

Smappee EV Base Installation manual



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

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1. Introduction

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

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.

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

	<p>WARNING</p> <p>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.</p> <p>Only certified electricians may carry out the installation, which must be in accordance with the national safety regulations.</p> <p>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.</p>
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	<p>CAUTION</p> <p>Risk of electric shock.</p> <p>Refer to the accompanying documentation whenever you see this symbol.</p>
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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 your 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.
- 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
EVB-2332-B-E	5425036932272	EV Base 3-Phase 2 x 22 kW Socket
EVB-2332-B-E-B	5425036934184	EV Base Black 3-Phase 2 x 22 kW Socket
EVB-2332-BS-E	5425036932753	EV Base 3-Phase 2 x 22 kW Socket with shutter
EVB-2332-C5-E	5425036932296	EV Base 3-Phase 2 x 22 kW Type 2 cable 5m

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	Quick install guide
5	2	QR code label
6	2	Charging cable
7	2	M32 cable gland
8	2	Cable ties for strain relief

3.3. Directional determination

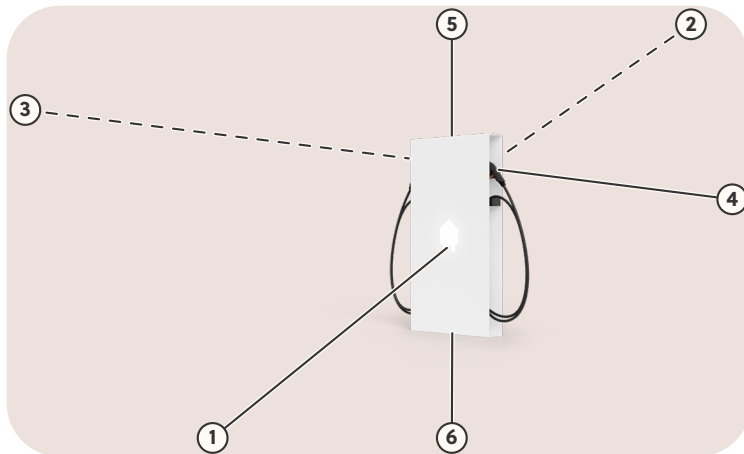


Image 2: Directional determination

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.

