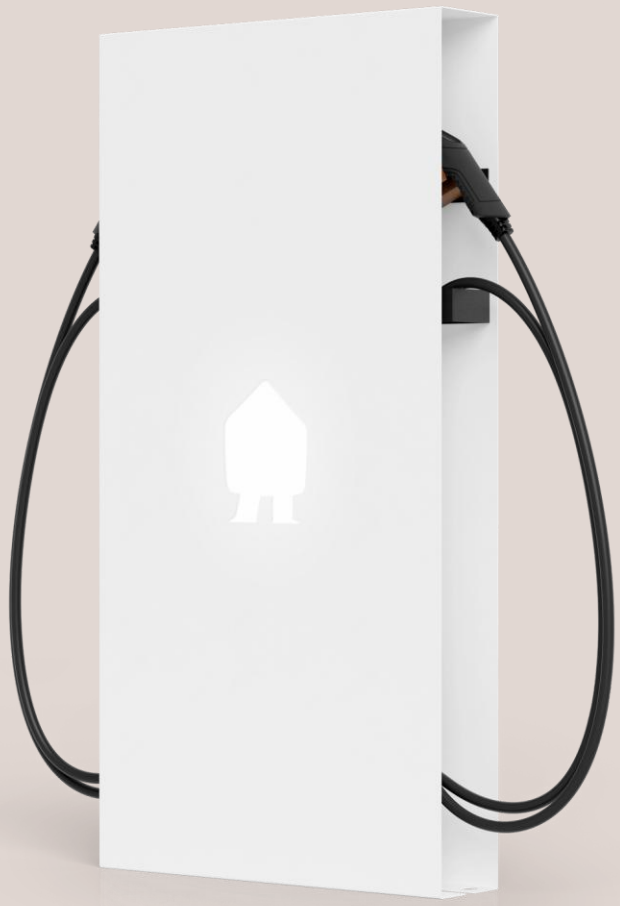
Smappee EV Base

Installation manual



English – 1.02.2 – October 2025

smappee

Document accuracy

The specifications and other information in this document were verified to be accurate and complete at the time of its publication. Due to ongoing product improvement, this information is subject to change at any time without prior notice. For the latest information, see our online documentation: smappee.com/downloads

Table of contents

1. Introduction

Thank you for purchasing this EV Base charging station for electric vehicles, the smartest charging station.

This installation manual tells you how to install the EV Base. We recommend that you read the contents of this manual carefully, to ensure a safe and proper installation and enable to use all the advanced features of this product to the full.

Intended use

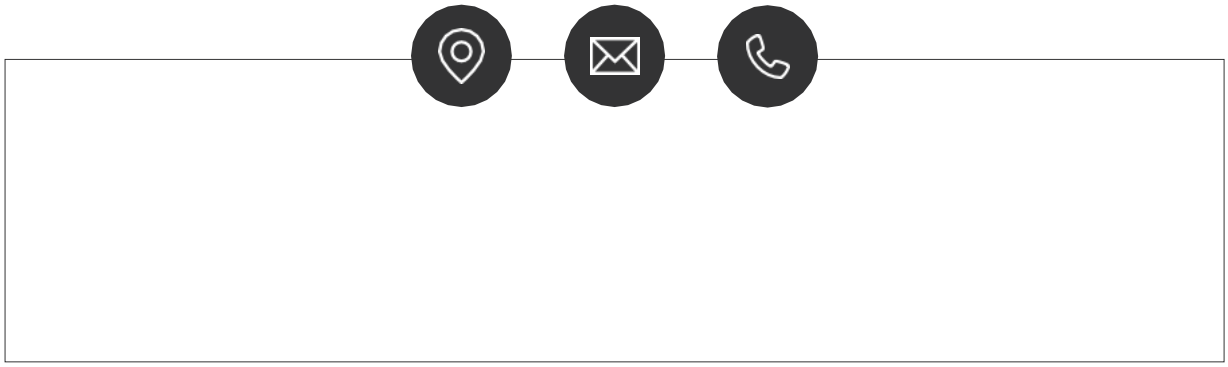
This charging station is designed for charging electric vehicles using either the fixed Type 2 charging cable (if equipped) or a compatible Type 2 charging cable connected to the socket outlet. The use of intermediate adapters or extension cables is not permitted.

Use for any other purpose than EV charging as defined in the IEC 61851-series is not and constitutes misuse of the charging station. Only qualified, trained and authorised persons are allowed to install, maintain and/or repair the charging station and make sure that the technical specifications and installation requirements are met. Incorrect installation and testing of the charging station could potentially damage either the vehicle's battery or the device. Any resulting damage is excluded from the warranty of the device. Any modification that is not in writing confirmed by Smappee will void the warranty. For more information, refer to smappee.com/legal-documents.

Support

Only qualified electricians or equivalent may install the charging station. If you have any questions, please contact your service partner.

Please have the following information ready to hand to speed up the process: Article number and serial number which you can find on the identification label of the charging station.



Should your local distributor be unable to help you, or you have a suggestion for us, you can contact Smappee at: **support@smappee.com**.

Smappee NV
Evolis 104
8530 Harelbeke
Belgium

2. Safety instructions

2.1. Safety warnings and precautions

WARNING

Carrying out activities on this charging station without the relevant knowledge and qualifications can lead to serious accidents and death. Only carry out tasks for which you are qualified and have been fully instructed.

Only certified electricians may carry out the installation, which must be in accordance with the national safety regulations.

Fully read and follow the safety instructions below before you install, service or use your EV Base. Incorrect installation, repairs or modifications can result in danger to the user and may void the warranty and liability.

CAUTION

Risk of electric shock.

Refer to the accompanying documentation whenever you see this symbol.

Please observe the following safety precautions to avoid potential electric shock, fire, or personal injury:

- Use the correct tools and provide sufficient material resources and protection measures.
- The charging station is, when installed correctly, intended to be used by untrained individuals to exclusively charge their electric vehicle.
- Do not allow children to operate a charging station.
- When a charging station is in use, adult supervision of any children present is required.
- Switch off electrical power supply to the charging station before installation or maintenance work.
- Do not use the charging station if it is damaged or defective.
- Do not immerse the charging station in water or any other liquids.
- Do not expose the charging station to heat, flame or extreme cold.
- Do not attempt to open, repair, or service any parts. Contact Smappee or your service partner for further information.
- Only use the charging station under the specified operating conditions.
- While charging the charging cable must be completely unwound and connected to the electric car without overlapping loops. This to avoid the risk of overheating the charging cable.
- After charging, store the charging cable properly so it does not present a tripping hazard. Make sure the charging cable cannot become damaged (kinked, compressed or driven over).
- Do not place any objects on the charging station.

2.2. Maintenance

- Observe the maintenance schedule (page 42).
- Clean the outside only with a dry, clean cloth.
- Do not use abrasive agents or solvents.
- May not be carried out during rain or if air humidity exceeds 95 %.

2.3. Transport and storage

- Disconnect electrical power supply before removing the charging station for storage or relocation.
- Only transport and store the charging station in its original packaging. No liability for damage incurred will be accepted if the charging station is transported in non-standard packaging.
- Store the charging station in a dry environment within the temperature range specified in the technical specifications.

3. Overview of the EV Base

3.1. Models

Article no.	EAN	Description
EVBC-2332-B-E-W	5425036934887	EV Base White
EVBC-2332-B-E-B	5425036934894	EV Base Black
EVBC-2332-C5-E-W	5425036934900	EV Base White with Cable
EVBC-2332-C5-E-B	5425036934917	EV Base Black with Cable

3.2. What's in the box

Image 1: What's in the box (items 6, 7 and 8 only for EV Base with fixed charging cables)

No.	Quantity	Description
1	1	EV Base
2	4	Concrete anchors (Ø 12 mm x 100 mm)
3	4	M12 washers (Ø 50 mm)
4	1	Smappee Charge Card, for the owner of the charging station
5	2	QR code for Scan and charge
6	1	Splitter
7	2	Charging cable
8	2	M32 cable gland
9	2	Cable ties for strain relief

3.3. Directional determination

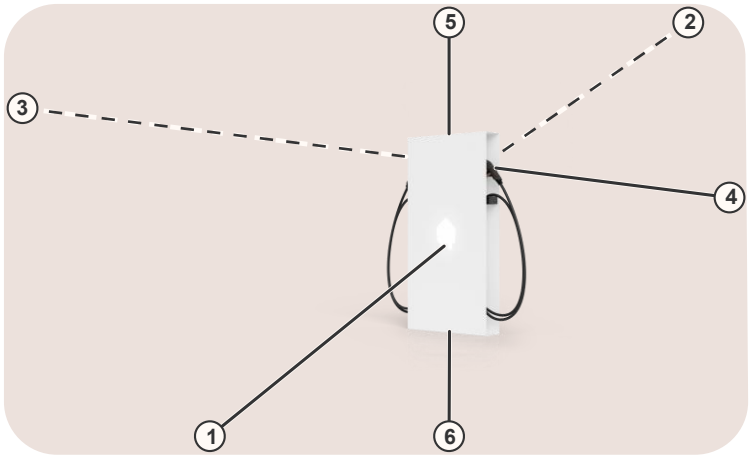


Image 1: Directional determination

Id	Description
1	Front
2	Rear
3	Left
4	Right
5	Top
6	Bottom

3.4. Identification label of the EV Base

Position of the identification label of the EV Base

The identification label of your charging station is located above the connector 1.

