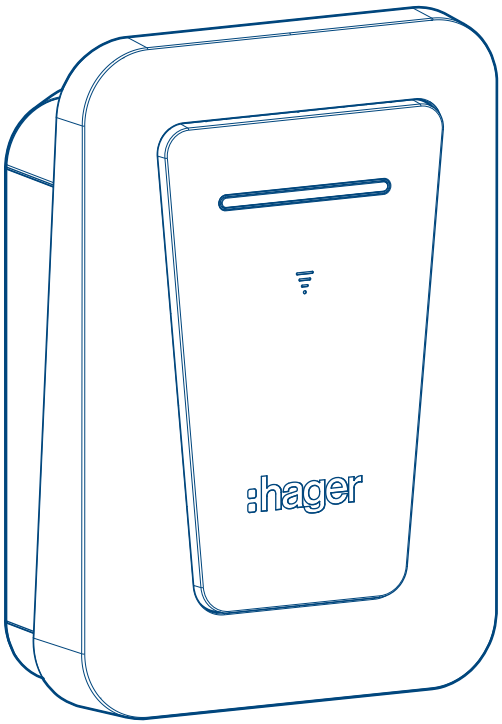
Installation and operating manual

Charging station

witty one



Charging station attached cable for electric vehicle

XVR111C

CE

:hager

EN

1 About this manual 4

1.1 Symbols used 4
1.2 Affected groups 5

2 Safety 6

2.1 Correct use 6
2.2 Safety instructions 6

3 Overview 8

3.1 Scope of delivery 8
3.2 Dimensions 8
3.3 Tools required 9

4 Overview of the device 10

4.1 External view of the device 10
4.2 Internal view of the device 10

5 Installation 13

5.1 Protective device requirements 13

6 Mounting the charging station 16

6.1 Preparatory work 16
6.2 Wall mounting 17

7 Electrical connection 19

7.1 Connection to the power terminal block 19
7.2 Connection of the output (optional) 20
7.3 Connection of the input (optional) 21
7.4 Connection of TIC cards (optional) 21
7.5 Connection of the attached cable 26

8 Settings 28

8.1 Operating current and connection type 28
8.2 Reset from the charging station 28

9 Final assembling....29

10 Commissioning....30

11 Advanced Configuration....31

11.1 Pairing....31
11.2 Dashboard....32
11.3 General settings....34
11.4 Access management....35
11.5 Load management....35
11.6 Outlet 230 V....36
11.7 Diagnostics....36
11.8 Installation report....36

12 Charging station operation....37

12.1 Operation without a badge....37
12.2 Operation with a badge....37

13 Charging an electric vehicle....38

13.1 Preparation for a charging session....38
13.2 Stopping a charging session....38
13.3 LED light strip....38

14 Maintenance....40

15 Appendix....41

15.1 Technical specifications....41
15.2 Identification of compatible vehicles in accordance with EN 17186....42
15.3 CE Declaration of Conformity....42
15.4 Disposal of the charging station....42
15.5 Warranty....43

1 About this manual

This manual describes the correct and safe installation and commissioning of the charging station for electric vehicles. These instructions are an integral part of the device. Keep these instructions throughout the service life of the device and pass them on if necessary.

1.1 Symbols used

Text icons

Symbol	Description
●	Action instruction in a single step or in any order.
①	Instructions for multi-step actions. Order must be complied with.
-	Enumeration
▶	Reference to documents / additional information

Indication icons

	Contents of the package		Product dimensions		Tools required
	Mounting		Installation		Final mounting
	Description of the device		Settings		Optional accessories
	Installation by an electrician		Alternating current (IEC 60417-5032)		Protective earth (IEC 60417-5019)
CE	Applicable throughout Europe and Switzerland		When displayed on a device or attached to the documents of the product, the symbol opposite indicates that the device must not be disposed of with household waste when it reaches the end of its service life.		For more information, refer to the installation and commissioning instructions

Degrees of danger warnings

Symbol	Signal word	Consequences in case of non-compliance
	Danger	Causes serious injury or death.
	Warning	May cause serious injuries or death.
	Caution	May cause minor injuries.
	Attention	May cause damage to the device.
	Comment	May cause damage.

Symbol	Description
	Risk of electric shock.
	Risk of damage due to mechanical overload.
	Risk of damage from electricity. Risk of electric shock
	Risk of fire damage.

Information

Symbol	Signal word	Definition
	Comment	Indicates important instructions for use.
	Information	Indicates useful information about the product.

1.2 Affected groups



The assembly, installation and configuration of electronic devices must only be carried out by a specialist trained in the electrotechnical field and certified in compliance with the local installation standards in force. Accident prevention recommendations applicable in the country must be complied with.

These instructions are also intended for the operator of the charging station and for specialists trained in the electrotechnical field.

Commissioning requires knowledge of network technology.

2 Safety

2.1 Correct use

The charging station is used to charge electric or rechargeable hybrid vehicles. It is only intended for use in private and semi-public areas with open access (private properties, company car parks or depots). It is designed to be mounted in a fixed vertical position on a wall or stand, either indoor or outdoor.

The charging station should be permanently connected to the AC mains. The charging stations comply with the Radio Equipment Directive 2014/53/EU (RED).

Restrictions on use

Installation on the ceiling of a room or on the ground is prohibited. Any intervention in internal areas of the device and any modification of the pre-wiring, other than the operations described in this manual, is prohibited and voids the warranty, as well as any other form of guarantee. Interventions of this type can damage electronic components.

2.2 Safety instructions



Danger

Risk of injuries that may cause death in case of electric shock

- Before working on the device, the upstream circuit breaker(s) must be switched off. After opening the charging station, make sure that all power cables are voltfree.
- When installing, doing maintanance work, or restoring power to the charging station, ensure that ambient conditions, such as rain, fog, snow, dust or wind, do not constitute a source of danger.



Warning

Risk of fire due to device overload

If the power cable is not properly dimensioned, there is a risk of fire due to device overload.

- Prepare the power cable according to the technical specifications of the device.



Caution

Risk of injury due to falling/tipping of the charging station

Use appropriate fixings to prevent the charging station from falling and causing injuries.

- Adapt the installation accessories to the requested conditions at the installation location. The fixings supplied are suitable for concrete and masonry.



Caution

Risk of damage to the charging station if prohibited charging accessories are used

- Do not use a connection adapter between the charging cable and the vehicle.
- The charging cable must not be extended.

Warning

Risk of data loss when connected to the Internet

Unauthorised access can result in loss of data.

- Before operating the device, appropriate security measures must be taken to protect the network from unauthorised access.

Warning

Risk of malfunctioning due to electromagnetic influences

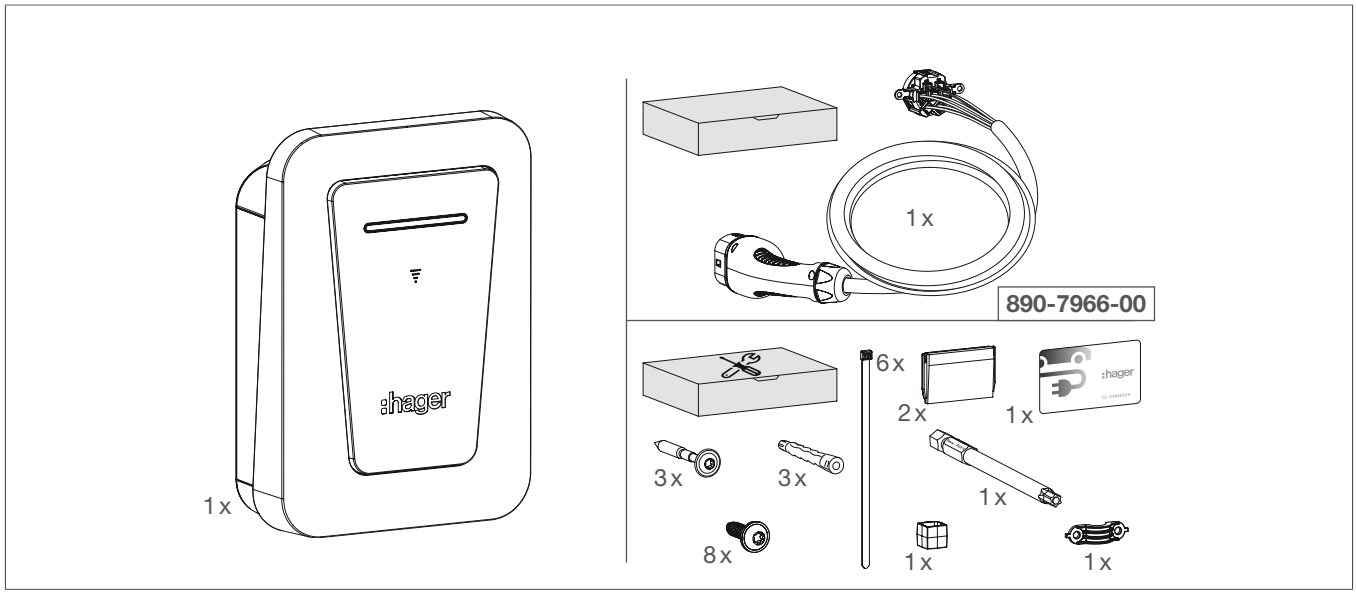
Electromagnetic fields can interfere with the transmission of signals through very low voltage lines.