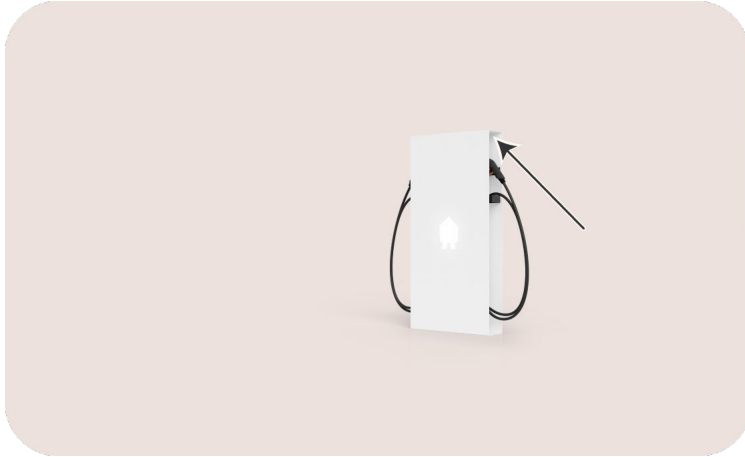


Image 3: Position of the identification label

Content of the identification label of the EV Base

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

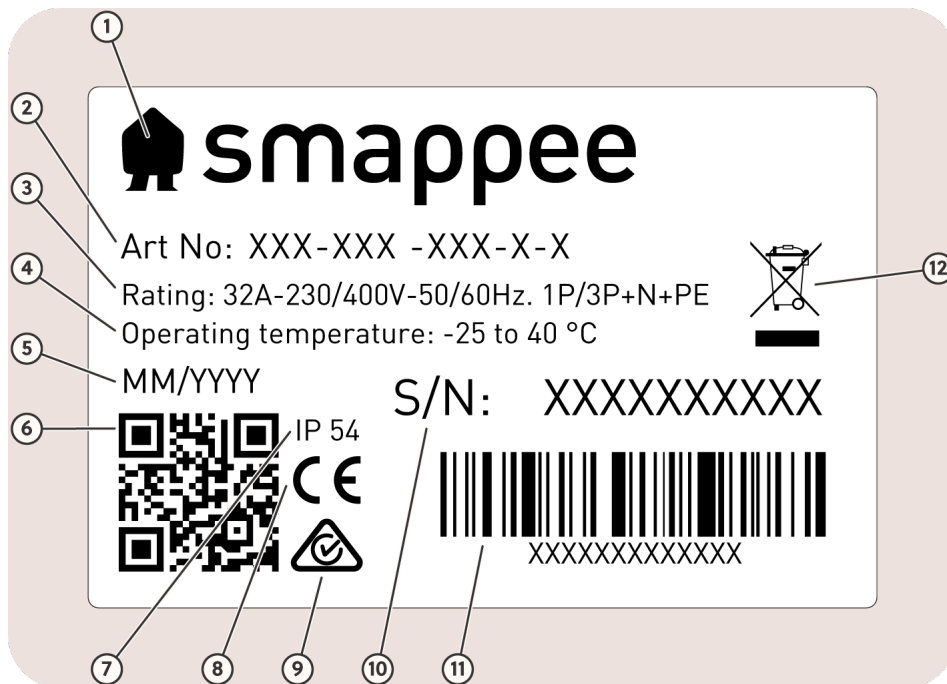


Image 4: Identification label

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
Physical properties	
Dimensions	1200 x 600 x 150 mm
Weight (excluding packaging)	Charging station with sockets: 33 kg Charging station with sockets with shutter: 33 kg Charging station with cables: 39.5 kg
Charging cable length	2 x 5 m
Supply line connection	Flexible conductors up to 6 mm ² or solid conductors up to 10 mm ²
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) or Case C (Fixed cable), depending on model (IEC 61851)
Metering	MID certified class B
Integrated Residual Current Protection	Rated operating residual current detection: 6 mA DC and 30 mA AC RCD type A
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
Rated peak withstand current (I _{pk})	6 kA

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

Feature	Description
Rated conditional short-circuit current (I_{cc})	6 kA
EMC classification	Class B
Connection method	AC, permanently connected
Required external circuit breaker(s)	2 x 2P (single-phase), 2 x 3P (three-phase) or 2 x 4P (three-phase with neutral) breaker of max. 40 A, type B or C
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	Aluminum (structure), Magnelis (front plate and rear plate)
Enclosure standard colors	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 % - 95 %, non-condensing
Maximum installation altitude	0 – 2.000 m
Access	Locations with restricted and non-restricted access



NOTE

The operating temperature 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.



NOTE

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.



NOTE

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.



NOTE

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. Preparing the installation

For overload protection or optimized 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 authority.
- 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 Ethernet cable for the internet connection available for each EV Base.
- Route the two power supply cables together with the Ethernet 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 Ethernet cable length available at the location of the EV Base, to be able to connect it easily.

4.2. 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 Ethernet 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 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.

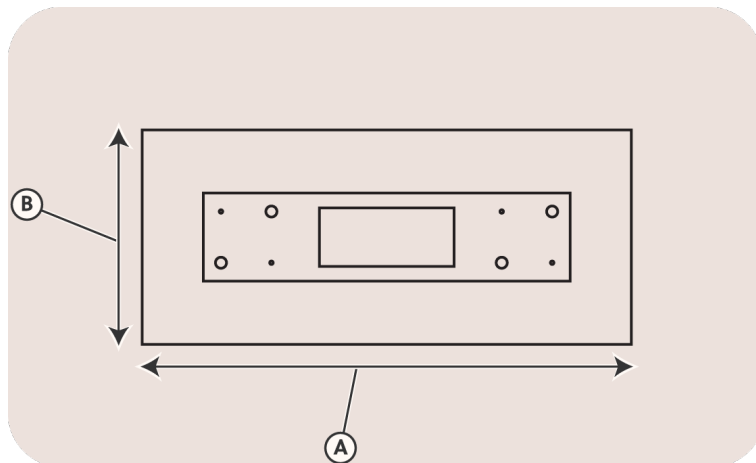


Image 5: View on the minimum dimensions ($A \times B = 0.80 \text{ m} \times 0.35 \text{ m}$ or $2.62 \text{ ft} \times 1.15 \text{ ft}$)