Image 2: Position of the identification label

Content of the identification label of the EV Base

The identification label of your charging station has the following information.

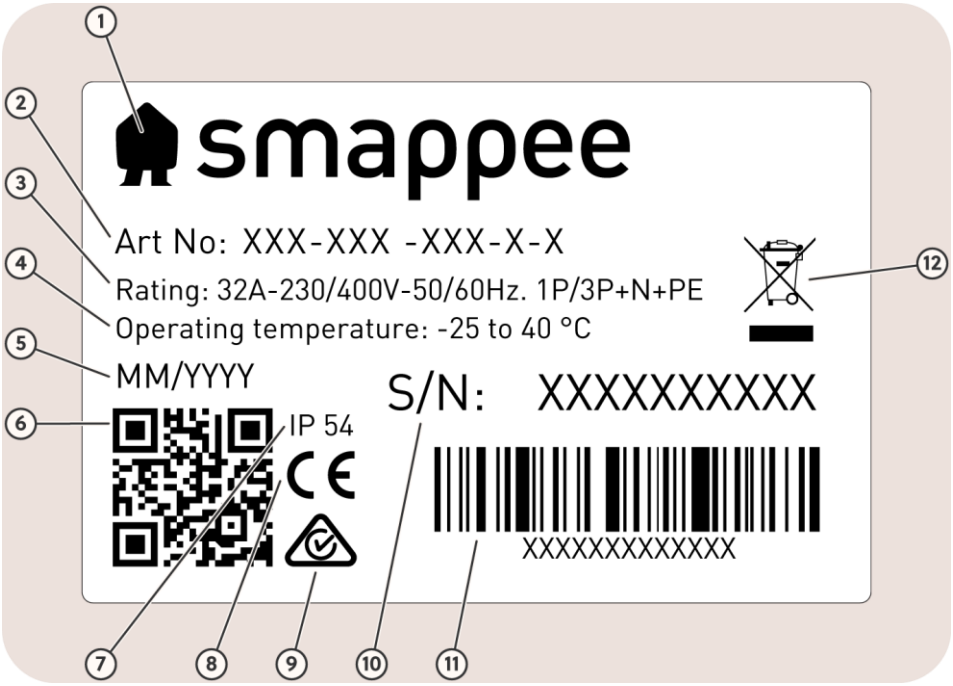


Image 3: Identification label

No.	Description
1	Manufacturer
2	Article number
3	Electrical rating
4	Operating temperature
5	Manufacturing date
6	QR code to scan during configuration of the charging station
7	Ingress protection rating
8	CE
9	RCM
10	Serial number
11	EAN-code
12	Waste disposal symbol

3.5. Technical specifications

Feature	**Description**	
	Socket	**Type 2 cables**
Physical properties		
Dimensions	1200 mm x 600 mm x 150 mm	
Weight (excluding packaging)	Charging station with sockets: 33 kg Charging station with cables: 39.5 kg	
Socket	2 x Type 2 socket with shutter	N/A
Charging cable	N/A	2 x 5 m Type 2
Supply line connection	Flexible conductors up to 6 mm² or solid conductors up to 10 mm²	
Stationary / moveable	Fixed installation	
External design	Enclosed assembly	
Mounting method	Ground mounted	
Technical features		
Maximum nominal power per charging point	Single-phase connection: 7.4 kW Three-phase connection: 22 kW	
Charge mode	Mode 3 (IEC 61851)	
Connection case	Case A and B (Socket) (IEC 61851)	Case C (Fixed cable) (IEC 61851)
Metering	MID certified class B	
Integrated Residual Current Protection	Rated operating residual current detection: 6 mA DC RCM and 30 mA AC RCD type A	
Required external circuit breakers	2 x 2P (single-phase), 2 x 3P (three-phase) or 2 x 4P (three-phase with neutral) breaker of maximum 40 A, type B or C	
Supported power systems	TN-C, TN-C-S, TT, IT [1]	
Grounding	TN system: PE wire TT system: Independently installed ground electrode < 100 Ohm spreading resistance IT system: connected to a shared reference (common earth) with other metal parts	
Rated voltage (U_N)	230/400 VAC	
Rated insulation voltage (U_i) of a circuit	500 V	
Rated impulse withstand voltage (U_{imp})	4 kV	
Rated frequency (f_N)	50 Hz / 60 Hz	
Rated current (I_{na})	32 A	
Rated current (I_{nc}) of a circuit	32 A	

1 Caution: not all electric vehicles support the IT system. For 3 x 230 V charging, a voltage transformer might be necessary.

Feature	Description	
	Socket	**Type 2 cables**
Rated peak withstand current (I_{pk})	6 kA	
Rated conditional short-circuit current (I_{cc})	6 kA	
EMC classification	Class B	
Connection method	AC, permanently connected	
Interfaces & Connectivity		
Information status	RGB LED	
Session activation	Plug and charge, Swipe RFID, Scan QR code, optional Pay Station	
Connectivity	Ethernet 100BASE-T	
Communication protocol	OCPP 1.6 JSON, ready for update to OCPP 2.0	
Certifications and Standards		
Product certification	CE, ACMA	
Standards	IEC 61851-1 (2017), AS/NZS 3820:2020	
Environment		
Enclosure material	Aluminium (structure), Magnelis (front plate and rear plate)	
Enclosure standard colours	RAL 9016 (star white), RAL 7021 (black grey)	
Protection degree	IP 54	
Mechanical impact protection	IK10	
Pollution degree	3	
Electrical safety class	I	
Stand-by use	LED brightness 0%: 3 W LED brightness 100%: 18 W	
Environmental conditions	Indoor and outdoor use	
Operating temperature	-25 °C to 40 °C	
Storage temperature	-25 °C to 60 °C	
Relative humidity	0 % to 95 %, non-condensing	
Maximum installation altitude	0 – 2.000 m	
Access	Locations with restricted and non-restricted access	

NOTE

- The operating temperate assumes the ambient temperature of a product delivered in the default enclosure colours RAL 9016 (star white) or RAL 7021 (black grey). Direct exposure to sunlight may have an adverse effect on the temperature range.
- If the product is exposed to lower or higher ambient temperatures, continuous operation cannot be guaranteed. If temperatures exceed the maximum values, the charging station will automatically decrease the charging current to decrease the internal temperature of the charging station. This stabilises the internal temperature and makes it less likely that a transaction will be unexpectedly paused.
- If the product is directly exposed to sunlight, the automated temperature management may automatically start below the maximum ambient temperature. Therefore, wherever possible, avoid exposing the charging station to direct sunlight.
- Where products are exposed to the elements of nature, the enclosure can be subject to gradual aging of the material, which can result in product discolouration over time. Therefore, wherever possible, place the product in a sheltered place to optimise the life of the materials.

4. Prepare the installation

For overload protection or optimised self-sufficiency, additional Smappee Infinity components must be installed to measure the Grid and Solar, Battery or other submetering if applicable.

> NOTE
>
> For more information, refer to the Smappee Academy.

The first step is to prepare the physical installation of the EV Base as described in this chapter.

4.1. Installation prerequisites

- Obtain all necessary permits from the relevant local authorities.
- Local regulations may be applicable and can vary depending upon the region or country.
- Make sure that there is sufficient space around the charging station as specified in the IEC 60204-1 standard.
- Make sure that the installation area of the charging station is adequate for usability and ventilation purposes.
- Refer to local wiring regulations to select the conductor sizes and use only copper conductors.
- Calculate the existing electrical load to find the maximum operating current for the charging station installation. The EV Base has two charging points which need to be powered individually.

> NOTE
>
> With the Smappee Overload functionality more charging stations or the total maximum operating current can be higher than the physical installation allows.