- Please follow the recommendations and standards applicable for SELV electrical circuits during cable installation.
- Lay power lines and extra low voltage (Ethernet) lines separately from each other.

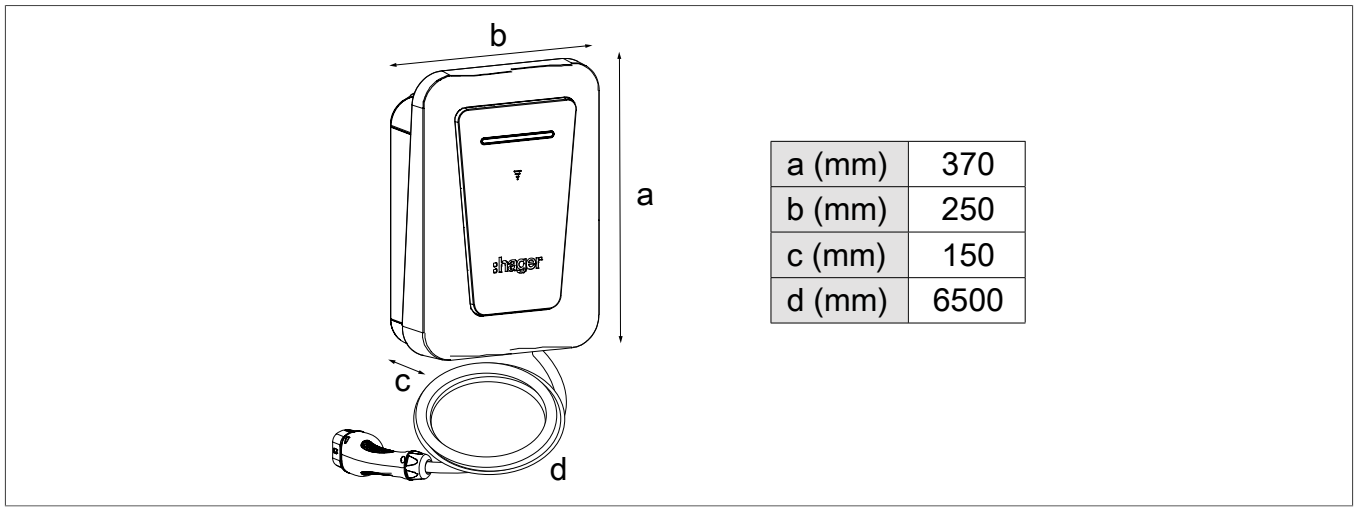
3 Overview

3.1 Scope of delivery

– Make sure the contents of the package are complete and intact.



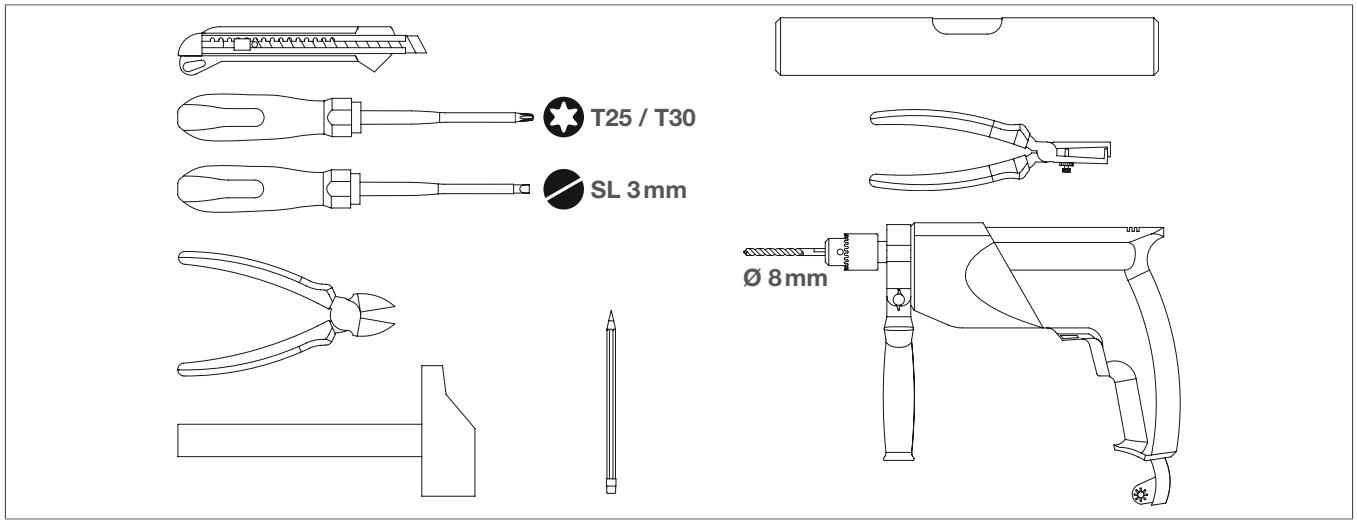
3.2 Dimensions



a (mm)	370
b (mm)	250
c (mm)	150
d (mm)	6500

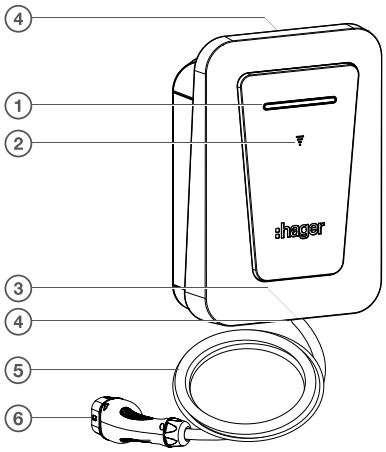
○ d: Cable length

3.3 Tools required



4 Overview of the device

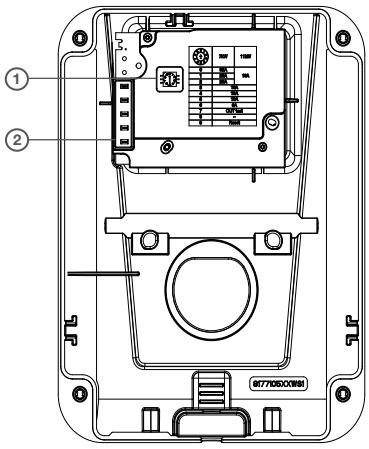
4.1 External view of the device



1. LED light strip
2. RFID card reader
3. Attached cable routing
4. Rubber cable grommet
5. Attached cable 6.5 m
6. Mode 3 plug type T2