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

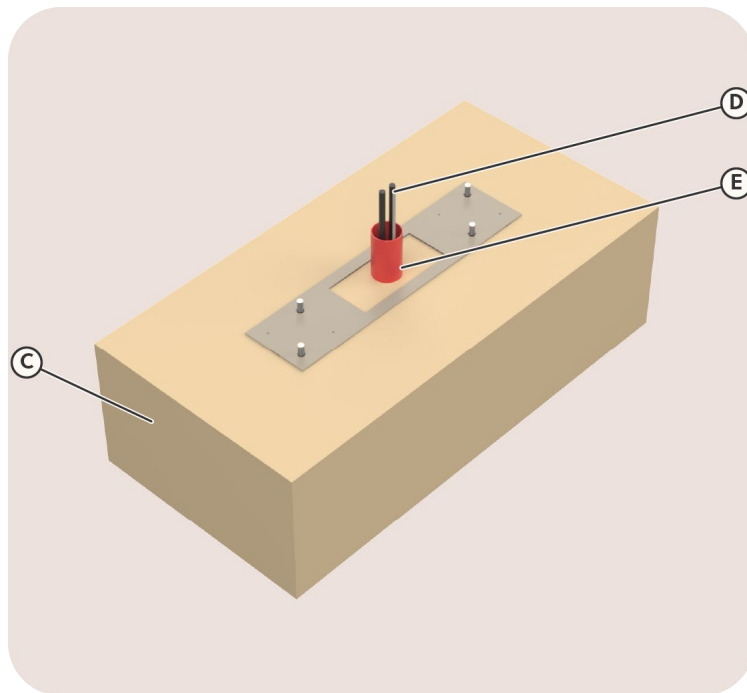


Image 6: Example of a solid foundation (C), with cables (D) in a flexible conduit system (E)

3. Fill foundation hole with concrete.

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

4.3. 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

4.4. Supplies (not included)

- Network cable and two RJ45 connectors for internet access, minimum Cat5 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)

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 charging EV Base.

1. Prepare the EV Base (page 20)
2. Install the floorplate of the EV Base (page 21)
3. Attach the EV Base to the floorplate (page 22)
4. Connect the charging cables (page 23)
5. Connect the power supply of the EV Base (page 24)
6. Connect the EV Base to the internet (page 25)
7. Attach the QR code labels to the EV Base (page 26)

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

8. Configure the EV Base with the Smappee App (page 27)
9. Complete the installation of the EV Base (page 28)

5.1. 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.

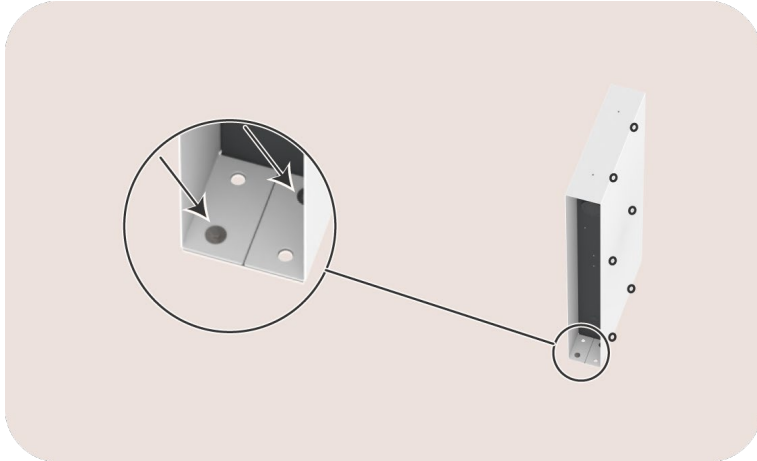


Image 7: View on the bolts that hold the floorplate and rear plate

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.