- The appropriate wire gauge of the supply cable depends on the power rating and distance between the meter cabinet and the charging station. The voltage drop must not exceed 5 %. It is advisable to have a maximum voltage drop of 3 %.
- The maximum wire gauge that can be fitted is 6 mm² in case of flexible conductors or 10 mm² when solid conductors are used.
- Each power supply connection must be protected against short-circuiting and over-current with an individual circuit breaker. These circuit breakers must be 2-pole (for single-phase), 3-pole (three-phase without neutral) or 4-pole (three-phase with neutral), curve B or C, and have a current rating of maximum 40 A (or otherwise in compliance with local standards and regulations).
- Make sure that there is one twisted pair cable for the internet connection available for each EV Base. For more information, refer to Connect the EV Base to the internet (page 26).
- Route the two power supply cables together with the twisted pair cable to the position where the charging station will be installed.

> NOTE
>
> Make sure there is at least 60 cm (2 ft) power supply and 100 cm (3.28 ft) twisted pair cable length available at the location of the EV Base, to be able to connect it easily.

4.2. Tools (not included)

- Screwdrivers and a 2.5 mm Hex screwdriver
- Multimeter and earth ground meter
- Wire stripper and cutter
- Needle-nose pliers
- Ferrules crimper (when using stranded power supply cables)
- RJ45 crimping tool
- Drill and rock drill diameter 12 mm
- 19 mm socket wrench with ratchet handle
- Hammer

4.3. Supplies (not included)

- Twisted pair cable (4 pairs) and two RJ45 connectors for internet access, minimum Cat 5 depending on the environment
- Power supply cables
- Ferrules (6 mm²), when using stranded power supply cables or decreasing the length of a charging cable
- Circuit breakers (maximum 40 A)

4.4. Prepare the foundation of the EV Base

Context

A stable and level ground needs to be prepared in advance and there must be two power supply cables and one twisted pair cable. The surface of the ground must be solid to allow the usage of concrete anchors and avoid moisture from the soil.

We recommend a levelled concrete foundation at ground level. This can be a polished concrete floor in a parking garage or a paved area for installation of the charging stations.

If you want a foundation for each EV Base, you should do the following.

Instructions

Proceed as follows.

1. Make a foundation hole that is large enough.
   Depending on the subsoil, the size may vary. Please refer to the technical specifications of size and weight to determine and construct a solid foundation for the EV Base.
   When dimensioning the foundation, it is advisable to carry out a static load capacity analysis according to the relevant standards.

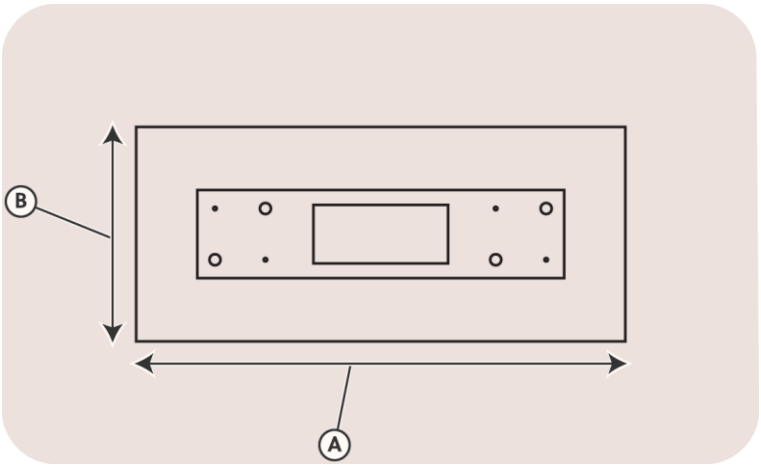


Image 4: View on the minimum dimensions (A x B = 0.80 m x 0.35 m or 2.62 ft x 1.15 ft)

2. Route the two power supply cables and one twisted pair cable to the location of the EV Base.

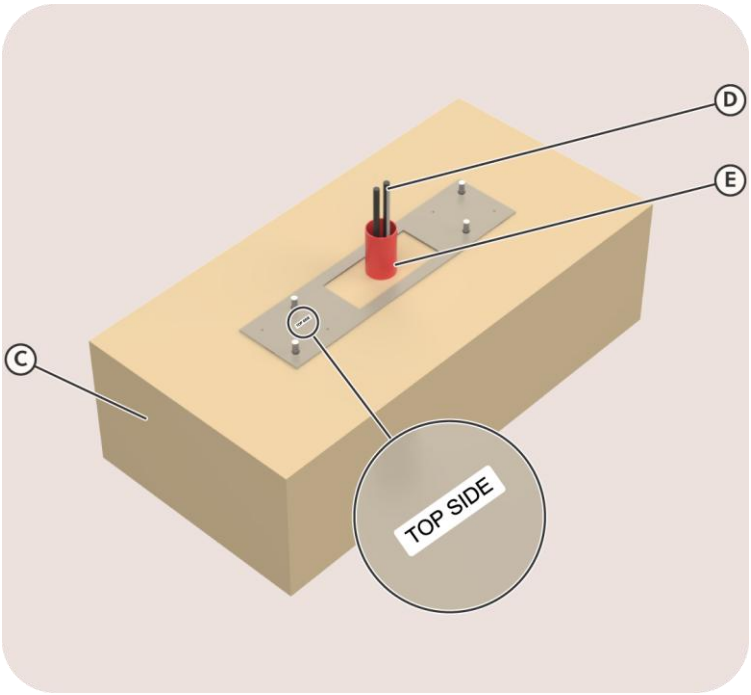


Image 5: Example of a solid foundation (C), with cables (D) in a flexible conduit system (E)

3. Fill foundation hole with concrete.

Wait for the concrete to cure before going to the next steps.

4.5. Prepare the EV Base

Context

For safe and compact transport of the EV Base:

- The floorplate is mounted to the EV Base
- The charging cables are stored within the EV Base together with the supplies.

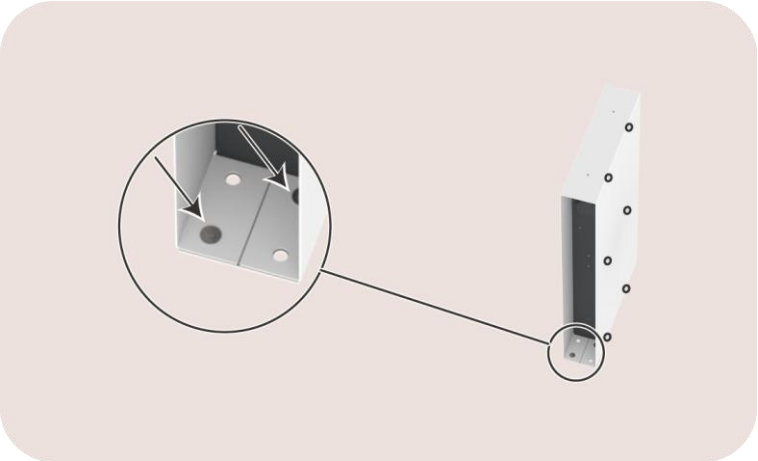


Image 6: View on the bolts that hold the floorplate and rear plate

Instructions

Proceed as follows.

1. Remove the cardboard packaging.
   Keep in mind to store the cardboard, as this can be used to safely store the outer housing while installing the EV Base.
2. Remove the floorplate.
   Unscrew the four M6 bolts and washers that hold the floorplate.
   Make sure to keep the bolts for later use.
3. If applicable, remove the charging cables.
4. Remove the rear plate.
   The rear side of the EV Base is the side without the Smappee logo.
   Use a 2.5 mm key to loosen the six hexagon socket screws of the rear plate.
   Put the plate in a safe location where it cannot be scratched or damaged.
   Insert the screws to avoid losing them.
5. Remove the supplies from the EV Base.

As a result, the EV Base is prepared for installation.

5. Installation and configuration

	CAUTION The installation must be carried out by a qualified professional who has read this manual and works in compliance with IEC 60364 standards. Neglecting this may lead to severe injuries or hazardous situations while working with electricity.

	CAUTION The electric system must be entirely disconnected from every power source prior to performing installation or maintenance work. Make sure it is not possible to connect the electric current during installation. Put up caution tape and warning signs to mark the work areas. Make sure no unauthorised people can enter the work areas.

	CAUTION The charging station contains electric components that may still contain electrical charge after being disconnected. Wait at least 10 seconds after disconnection before commencing work.

	CAUTION Adaptors or conversion adaptors and cord extension sets are not allowed to be used.

This procedure describes the required steps for the physical installation of the EV Base.

