit is ready and available for charging. The Prime Classic T2CRP version of the Wallbox is not equipped with a charging application and allows a Plug & charge process simply by inserting the cable or the plug into the car or vehicle.
Subsequently, the LED indicator light will turn blue. Once the charging is finished, it is possible to disconnect the cable or plug from the car or vehicle by placing it back into its slot.



(9.2) Connect the cable of the **Wallbox Prime Classic** to the vehicle to start charging

10 PERIODIC CONTROLS

The PRIME Wallbox has 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.