5.2. 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 Ethernet 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 center of a 16 mm hole of the floorplate.
Do not drill through the 5 mm bolt holes.

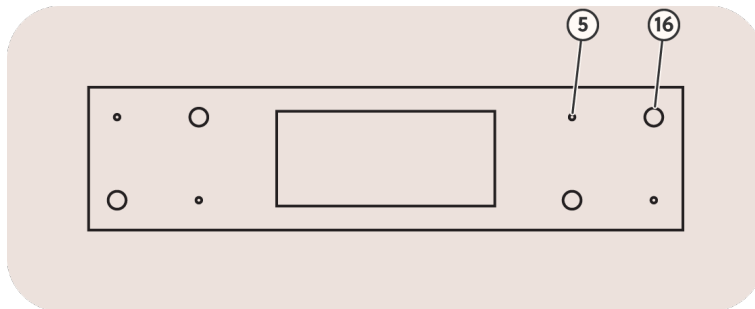


Image 8: Top view on the holes in the floorplate

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.

5.3. 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.

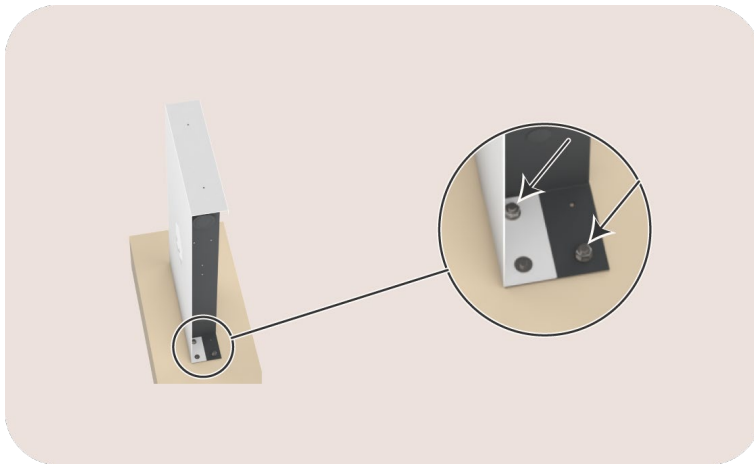


Image 9: View on the front plate



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.

5.4. 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.