1. Install the floorplate of the EV Base (page 20)
2. Attach the EV Base to the floorplate (page 21)
3. Connect the charging cables (page 22)
4. Connect the power supply of the EV Base (page 24)
5. Connect the EV Base to the internet (page 26)

After the physical installation, these are the last steps to have the EV Base ready for use:

6. Configure the EV Base with the Smappee App (page 32)
7. Complete the installation of the EV Base (page 33)
8. Give the owner a smooth start (page 34)

5.1. Install the floorplate of the EV Base

Context

The EV Base is designed to be installed at ground level using the floorplate.

Instructions

Proceed as follows.

1. Put the floorplate on the location of the EV Base.
   Route the two power supply cables and one twisted pair cable through the central opening of the floorplate.
   Make sure the label on the floorplate, with the text “TOP SIDE”, is facing upwards.
2. Drill a 12 mm hole to a depth of 70 mm through the centre of a 16 mm hole of the floorplate.
   Do not drill through the 5 mm bolt holes.

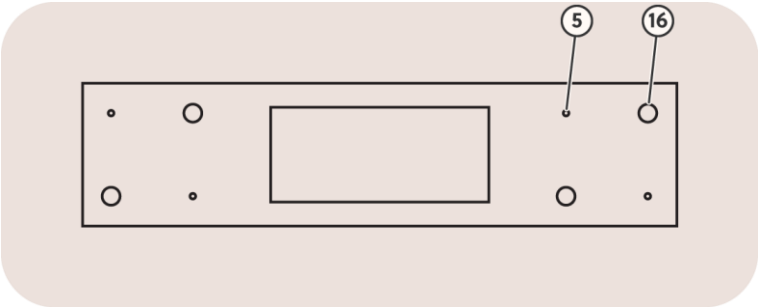


Image 7: Top view on the holes in the floorplate

3. Put a concrete anchor in one hole.
   You can chemically anchor this.
4. Attach the floorplate to the foundation.
   Make sure that there is approximately 3 cm of threaded wire visible above ground level.
5. Repeat steps 2 and 3 for the other 16 mm holes.
6. Make sure the floorplate is level in both directions.

5.2. Attach the EV Base to the floorplate

Context

The concrete anchors in the floorplate give the position where you attach the EV Base to the floorplate.

Instructions

Proceed as follows.

1. Position the EV Base above the floorplate.
   Lift the EV Base with at least two people.
   Make sure no cable can be crushed during lowering the EV Base.
   Make sure the EV Base goes over the four concrete anchors.
2. Attach the EV Base temporary.
   Put two large washers and nuts over the concrete anchors and tighten their nuts by hand.

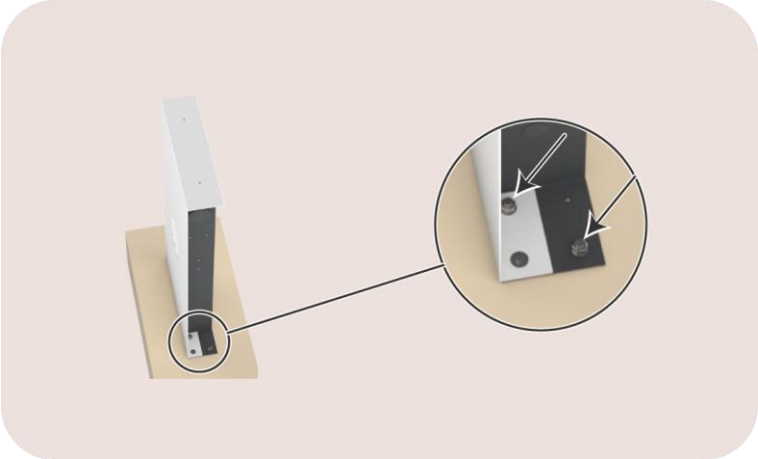


Image 8: View on the front plate

	NOTE Do not yet torque the bolts and nuts. The hand tightened fasteners are sufficient to keep the position of the EV Base during the installation. The final fixation is done at the end of the installation.

5.3. Connect the charging cables

Context

NOTE

This section is only relevant if the EV Base comes with a fixed charging cable. If you have a socket-variant, go to Connect the power supply of the EV Base (page 24).

Instructions

Proceed as follows.

1. Guide the charging cable through the M32 cable gland at the side of the EV Base.

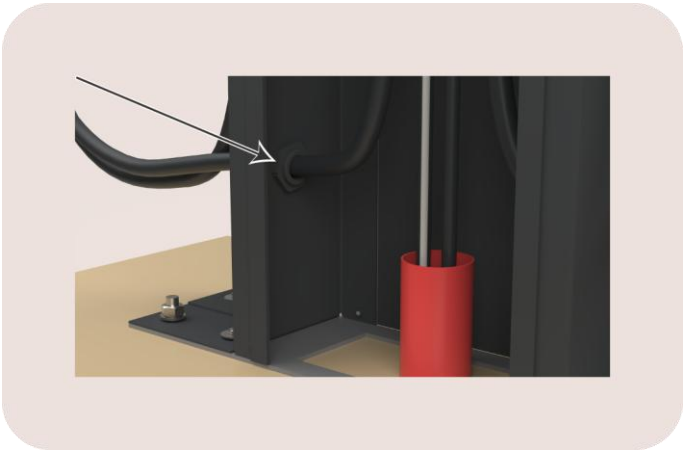


Image 9: View on the cable gland

2. Guide the charging cable through the cable gland.

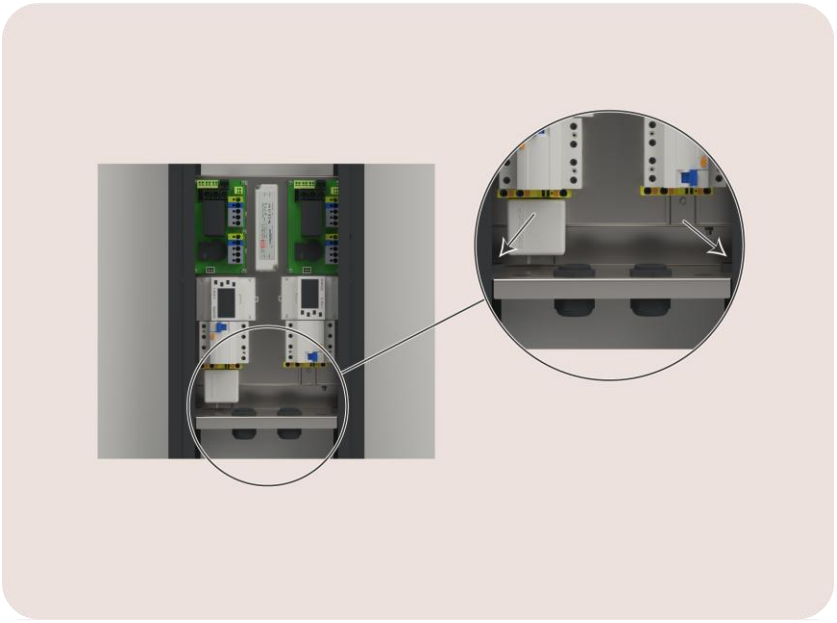


Image 2: View on the cable entry for the charging cables

3. If necessary, decrease the length of the charging cable.
   Add a ferrule (not supplied) per wire.

4. Connect each wire to the corresponding connection point as indicated with a label.
   Do not forget to connect the CP data wire of the charging cable to the CP connection point.

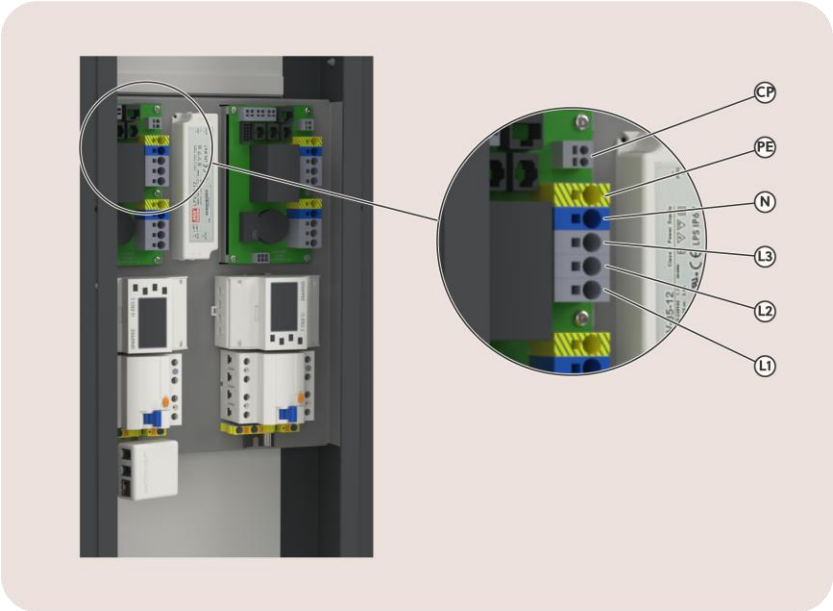


Image 10: View on the cable connections

5. Tighten the cable gland.
6. For strain relief, put the supplied cable tie around the charging cable.
   Tighten it just after the cable gland on the inside of the charging station.
7. Repeat steps 1 thru 5 for the other charging cable.