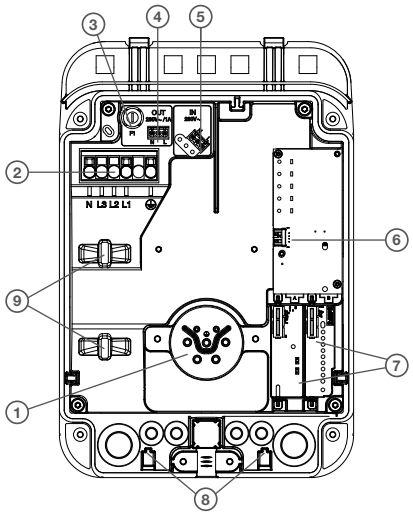
4.2 Internal view of the device

Cover



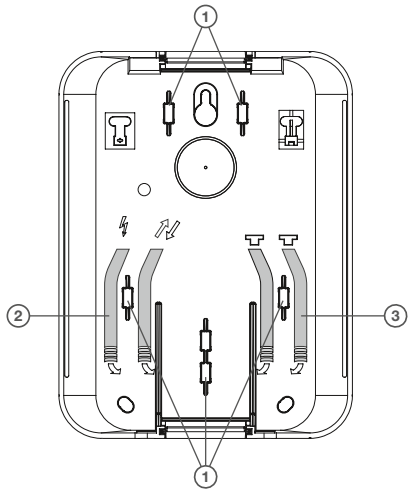
1. Rotary switch for max. current
2. Blade connector for HMI

Charging station body



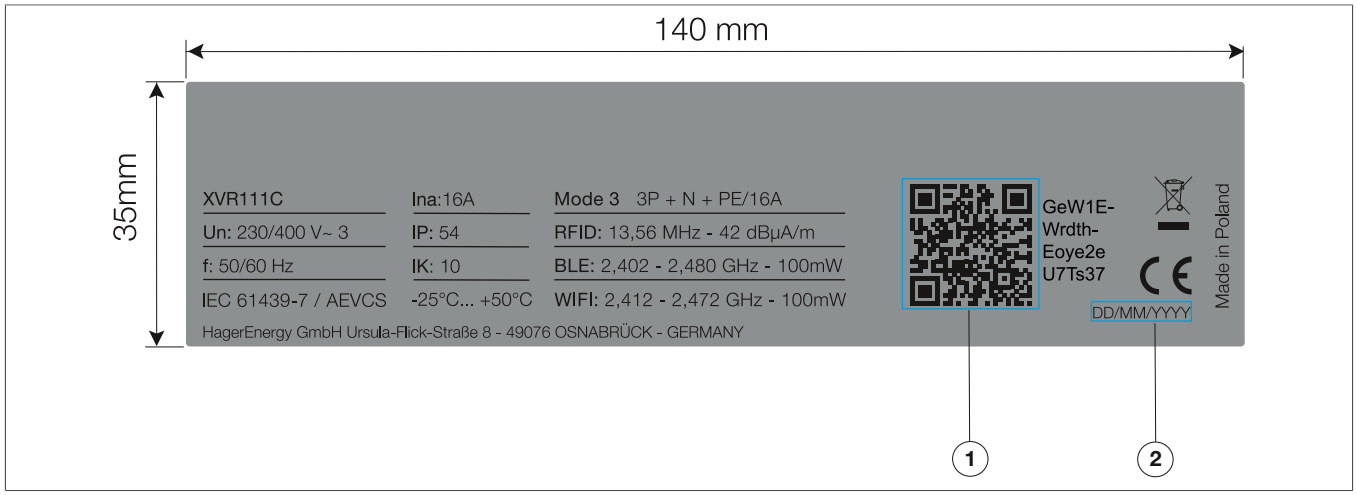
1. Connection plug mode 3 type T2 of attached cable
2. Three-phase supply terminal block
3. Fuse 3.15A/250V 5x20mm
4. Output contact terminal block 230 V~ 1 A max.
5. Input contact terminal block 230 V~
6. USB connector
7. Slots for optional cards
8. Cable entry sleeve
9. Securing the cables

Charging station base



1. Securing the cables
2. Sleeve for power supply cable and input/output cables (optional)
3. Cable inlets and outlets for optional cards

Label



1. QR code - Variable field
2. Manufacturing date- Variable field

5 Installation



Danger

Danger of death by electric shock.

Contact with live parts can cause death by electric shock.

- Before working on the device, unlock all the corresponding circuit breakers, check that they are voltfree and secure them before restarting the device.
- Cover the nearby conductive parts.



Warning

Risk of fire due to device overload.

If the power cable is not properly dimensioned, there is a risk of fire due to device overload.

- Prepare the power cable according to the technical specifications of the device.

The charging station has been designed for indoor and outdoor use. It is therefore necessary to comply with the installation conditions.

– Do not install the charging station in an explosion-hazard area (EX environment), or in premises where ammonia is present.
– Do not install the charging station in a passageway area to avoid any risk of tripping on the charging cable.
– The charging station must not be exposed to a water jet (wash station, pressure washer, garden hose)
– The charging station must be protected, as far as possible, from direct sunlight to avoid overheating and visual degradation of the plastic components.
– The power supply line of the charging station must be dimensioned according to the technical characteristics of the device and installed in compliance with the installation requirements in force.

5.1 Protective device requirements

– Each individual charging station shall be protected by a separate RCD with a rated residual current of 30 mA.
– No other load should be connected to this circuit.
– The protective device shall cut off all phases, including the neutral conductor. This charging station has a built-in protection of 6 mA DC and is therefore compatible with type A and F residual -current devices.

Dimensioning of the protective device

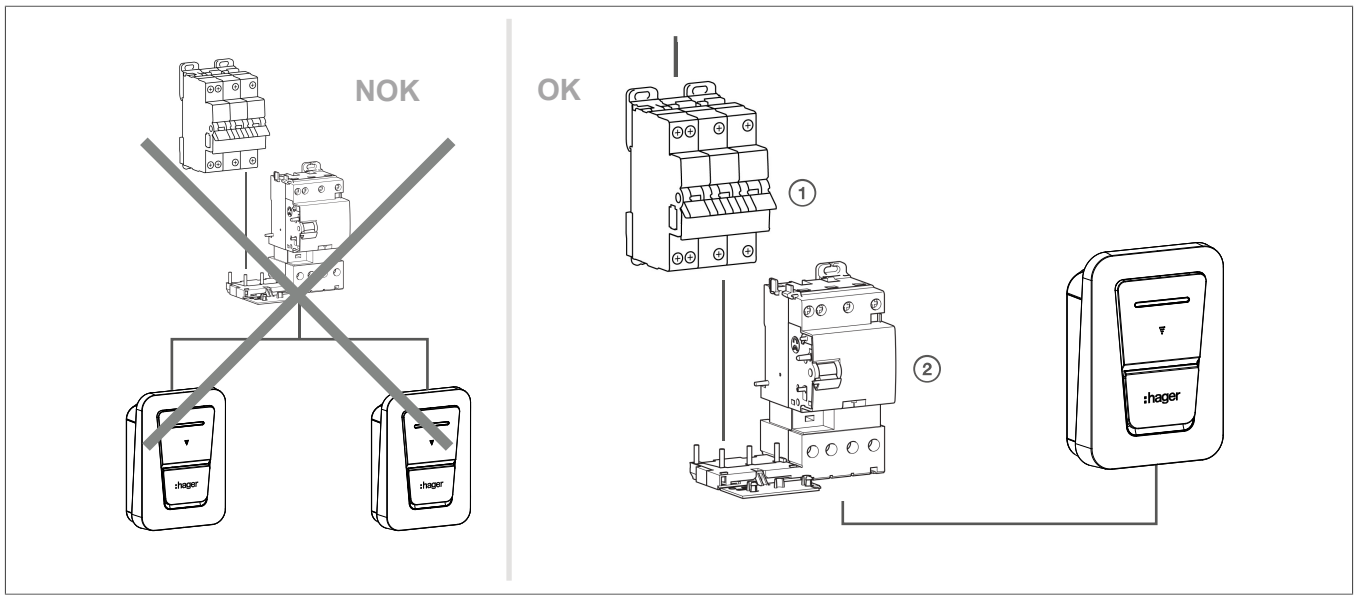
The charging station must be protected by a 20 Acircuit breaker, curve type C, with the appropriate breaking capacity for the installation.

Dimension the devices according to the information on the rating plate, the technical specifications and the setting dial of the charging station.