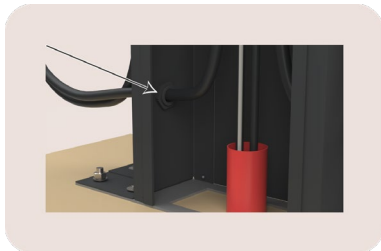


Image 10: View on the cable gland

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

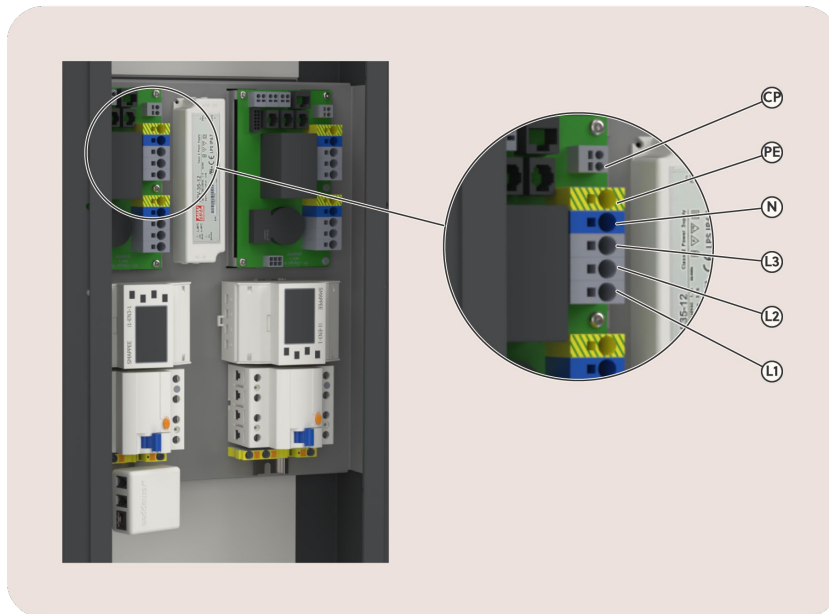


Image 11: View on the cable connections

4. Tighten the cable gland.
5. 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.
6. Repeat steps 1 thru 5 for the other charging cable.

5.5. Connect the power supply of the EV Base

Context

Each charging point has its dedicated power supply connection.

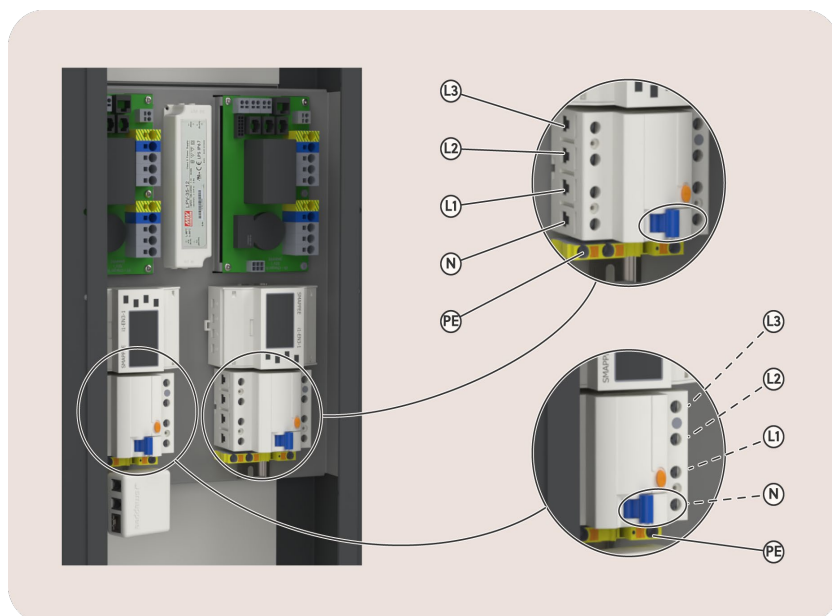


Image 12: View on the power supply connection

Instructions

Proceed as follows.

1. Cut the two power supply cables to sufficient length.
2. Remove 12 mm of isolation from each conductor.
For stranded wires, use suitable cable lugs.
3. Make sure that the resistance of the grounding circuit is within acceptable limits.
4. Put the green/yellow conductor in the corresponding terminal block for the protective earth conductor.
5. Put the blue conductor, if applicable, in the corresponding connection point for the neutral of the residual current device.
6. 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 29).

7. 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 now ready for power.

5.6. 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.