5.4. Connect the power supply of the EV Base

Context

Each charging point has an MID meter that measures the power supplied to the charging station. No other components must be installed to measure the charging station consumption.

Each connector must have a dedicated own circuit breaker. For more information, refer to Installation prerequisites (page 15).

Instructions

Proceed as follows.

1. Guide the charging cable through the cable gland.

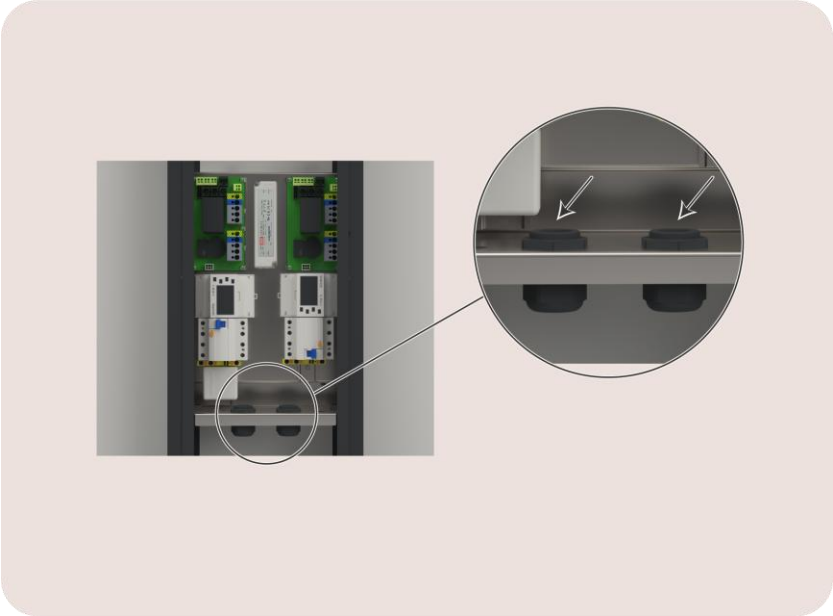


Image 3: View on the cable entry for the charging cables

2. Cut the two power supply cables to sufficient length.
3. Remove 12 mm of isolation from each conductor.
   For stranded wires, use suitable ferrules.
4. Make sure that the resistance of the grounding circuit is within acceptable limits.
5. Connect the power supply wires as follows:

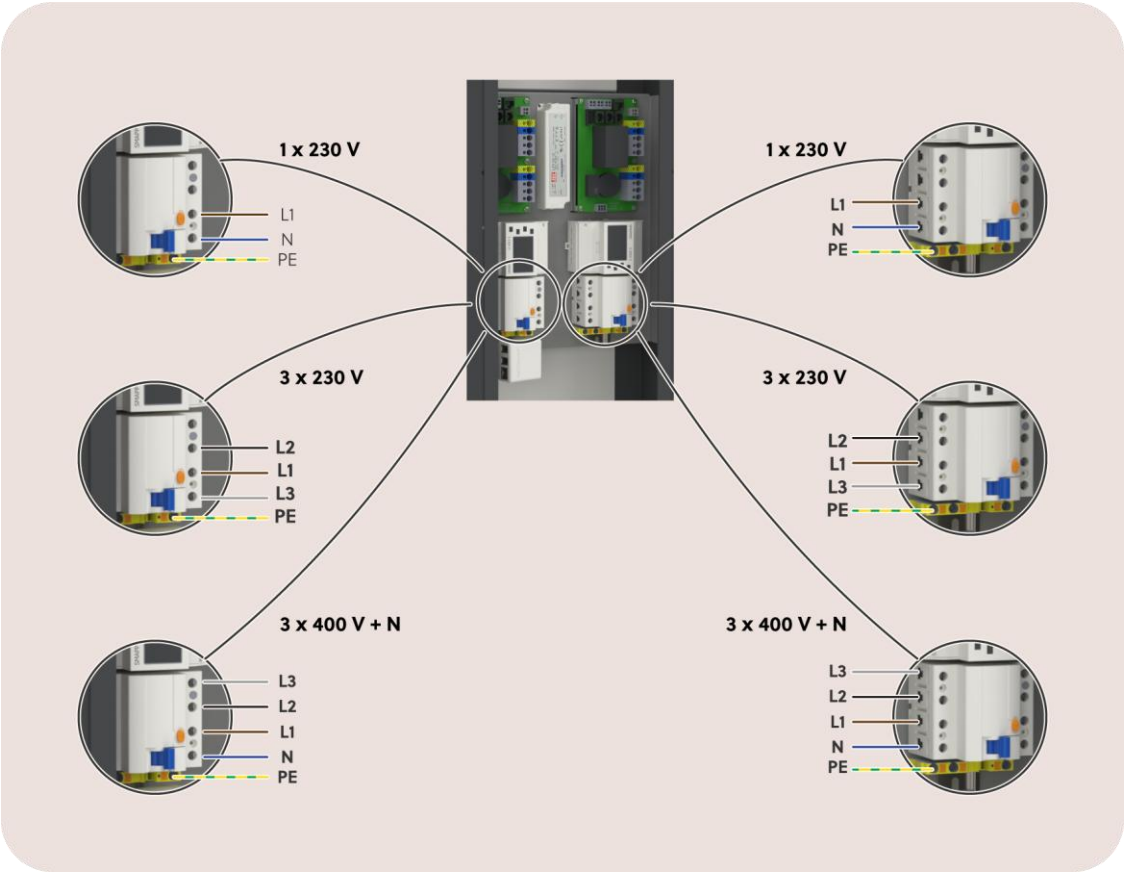


Image 11: View on the power supply connection for each grid type

- Put the green/yellow conductor in the corresponding terminal block for the protective earth conductor.
- Put the blue conductor, if applicable, in the corresponding connection point for the neutral of the residual current device.
- Put the phase conductors in the necessary connection point of the residual current device.

NOTE

- L1 = brown phase 1-conductor
- L2 = black phase 2-conductor, if applicable
- L3 = grey phase 3-conductor, if applicable
  For a 3P grid without neutral conductor, put the grey conductor in the neutral connection point.

  For a 3P+N grid we recommend different connection of the three phases.
  For more information, refer to Phase rotation (page 36).

6. Make sure that the two residual current devices are set to the on position.
   The on position is shown in Image 12.

As a result, the EV Base is almost ready for power.

5.5. Connect the EV Base to the internet

Context

CAUTION

Risk of electric shock.

Make sure no tools are in the charging station and people stand free from the charging station.

Communication with the internet can occur in three ways: wired connection (Ethernet), Wi-Fi, or 4G.

The EV Wall comes standard with a Smappee Connect, which enables communication via Ethernet or Wi-Fi. If neither an Ethernet nor Wi-Fi connection is available, communication will occur via 4G. In that case, the Smappee Connect must be replaced with a Smappee 4G Connect inside the building.

NOTE

The charging station comes with a Smappee Splitter, which is only used if you put the Connect or the 4G Connect in the building. If the wired connection goes directly to the charging station, you don't need the Smappee Splitter.

Via a wired connection or Ethernet

NOTE

You can also put the Connect in the building, for example if you are not sure if your local network is secured. Go to the topic Via Wi-Fi (page 28) for the instructions to install the Connect in the building. The Ethernet connection will be done during configuration.

Proceed as follows.