$I_{(setting\ dial)} <= I_{(protective\ device)} <= I_{(power\ cable)} <= I_{(nominal\ current)}$

Depending on the required operating current, it is possible to use, for example, the following products:

– Circuit breaker NFT820 (3P+N 6 - -10 kA curve C 20A) and residual current device BDF925F (3P +N 25 A 30mA F)

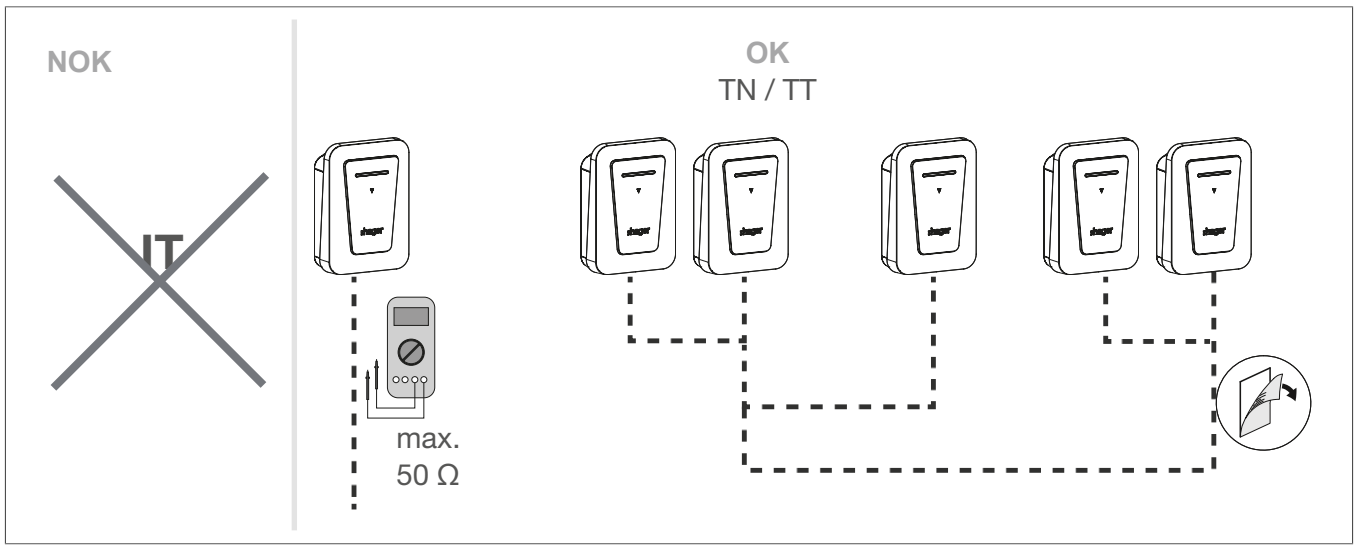


1 3P+N 6 -10 kA courbe C 20A
2 3P+N 25 A 30mA

Information

The references in this diagram are to be used as a guide and are only valid for the French market.

Earth resistance and neutral systems allowed



Caution

According to EN IEC 61851-1, this charging station incorporates a DC-CDC compliant with IEC 62955. If a DC component > 6 mA is detected at the fault current, this DC-CDC acts on the embedded power relays of the charging station, which automatically cut off the power supply to the charge point. This 6 mA DC detection device makes a type B residual current device redundant. All circuits of the building must be installed in completely the same structure (from the electrical point of view).

Information

A maximum of 5 charging stations can be connected to one earth terminal, with a recommended earth resistance of max. 50 Ω.

Danger

Damage to the charging station or electric vehicle during the charging process due to high voltages.

Transient overvoltages due to atmospheric phenomena or switching can destroy electronic components.

- Install overvoltage protection units upstream of the electronic household consumption meter. Upon the dimensioning step, take local conditions into account.

Provide surge protection devices for charging stations in public and semi-public areas, in accordance with the local standards in force.

6 Mounting the charging station

6.1 Preparatory work

Danger

Danger of death by electric shock.

Contact with live parts can cause death by electric shock.

- Before working on the device, unlock all the corresponding circuit breakers, check that they are voltfree and secure them before restarting the device.
- Cover the nearby conductive parts.

Danger

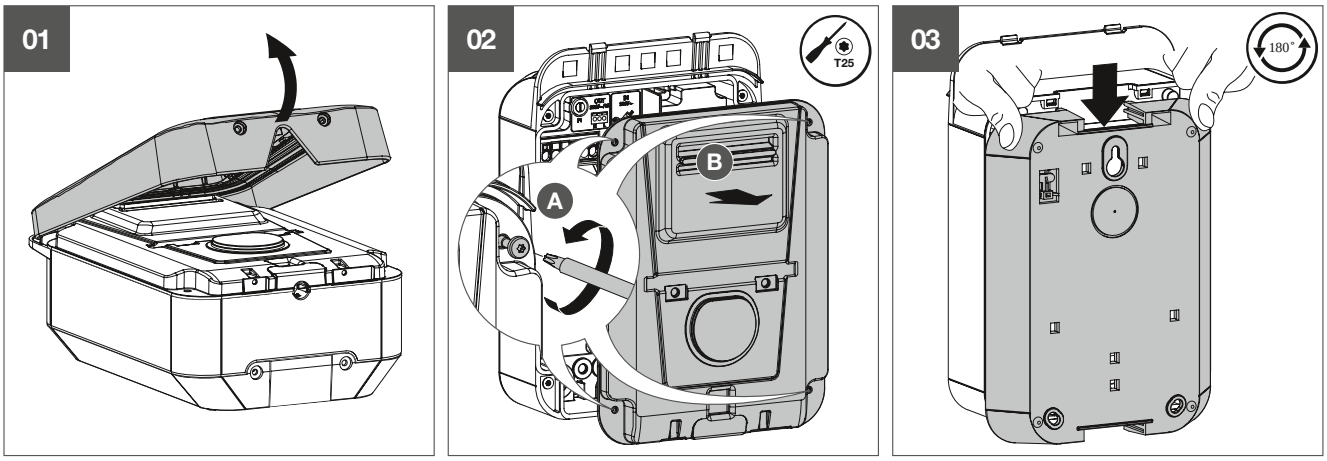
Risk of injury due to falling/tipping of the charging station

Use appropriate fixings to prevent the charging station from falling and causing injuries.

- Adapt the installation accessories to the requested conditions at the installation location. The fixings supplied are suitable for concrete and masonry.

Information

Upon delivery, the front panel and the mounting bracket are not screwed in.



Prerequisites

Mounting can be done on a wall, column or pole. Horizontal installation on the ceiling or floor is prohibited.

If the temperature difference between the storage and the installation site is too high, the charging station must be brought to ambient temperature

Before mounting the charging station, make sure that all of the cables are present:

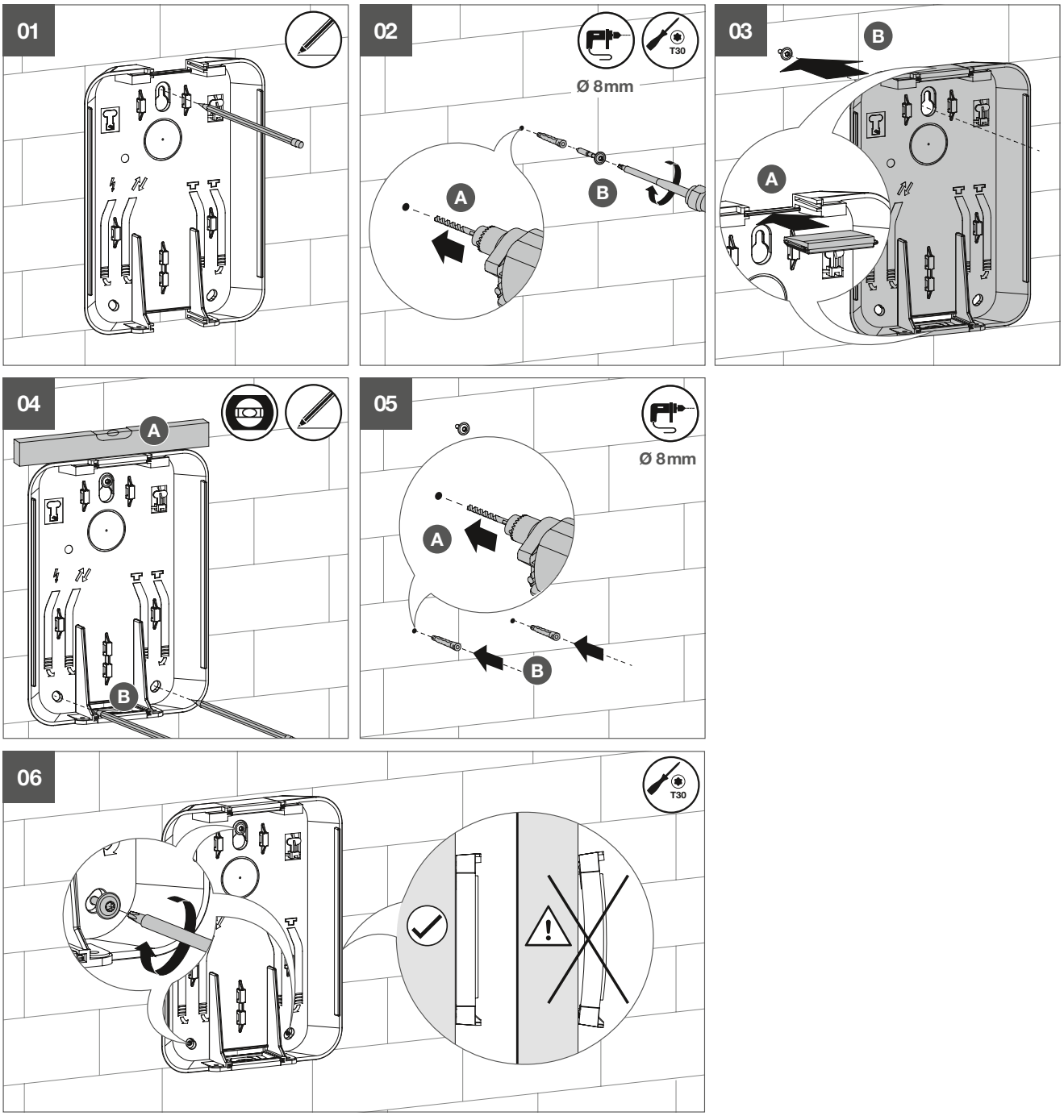
– 3 L + N + Earth for a three-phase terminal cable cross-section:
  – The minimum cable cross-section for a charging station with a 16 A power supply is 2.5 mm^2. It is absolutely necessary to take into account the maximum admissible length of cable.
  – The maximum cross-section of the power conductors is 10 mm^2 for multiwire and single-stranded conductors.

The optional cables (input / output) are laid at the mounting location:

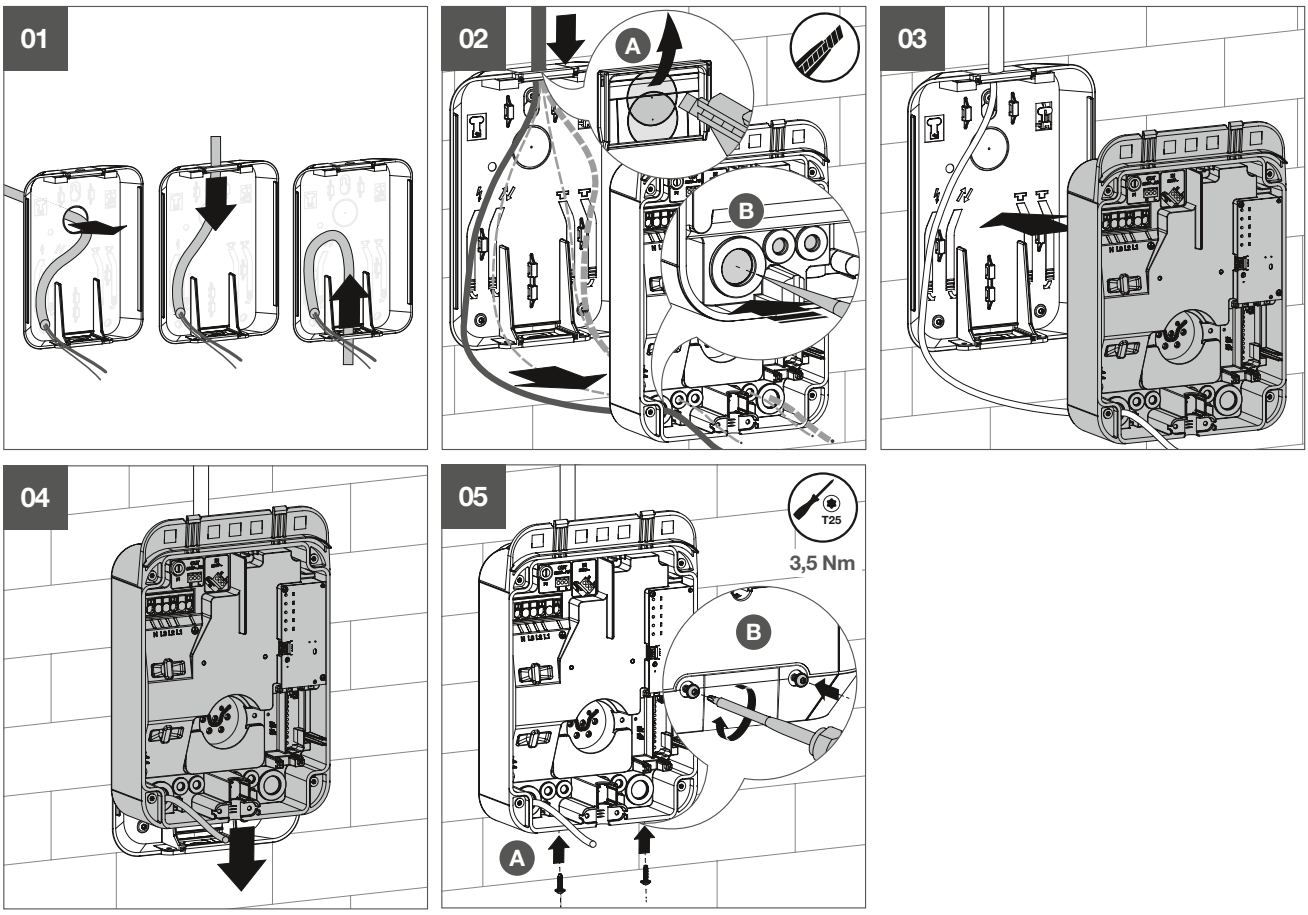
– L + N for connection of input IN and/or output OUT.
– The cross-section of the conductors must be between 0.75 mm² and 2.5 mm². It is absolutely necessary to take account of the power conveyed on these cables as well as their length.

The optional cables used to connect the optional cards (see the optional card installation instructions)

6.2 Wall mounting



The connecting cables can enter the charging station from the rear, the top, or from below.



7 Electrical connection

Danger

Danger of death by electric shock.

Contact with live parts can cause death by electric shock.

- Before working on the device, unlock all the corresponding circuit breakers, check that they are voltfree and secure them before restarting the device.
- Cover the nearby conductive parts.

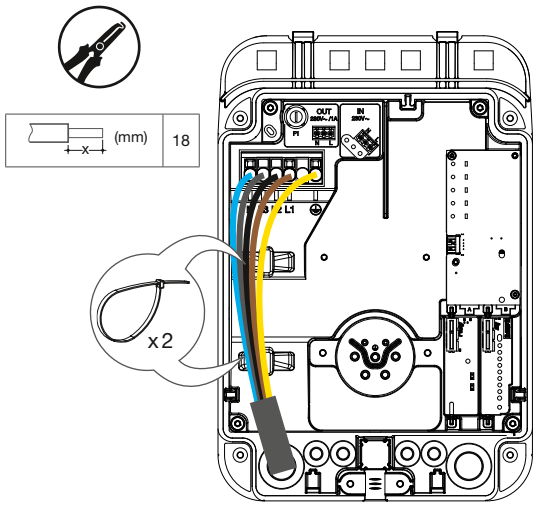
Caution

Special attention must be paid to the phase order when connecting to the terminal block (marked L3-L2-L1-N).

A critical error occurs if the phase order is not respected and the status LED lights up red continuously. This protection ensures correctly measured and calculated power consumption data.

Phase rotations are allowed but must be configured using the mobile app.

7.1 Connection to the power terminal block



The power supply terminal block is a spring terminal block.