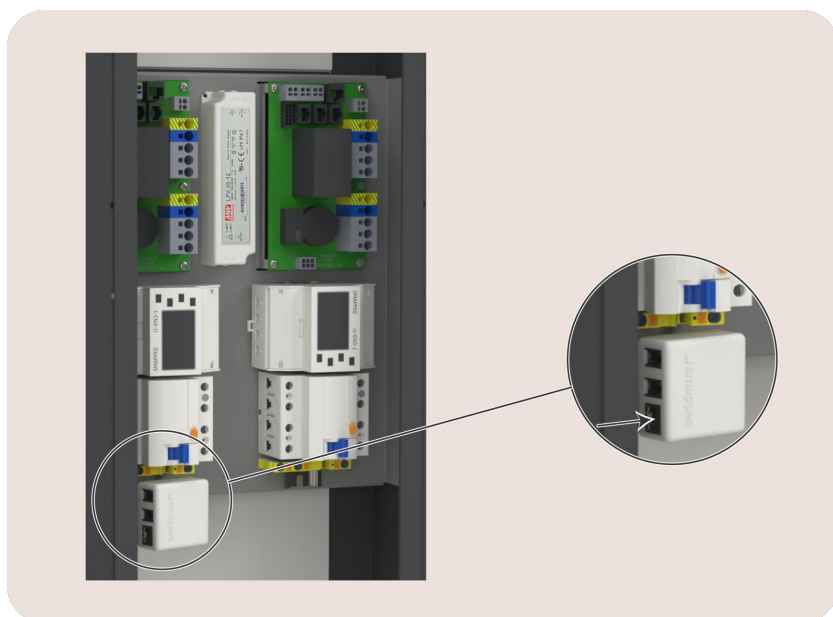


Image 13: View on the Smappee Connect

Instructions

Proceed as follows.

1. Guide the Ethernet cable to the Smappee Connect.
2. Cut the Ethernet cable to the necessary length.
3. Attach the RJ45 connector (not supplied).
4. Put the connector in the RJ45 port.
5. Start the power supply to the EV Base.
6. Check the status of the components after approximately 30 seconds.

Description	More information
1 x Smappee Connect	Blue flashing, 1 time per second For more information, refer to the annex Color code explanation (page 32).
2 x MID meter	Display is lighting up

7. Stop the power supply to the EV Base.

5.7. Attach the QR code labels to the EV Base

Context



NOTE

This section is only relevant if the EV Base needs Scan and charge.

If you will not use a QR code to start charging sessions, go to Configure the EV Base with the Smappee App (page 27).

Instructions

Proceed as follows.

1. Make sure the top surface of the charging station is free from dirt and grease.
2. Remove the protective cover from the QR code label.
3. Put the label near to the connector.
Make sure the EV driver will not scan the QR code of the other connector.

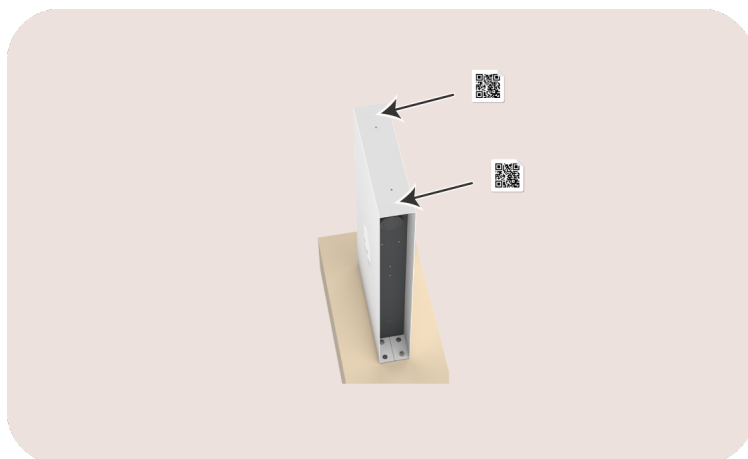


Image 14: View on the location of the QR code labels

4. Repeat steps 2 and 3 for the other label.

Post-requisites

1. Go in the Smappee App via **Settings > Charging stations**.
2. Select the configured EV Base and push the **Included QR-stickers** button.

5.8. Configure the EV Base with the Smappee App

Prerequisites

This procedure is done with the Smappee App. You can download this mobile app from the Apple App Store for iOS or the Google Play store for Android phones.



Image 15: Download the Smappee App

Instructions

1. For the installation of the first Smappee product, go to **House** > **+** button > **I want to install a Smappee charging station**.
For the addition of an EV Base to an existing Smappee location, go to **Settings** and then:
 - For a first installation to this location: **Install a Smappee EV Line charging station**
 - For an additional charging station at this location: **Charging stations** > **+** button
2. Follow the steps shown in the Smappee App.

Post-requisites

The settings of your 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 connector
- Phase mapping per connector

5.9. Complete the installation of the EV Base

Context



CAUTION

Risk of electric shock.