1. Guide the twisted pair cable from the building through the cable gland.

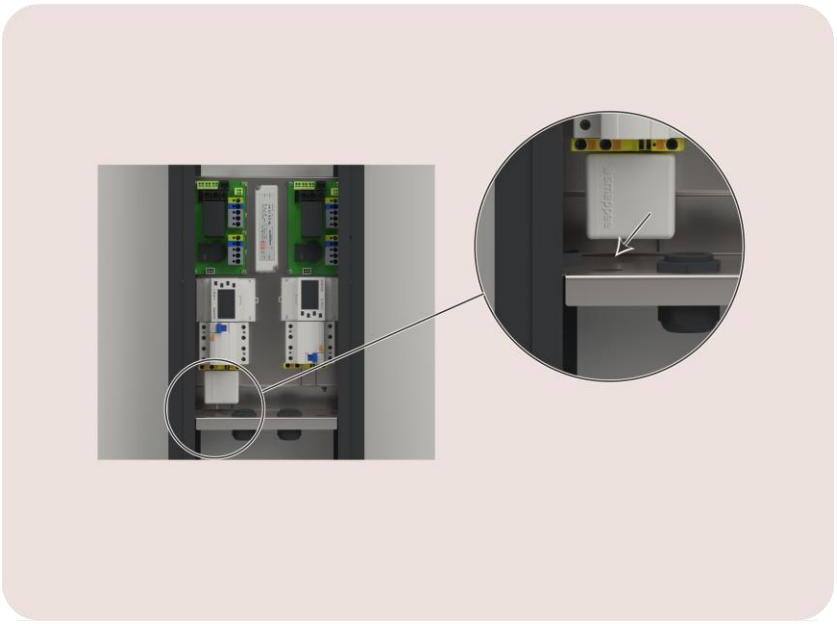


Image 4: View on the cable entry for the twisted pair cable

2. Cut the twisted pair cable to the necessary length.
   The twisted pair cable from your router goes to the RJ45 port of the Connect.

Image 5 View on the RJ45 port on the Connect

3. Attach the RJ45 connector (not supplied).
4. Put the connector in the related RJ45 port.
5. Tighten the cable gland.
6. Go to Post-requisites (page 32)

Via Wi-Fi

Proceed as follows:

1. Remove the Smappee Connect and the RJ10 cable from the EV Base.
2. Re-route the RJ10 cable from the MID meter connected to the Connect towards a B port of the relay board.
3. Guide a UTP communication cable through the right cable gland at the bottom of the EV Base.
4. Connect the RJ45 connector of the UTP cable to the A+B port of the relay board.

Image 12: View on the A+B port of the relay board

5. Route the UTP cable into the building.
6. Connect the RJ45 connector of the UTP cable to the A+B port of the Smappee Splitter inside the building.

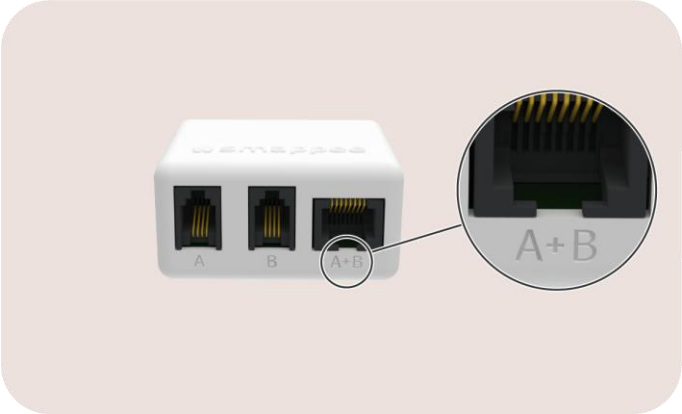


Image 13: View on the A+B port of the Smappee Splitter

The Smappee Splitter is included with the charging station and manages the communication between the charging station and the building.

7. Check whether the RJ10 cable from the Smappee Connect is plugged into one of the two B ports and reconnect it if necessary.

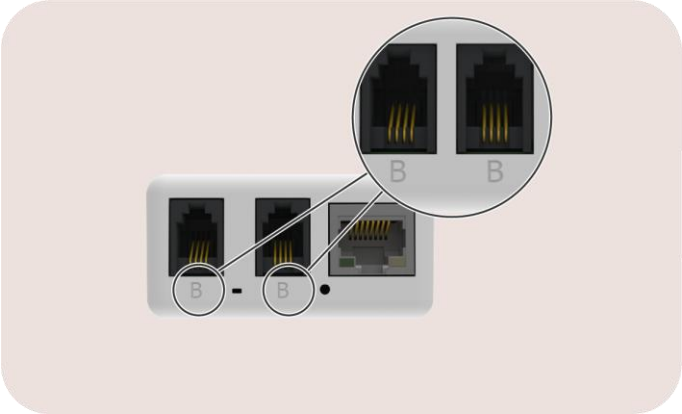


Image 14: View on the B ports of the Smappee Connect

8. Connect the other end of the RJ10 cable to the B port of the Smappee Splitter.

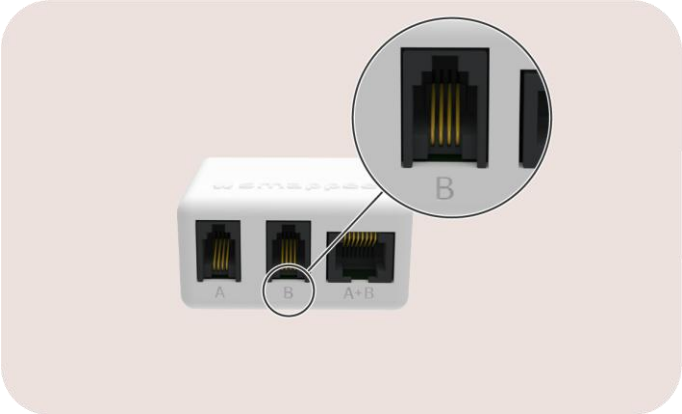


Image 15: View on the B port of the Smappee Splitter

For proper installation, a DIN mounting plate is included for the Smappee Splitter, and a wall mounting plate is included for the Smappee Connect.

9. Go to Post-requisites (page 32)

Via 4G

NOTE

The position of the antenna of the Smappee 4G Connect (upright or angled) does not affect the signal strength.

Proceed as follows:

1. Unplug the RJ10 cable from the Smappee Connect and remove the Smappee Connect from the EV Base.

Image 16: View on the Smappee Connect

   Keep the Smappee Connect aside (in case a future switch from Smappee 4G Connect back to Smappee Connect is required).
2. Re-route the RJ10 cable from the MID meter connected to the Connect towards a B port of the relay board.
3. Guide a UTP communication cable through the right cable gland at the bottom of the EV Base.
4. Connect the RJ45 connector of the UTP cable to the A+B port of the relay board.

Image 17: View on the A+B port of the relay board

5. Route the UTP cable into the building.

6. Connect the RJ45 connector of the UTP cable to the A+B port on the Smappee Splitter inside the building.

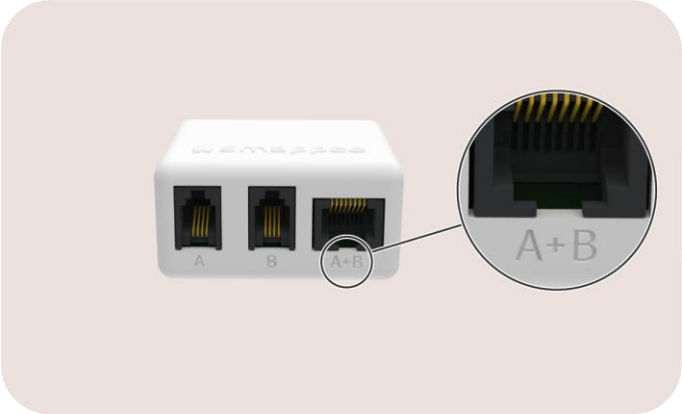


Image 18: View on the A+B port of the Smappee Splitter

The Smappee Splitter is included with the charging station and manages the communication between the charging station and the building.

7. Connect the supplied RJ10 cable from the Smappee 4G Connect to one of its two B ports.

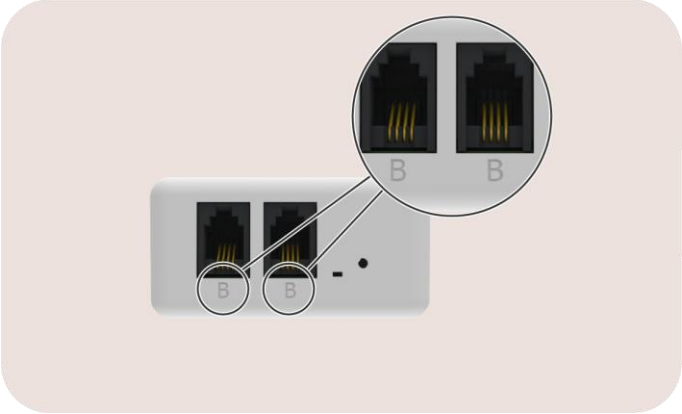


Image 19: View on the B ports of the Smappee 4G Connect

8. Connect the other end of the RJ10 cable to the B port on the Smappee Splitter.

Image 20: View on the B port of the Smappee Splitter

For proper installation, a DIN mounting plate is included for the Smappee Splitter and a wall mounting plate for the Smappee 4G Connect.

9. Go to Post-requisites(page 32)

Post-requisites

1. Switch on the power supply to the charging station.
2. Check the status of the components after approximately 30 seconds.