The admissible cable cross-sections are:

– Rigid (min-max): 0.75 mm^2…10 mm^2
– Flexible (min-max): 0.75 mm^2…10 mm^2
– Flexible with end piece (min-max): 0.75 mm^2…10 mm^2

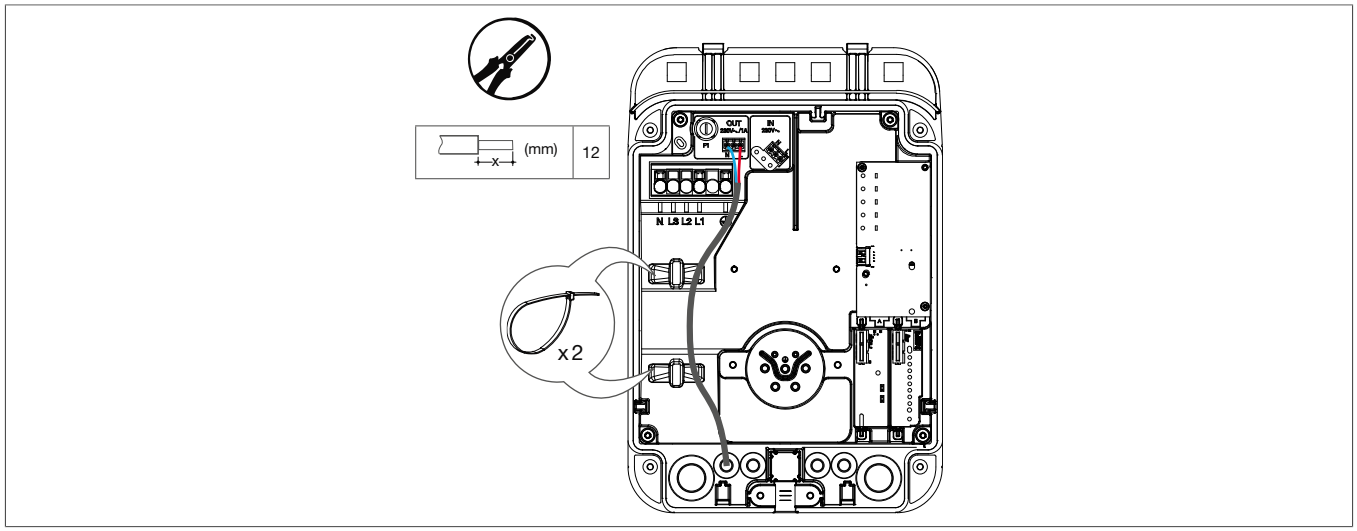
Conductors must be stripped to a length of 18 mm

7.2 Connection of the output (optional)

Bonded contact detection function wiring

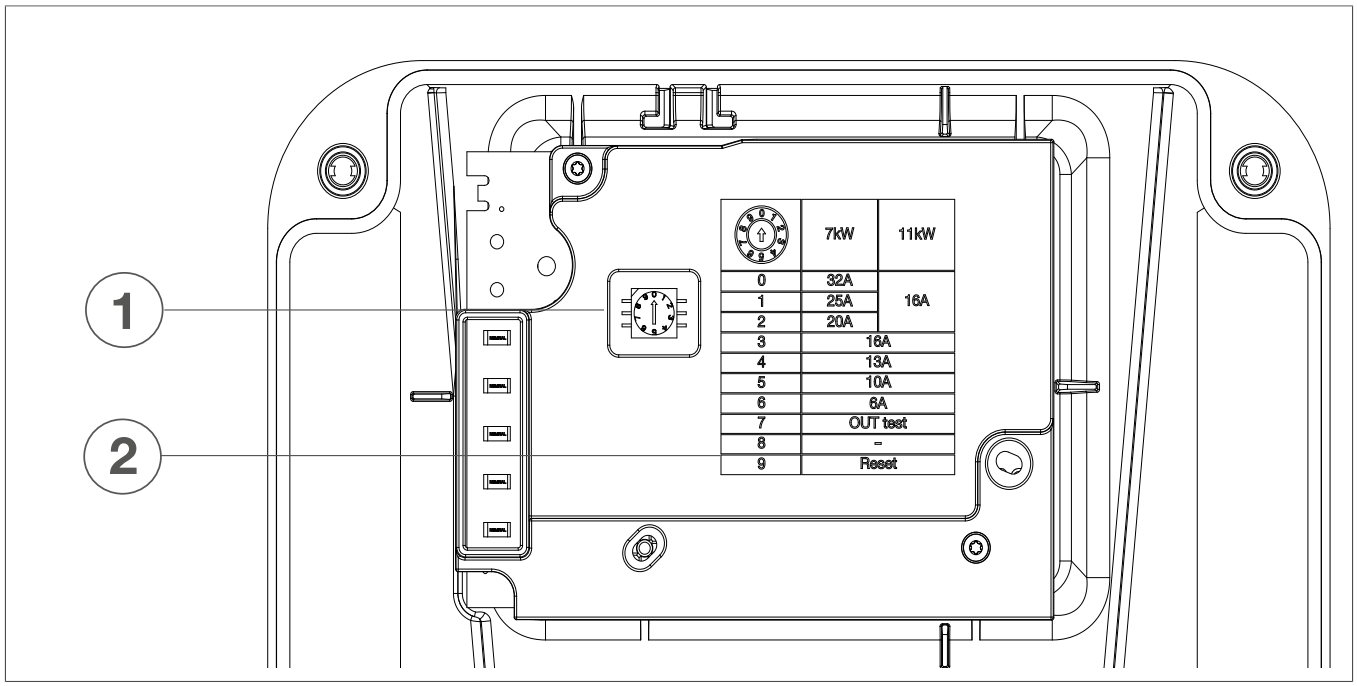
The 230V output can be used to add additional protection to the charging station

The shunt trip - 230/415 VAC - HAGER MZ203, also called shunt trip coil, provides comprehensive electrical safety for your charging station as an optional addition to the compulsory dual-safety provided by the residual-current disconnector and circuit breaker. It is used to cut off the power supply to the charging station if the relay of the T2 socket is stuck.



Output contact testing

The output contact can be tested using the setting dial(1).



Process for output contact testing:

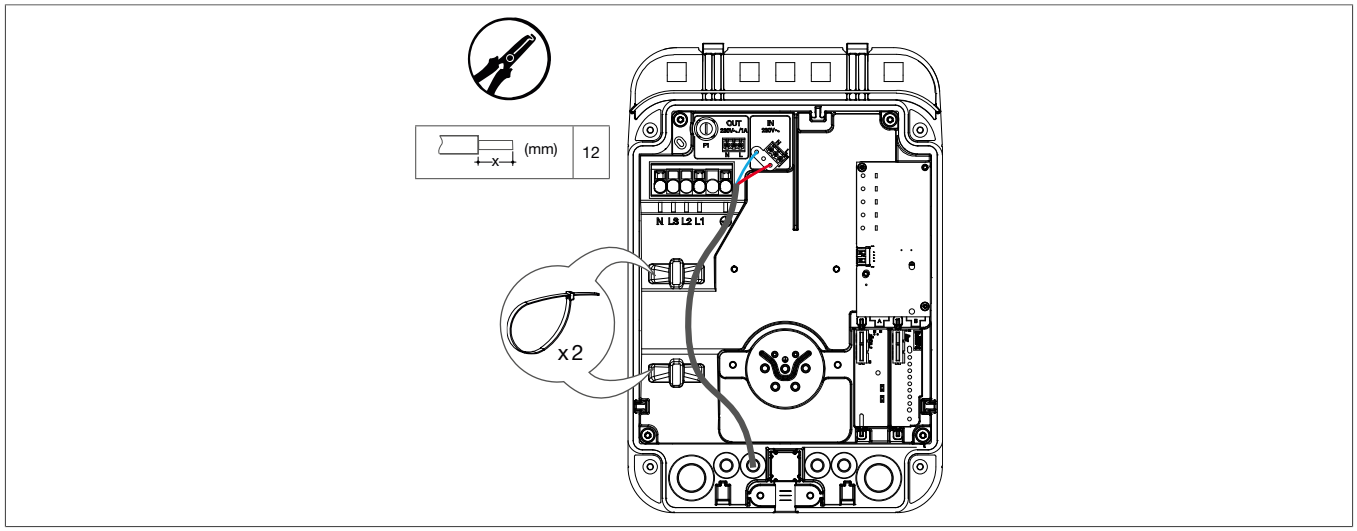
1. Turn off the charging station for 20 seconds.
   When doing so, take the RCD and all circuit breakers into account.
2. Set the dialto 7.