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

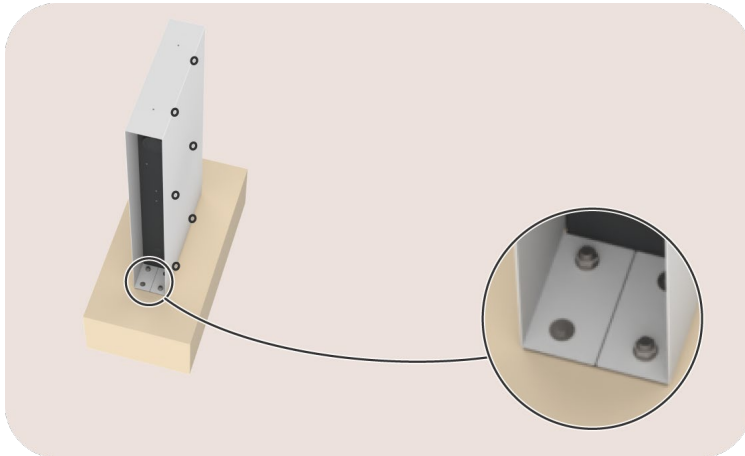


Image 16: View on the bolts that hold the rear plate and floorplate

Instructions

Proceed as follows.

1. Fill the opening of the flexible tube which has the power supply cables and the Ethernet cable with an airtight material such as polyurethane foam.
This is to stop small animals from entering the charging station via the ground and to avoid moisture problems.
2. Seal the opening between the floorplate and the foundation with universal sealant.
3. Remove the two nuts and large washers from the rear concrete anchors
4. Put the rear plate back.
5. 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
6. Tighten all fasteners of the rear plate and at the bottom.

Annexes

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.

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

Declaration of conformity

Declaration of conformity

We,
Smappee nv
Evolis 104
B-8530 Harelbeke, Belgium

following the provision of the following EC Directives:

- 2014/35/EU The Low Voltage Directive
- 2014/30/EU The Electromagnetic Compatibility Directive
- 2014/32/EU Measuring Instrument Directive
- 2011/65/EU RoHS Directive

hereby declare that the product:

EVB-2332-B-E, EVB-2332-B-E-B, EVB-2332-BS-E, EVB-2332-C2-E, EVB-2332-C5-E

is in conformity with the applicable requirements of the following documents

- Metering:
EN50470-1: 2006 / EN50470-3 :2006
- Emissions:
(EN61326-1 : 2013)
Radiated Emission: EN 55011:2009 / EN 55032:2015 (Class B)
Conducted Emission: EN 55011:2009 / EN 55032:2015 (Class B)
Harmonic current Emission: EN 61000-3-2:2005 +A1:2008 + A2:2009
Flicker: EN 61000-3-3:2008
- Immunity:
(EN61326-1 : 2013)
ESD: EN 61000-4-2:2008 / EN 61000-4-2 :2009
Radiated immunity: EN 61000-4-3:2006 + A1:2007 + A2: 2010
Power frequency magnetic field: EN 61000-4-8:2009
Voltage dips/interruptions: EN 61000-4-11:2004
Common Mode Immunity: EN 61000-4-6:2008 / EN 61000-4-6:2009
Burst: EN 61000-4-4:2004 / EN 61000-4-4:2012
Surge: EN 61000-4-5:2005 / EN 61000-4-5:2006
- Safety:
Metering Function: IEC 61010-1 Ed 3.0 (2010-06) + A1:2016
AC Charging equipment: IEC 61851-1 (2017) / EN61558-1, AS/NZS 3820:2020