Description	More information
2 x MID meter	Display is lighting up
1 x Smappee Connect	LED is lighting up For more information, refer to the annex Colour code explanation (page 38).

3. Switch off the power supply to the charging station.

5.6. Configure the EV Base with the Smappee App

Instructions

Proceed as follows:

1. Scan the QR code on the front of the charger.

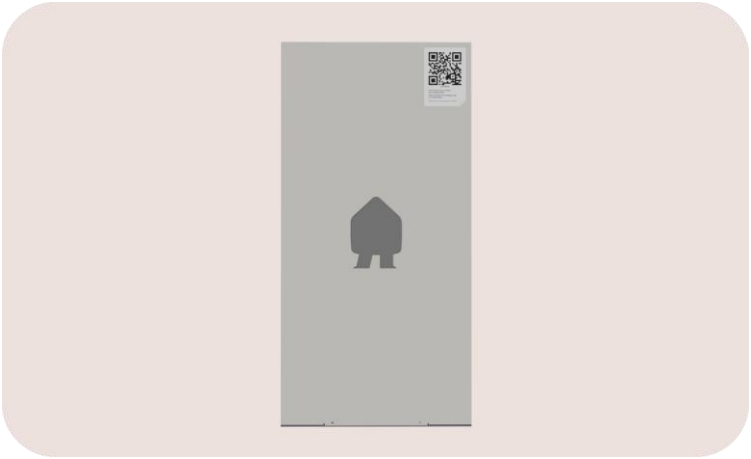


Figure 21: QR code on the front of the charging station

2. Follow the steps shown in the Smappee App.

Post-requisites

The settings of the charging station can be adjusted in the Smappee App or the Smappee Dashboard.

- Name
- LED brightness
- Maximum current per connector and thus the charging speed per charging point
- Phase mapping per connector

5.7. Complete the installation of the EV Base

Context

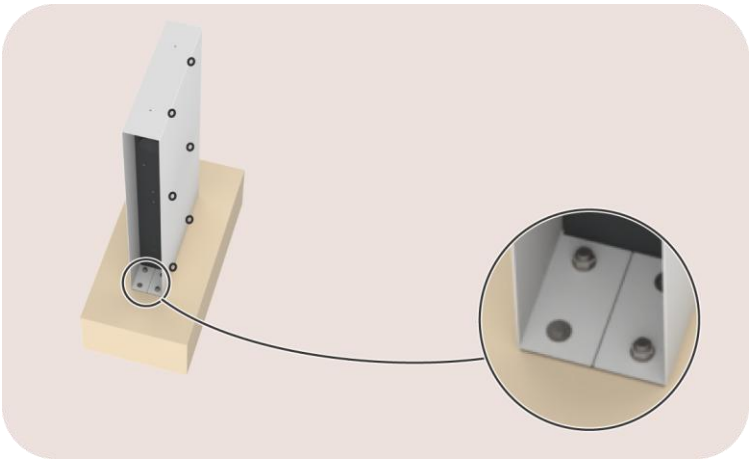


Image 22: View on the bolts that hold the rear plate and floorplate

Instructions

Proceed as follows.

1. Remove the two nuts and large washers from the rear concrete anchors.
2. Put the rear plate back.
3. Align the small holes in the rear plate and in the floorplate, so that you can:
   - Screw in the M6 bolts with its washers
   - Screw in the six screws from the rear plate
   - Put the large washers and the nuts again over the rear concrete anchors
4. Tighten all fasteners of the rear plate and at the bottom.

5.8. Give the owner a smooth start

1. Give the Smappee Charge Card to the charger owner.
2. Tell them to scan the QR code on the front of the charger.

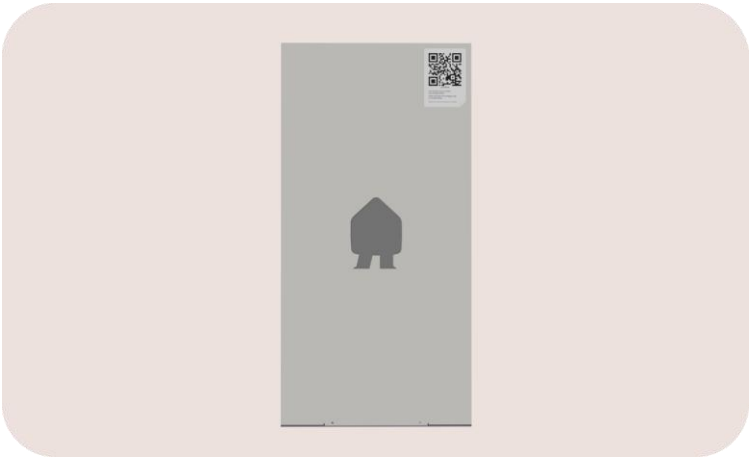


Figure 23: QR code on the front of the charging station

Annexes

Declaration of conformity

Docusign Envelope ID: 594463BB-F7DF-41B6-A982-89CF1DDCBB19

EU Declaration of Conformity

Manufacturer	**Smappee NV**
Address	Evolis 104, 8530 Harelbeke, Belgium
Represented by	**Stefan Grosjean**
Function	CEO

Hereby declares, under the sole responsibility of the manufacturer, that

The product:	AC conductive charging equipment
Models:	EVBC-2332-B-E-W, EVBC-2332-B-E-B, EVBC-2332-C5-E-B, EVBC-2332-C5-E-W
First CE affixed:	2025

Complies with the requirements of the following EU Directives, provided that it is installed, maintained and used according manufacturer's instructions:

2014/53/EU The Radio Equipment Directive

2011/65/EU RoHS Directive

Standards applied:

Note: where RED is applicable to radio equipment, the LVD and EMCD do not apply, however the RED refers to the essential requirements of the LVD and EMCD

RED art 3.1.a Health and safety:
EN IEC 61851-1 2019 Electric vehicle conductive charging system - General requirements
EN IEC 62311:2020 Human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)

RED art 3.1.b Electromagnetic Compatibility:
EN IEC 61851-21-2:2018 EMC requirements for off board electric vehicle charging systems
EN ETSI 301 489-1: 2019 EMC for radio equipment & services: common technical requirements
EN ETSI 301 489-3: 2023 EMC specific conditions for Short Range Devices (SRD)
EN ETSI 301 489-17: 2023 EMC for Broadband and Wideband Data Transmission Systems

RED art 3.2 Efficient use of Radio Spectrum:
EN ETSI 300 220-1: 2017 Short Range Devices - 25 MHz to 1000 MHz: Technical characteristics
EN ETSI 300 328: 2019 Wideband transmission systems - Data transmission equipment in the 2,4 GHz band

RED art 3.3.e Network protection
EN 18031-1: 2024 Common security requirements for Internet connected radio equipment

RED art 3.3.f Personal data protection
EN 18031-2: 2024 Common security requirements for radio equipment processing data

RED art 3.3.g Protection from fraud
EN 18031-3: 2024 Common security requirements for Internet connected radio equipment processing virtual money or monetary value

Authorized signatory

DocuSigned by:
Stefan Grosjean
A7AEF5470392469...

Stefan Grosjean, CEO

15-okt-2025

smappee

Phase rotation

Most of the hybrid vehicles use only one phase for charging.

When connected to a single-phase power supply, the Smappee (Cascade) Overload Protection will control the charging sessions on the L1 phase to prevent a circuit breaker from tripping.

When connected to a three-phase power supply, the Smappee (Cascade) Overload Protection can control the charging sessions on each of the three phases. When charging multiple single-phase electric vehicles at the same time, you can use phase 2 and phase 3 by doing the following:

- During the installation you can do the physical phase rotation.
- During the configuration with the Smappee App you need to set the phase mapping.

Example of phase rotation

A charging square has two EV Base (charging point 1 thru 4), one EV Wall (charging point 5) and an EV One (charging point 6). In the following table, the bold Xs indicate the phase rotation.

				3-phase power supply with the colours of the wires to be connected on the position X in the distribution panel		
Charging stations from the Smappee EV Line	**Connector number on the charging square**	**Internal wiring of the phases and their colour in the charging station**		**3 x 400V + N**		
				L1	**L2**	**L3**
				Brown	**Black**	**Grey**
EV Base 1	Connector 1	**L1**	**Brown**	**X**	-	-
		L2	**Black**	-	X	-
		L3	**Grey**	-	-	X
	Connector 2	**L1**	**Brown**	-	**X**	-
		L2	**Black**	-	-	X
		L3	**Grey**	X	-	-
EV Base 2	Connector 3	**L1**	**Brown**	-	-	**X**
		L2	**Black**	X	-	-
		L3	**Grey**	-	X	-
	Connector 4	**L1**	**Brown**	**X**	-	-
		L2	**Black**	-	X	-
		L3	**Grey**	-	-	X
	Connector 5	**L1**	**Brown**	-	**X**	-
		L2	**Black**	-	-	X
		L3	**Grey**	X	-	-
EV One	Connector 6	**L1**	**Brown**	-	-	**X**
		L2	**Black**	X	-	-
		L3	**Grey**	-	X	-

Colour code explanation

Status of the Smappee Connect

This status is relevant during the configuration and use of the charging station.