3. Close the cover and turn on the charging station again.
   The charging station status LED flashes red. The output contact closes and remains closed until the terminal is de-energised.
4. Turn off the charging station for 20 seconds.
   The output contact opens.
5. Open the charging station cover and set the dial between 0 and 6.
6. Close the cover and turn on the charging station.

7.3 Connection of the input (optional)

The 230V input can be used to control the operation of the charging station with an external component. It must be configured using the mobile app during commissioning.

Add input protection (circuit breaker 2A curve C)



The admissible cable cross-sections are:

- Rigid (min-max): 0.75 mm^2…2.5 mm^2
- Flexible (min-max): 0.75 mm^2…2.5 mm^2
- Flexible with end piece (min-max): 0.75 mm^2…2.5 mm^2

Conductors must be stripped to a length of 12mm

7.4 Connection of TIC cards (optional)

The XVA200 (TIC) card is a gateway that allows the exchange of meter data between an old- or new-generation electronic energy meter and a charging station of Hager brand.

It provides real-time information about the electrical power consumption to the charging station, in order to manage the dynamic charge of the vehicle (adapting the vehicle's charge current according to the power consumption of the building).

The TIC card receives data from the electronic meters or the TIC simulators XEV304 or XEV305; they are then transmitted to the controller of the charging station.

Type of energy meter

1. Your customer has a Linky energy meter (new model) :



The meter and the TIC card can be wire-connected using a remote energy meter cable.

2. Your customer has a blank electronic energy meter (former model used before Linky):



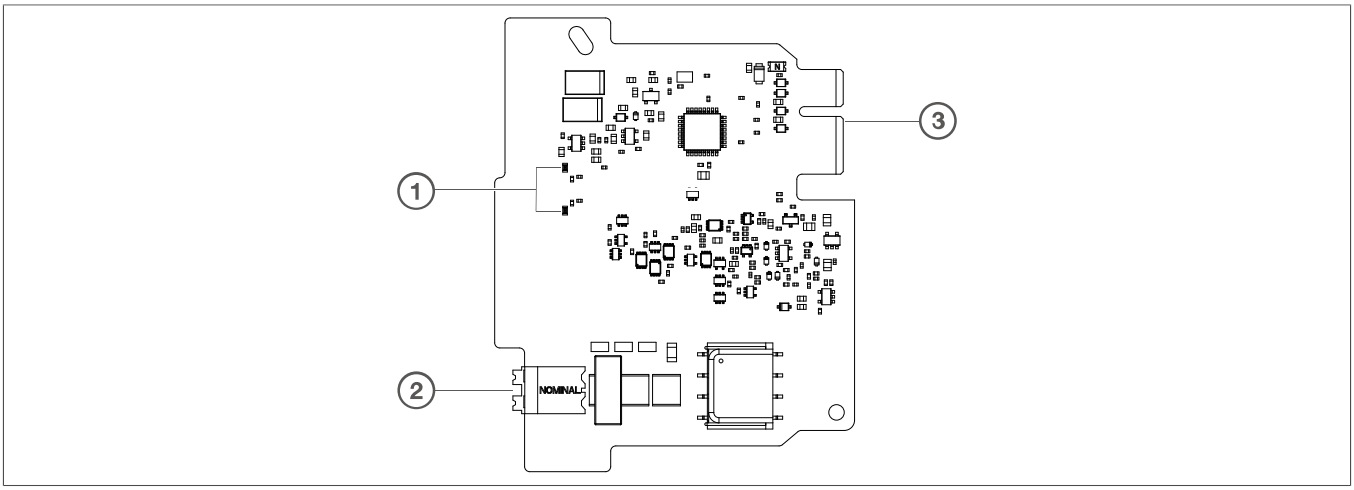
The meter and the TIC card can only be wire-connected via a remote energy meter cable.

3. Your customer has a Ferraris electromechanical meter (without TIC):



To obtain a TIC, you can create a wired connection using a remote energy meter cable between the TIC simulator XEV304 (for single-phase network) or XEV305 (for three-phase network) and the TIC card. Refer to the XEV304 and XEV305 product manual.

Description of the card



① Status LED of the TIC
② Connector of the TIC link
③ Connector Card/charging station

Function

Typical use case

- Embedded into an EV charging station type XVR1xxx.
- Communication with the Linky meter (new model) and electronic meters with a TIC output via the wired connection.

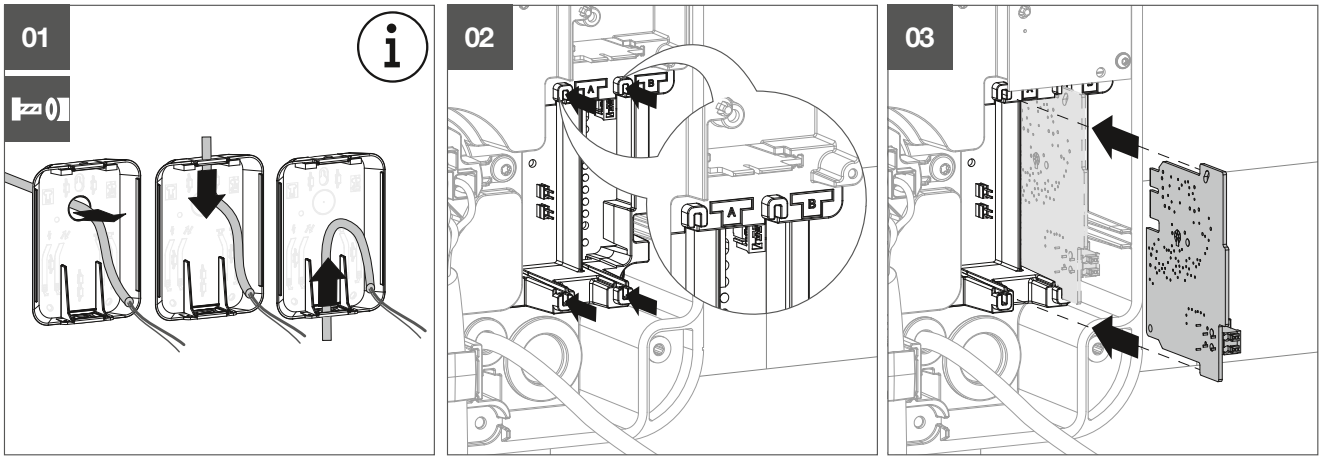
Product compatibility

- Compatible with the three-phase or single-phase electric vehicle charging stations referenced XVR1xxx.
- This TIC card does not require setting:
  - with the former model of TIC card from the French electronic energy meters
  - with a standard TIC from the Linky French energy meter (new model).

Information

The usual TIC card, embedded to the former meter models, sends basic information such as consumption and hourly rates. In contrast, the **new standard TIC card**, introduced with Linky meters, offers more detailed data, such as instantaneous power and alerts, enabling a more advanced energy management. The new standard TIC card is therefore more suitable to actual needs, while the former TIC card is more limited in terms of functionalities.

Installing the TIC card



Information

The remaining cable should be about 60 cm long to allow connection to the optional board.

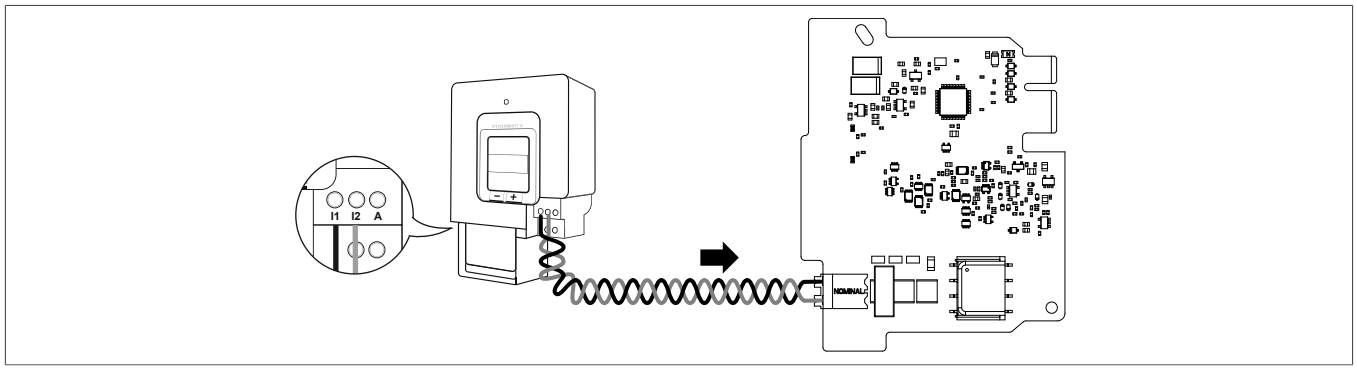
The optional board can be installed either in slot A or slot B.