Harelbeke, Belgium, September 14, 2020

Authorized signatory



CEO Smappee



Color code explanation

Status of the Smappee Connect

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

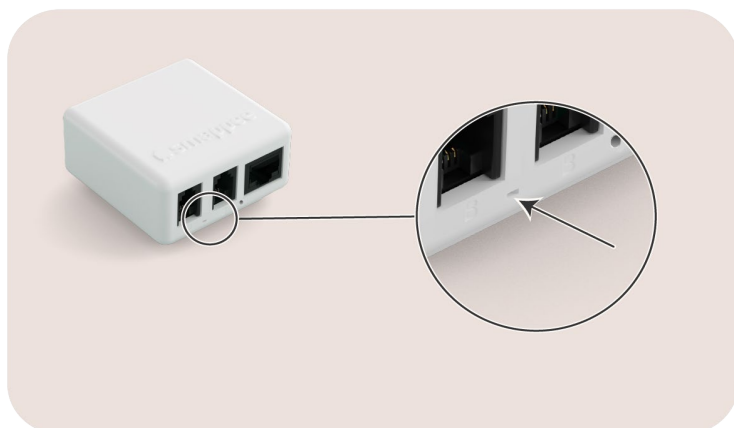







Image 17: Position of the LED on the Smappee Connect

Color	Status	Meaning	More information
	Blue continuous	Starting up	The Connect is starting up. If this takes more than 30 seconds, please contact support.
	Blue pulsing	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 charging station

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

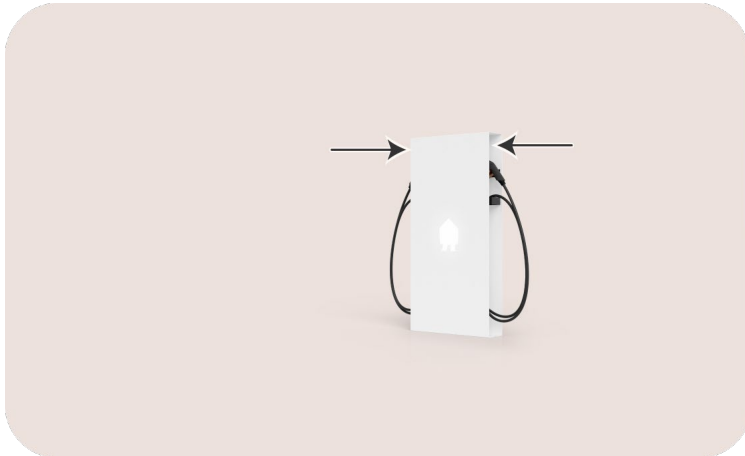










Image 18: Position of the RFID readers with LED on the EV Base



NOTE

Each charging point can have a different status.

Color	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 authorization 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: <ul style="list-style-type: none"> • 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		Authorization is being verified.	Wait 15 seconds until the authorization 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 authorized.	Contact the supplier of the RFID tag.
	Green breathing		EV is being charged.	Your EV is being charged.
	Green pulsing		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

For a safe and regular operation of the charging station, regular maintenance or control is required. Refer to the table below for the intended maintenance work and interval.

All points in the table are considered mandatory and must be carried out by a certified technician.

Before starting maintenance activities, consider all safety precautions as listed in:

- Safety instructions (page 5)
- Installation and configuration (page 19)

	<p>WARNING</p> <p>Fully read and follow the safety instructions below before you install, service or use your charging station. Incorrect installation, repairs or modifications can result in danger to the user and may void the warranty and liability.</p>
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Maintenance task	Interval	More information
Check the compliance.	Every maintenance activity	Refer to local regulations and standards.
Check the visual state.	Every maintenance activity	If necessary, replace worn or damaged parts.
Replace the charging cable.	After 20,000 charging cycles or if damaged	Article number : EVB-CBL-T2-332-5
Do a functional test of the residual current device.	Every maintenance activity	Push the button of the device. Check that there is no power supplied. If necessary, replace the device.
Verify the protective measures.	Yearly	With the charging station switched off, check the resistance between the ground and all externally accessible parts. This can be housing, screws and other parts.
Check for cleanliness and condensation.	Yearly	Stop the power supply before you open the charging station. If necessary, clean with a dry, clean cloth. Do not use abrasive agents or solvents. If necessary, replace the sealant of the openings. Refer to page 28.