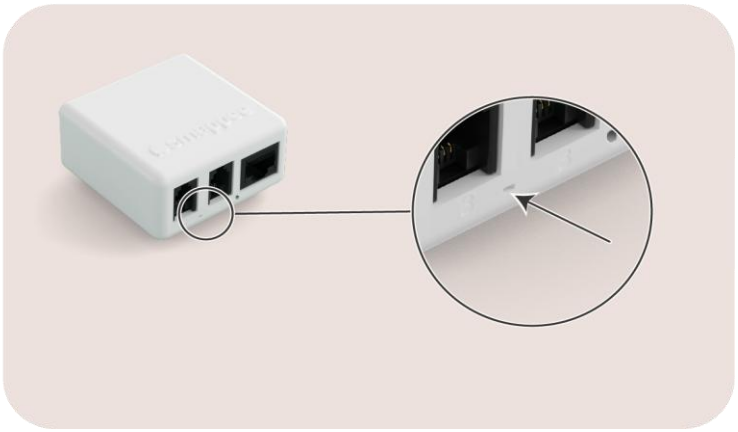


Image 24: Position of the LED on the Smappee Connect

Colour	Status	Meaning	More information
	Blue continuous	Starting up	The Connect is starting up. If this takes more than 30 seconds, please contact support.
	Blue flashing	Ready for connecting	The Connect is ready to be connected to the network.
	Green continuous	Connecting	The Connect is connecting to the internet and must become Green breathing. If this takes more than 2 minutes, please contact support.
	Green breathing	All good	The Connect operates correctly.
	Red flashing	No connection	The Connect has no connection to the internet during start-up. Find the cause of the connection issue or contact support.

Status of the Smappee 4G Connect

This status is relevant during the configuration and use of the charging station.

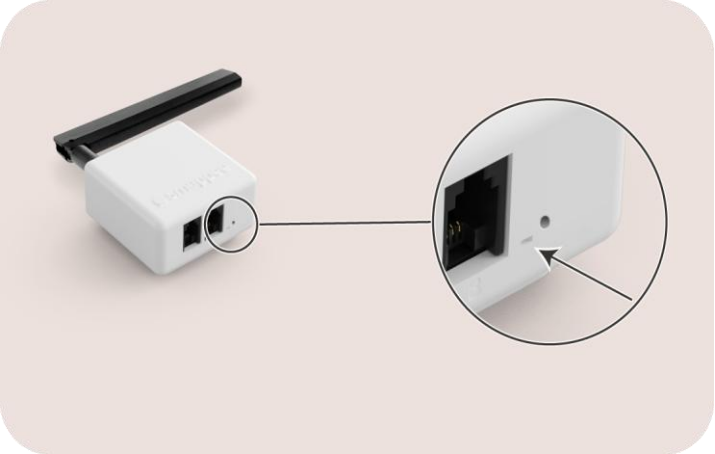


Image 25: Position of the LED on the Smappee 4G Connect

NOTE

Make sure your own body does not interfere with the reception.

Colour	Status	Meaning	More information
	Cyan flashing	Searching for 4G network	The 4G Connect is searching for network connection.
	Green continuous	Connecting	The 4G Connect is connecting to the internet and must become Green breathing. If this takes more than 2 minutes, please contact support.
	Green breathing	Good reception	The 4G reception is good at this position.
	Yellow breathing	Average reception	The 4G reception is average at this position and some features may respond slowly.
	Red breathing	Poor reception	The 4G reception is poor at this position. You must move the 4G Connect to a better spot or use an alternative connection.
	Red flashing	No reception	The 4G Connect has no connection to the internet during start-up. Find the cause of the connection issue or contact support.

Status of the charging station

This status is relevant during the use of the charging station.

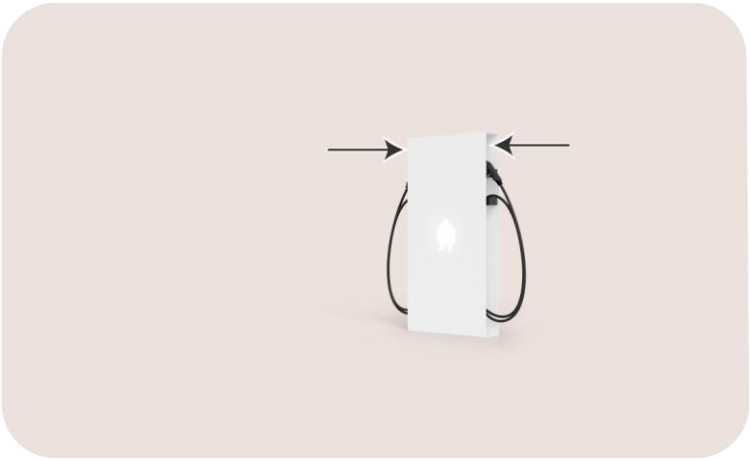


Image 26: Position of the RFID readers with LED on the EV Base

	NOTE Each charging point can have a different status.

Colour	Status	Meaning	Action of the user
	Red continuous	Charging point is unavailable.	Something is wrong or the charging station has been disabled. Enable the charging station with the Smappee App or contact your installer.
	White continuous	Charging point is available.	Connect your electric vehicle (EV) with the charging station.
	Blue continuous	EV is connected to the charging point but is not yet charging.	If no authorisation is necessary, wait 3 seconds until you hear a sound and the LED is green. If the LED stays blue, do one of the following: • Swipe your RFID tag (charge card, RFID key, …) along the blue indicator of the charging station. • Scan the QR code. • Go to the Pay Station.
	Blue flashing	Authorisation is being verified.	Wait 15 seconds until the authorisation is finished and you hear a sound. The LED is red if charging has not started or green if charging has started.
	Red flashing	RFID tag is not authorised.	Contact the supplier of the RFID tag.
	Green breathing	EV is being charged.	Your EV is being charged.
	Green flashing	Charging session is waiting to charge or paused by an overload	This is informative, no action required.
	Green continuous	EV is charged	Disconnect the charging cable and put it safely back in the cable holder or another storage place (for the socket-variant).

Maintenance schedule

To ensure safe and reliable operation, periodic maintenance and inspections are recommended. The frequency depends on usage and environmental conditions.

WARNING

Before starting maintenance activities, consider all safety precautions as listed in Safety instructions (page 5).

NOTE

For publicly accessible charging stations, periodic inspections may be required by local regulations. Check applicable guidelines for compliance.

Task	**More information**
Visual inspection of the charging station	Check for visible damage or wear. If necessary, consult an installer for assessment or replacement.
Cleaning	Cleaning is optional and does not affect the operation of the charging station. For aesthetic reasons, you may wipe the unit with a dry, clean cloth. Do not use water jets, solvents, or abrasive materials.

Spare parts list

Article no.	EAN	Description
i1-GW-3	5425036931442	Smappee Connect
i1-EN3-1	5425036931701	Smappee 3phase MID meter
AC-RCDA-4P40A	5425036935532	RCD Type A 4P 30mA 40A
EV-PCB-SIGNALBOARD-1	5425036935549	EV Line Charge controller + RFID Reader
EV-PCB-RELAYBOARD-1x4P-1	5425036935563	EV Line Relayboard 1 x 4P
EV-CABLE-12P-1	5425036935587	12P cable EV_charg 0,5m
AC-AB-SPLITTER	5425036935334	A_B Splitter
EVB-CBL-T2-332-5	5425036932494	EV Base 3-Phase 32A Type 2 open-ended charging cable 5m
EVB-BACK-PLATE-B	5425036935624	EV Base Back plate Black
EVB-BACK-PLATE-W	5425036935631	EV Base Back plate White
EVB-FLOORPLATE-1	5425036934146	EV-Base Floorplate
EVB-LED-1	5425036934733	EV Base Led board
EVB-CBL-HOLDER-4	5425036934207	EV Base Cable holder - 4 pieces
EVB-CONN-HOLDER-4	5425036934214	EV Base Connector holder - 4 pieces
EVB-INSIDECOVER-1	5425036935365	EV Base inside cover kit
EVB-SHUTTER-V2-3	5425036935358	EV Base V2-V3 Shutter upgrade kit

If you need another part than listed, please contact info@smappee.com.