Connecting the TIC card

Warning

It is recommended to use a remote energy meter cable or possibly a telephone-type twisted cable.
An R02V cable should not be used.

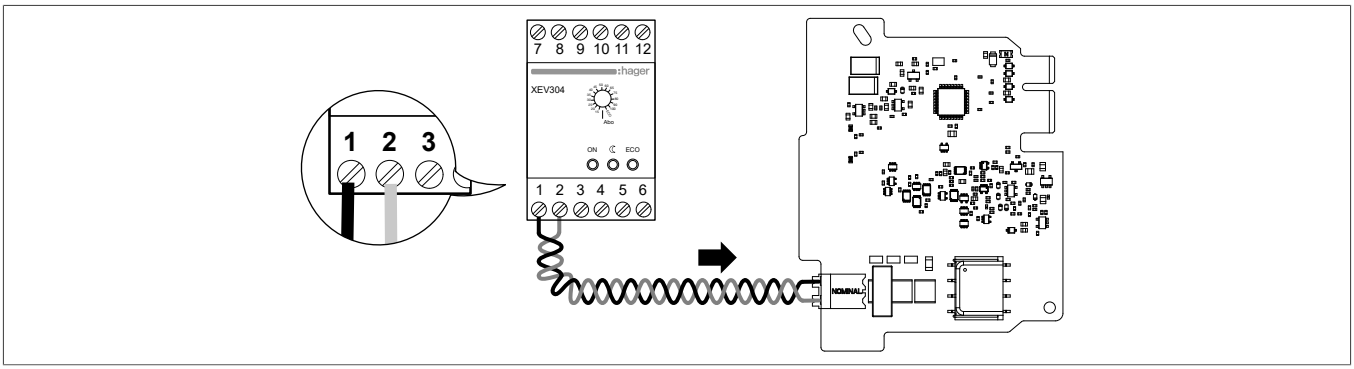
- Connection to the Linky meter



- Connection to the TIC simulator

XEV304 (for single-phase network) or **XEV305** (for three-phase network)

When an electronic meter is not available, Hager offers a TIC simulator that enables dynamic management of the vehicle charge and thus prevents accidental outages caused by an overload in the domestic electricity network.



Meaning of the card status LED

The TIC card is fitted with LEDs to indicate its operating status. However, these LEDs are only active when the cover is removed.

– The charging station should be switched on
– Remove the cover

After about 10 seconds, the LED indicates the operating status of the card.

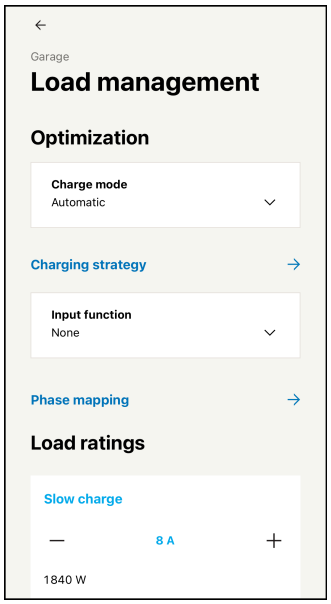
LED status	Meaning
	TIC card operating
	No communication with the TIC card

Setting of the TIC card

Once the card has been installed in the charging station, the parameters need to be set as per the subscription contract to the French Electricity Company (Electricité De France).

On your smartphone:

1. Launch the **Hager Charge** application.
2. access the **load management** page in the **charging station settings**.



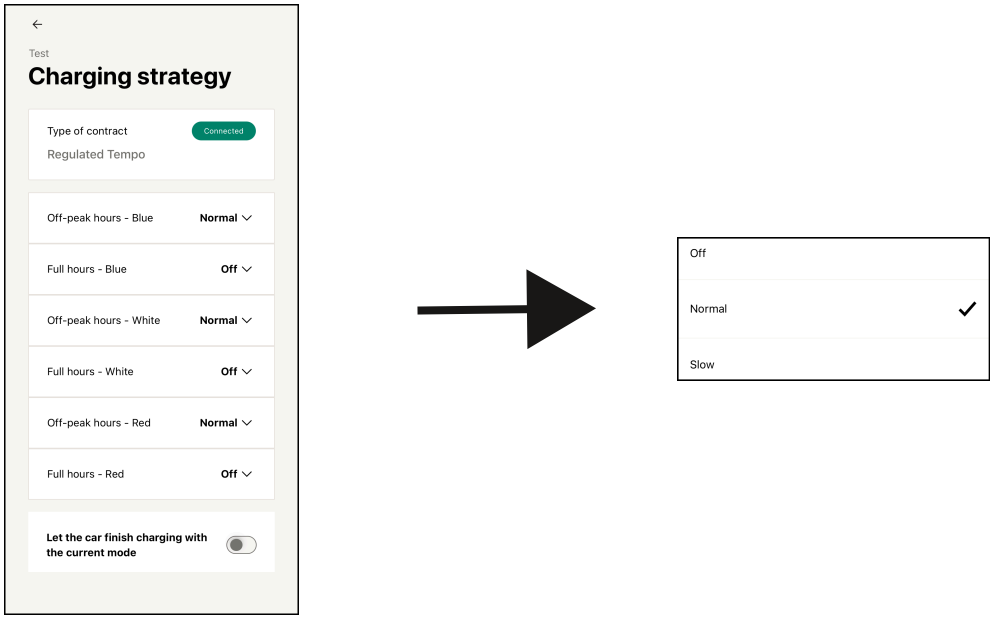
3. Click on **Load strategy** to define the parameters according to the type of contract with the electricity provider (EDF).

Type of contract

The type of agreed contract is detected automatically.

- **Blue Rate (Tarif Bleu)**
  - Basic rate The rate per kWh is the same no matter the time of the day.
  - Peak / Off-peak hours: The rate of kWh depends on the time of day, a reduced rate being applied during specific time slots.
- **Peak-shaving tariffs (EJP)**: This contract is intended to limit energy consumption during peak hours.
- **Tempo tariff**: This contract offers three levels of pricing depending on the day: blue days, white days and red days.
- **Tariff 'other'**: to set operation according to 10 different tariffs.

Example of a Tempo tariff:



1. Select one of the available tariffs.
2. Define the operating mode of the charging station when this tariff is active.
3. Proceed to the setting for each tariff

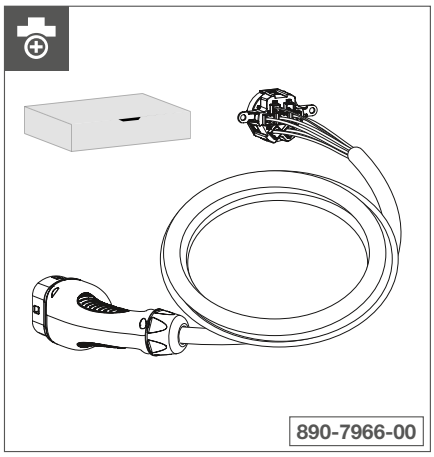
7.5 Connection of the attached cable

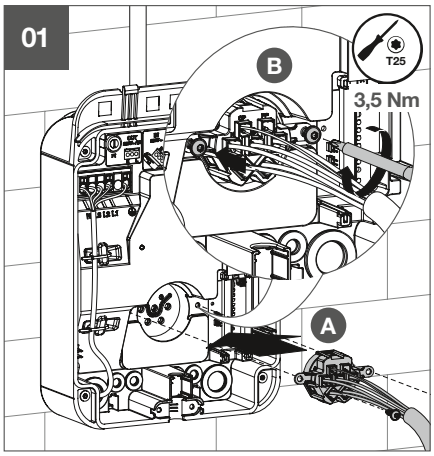
Danger

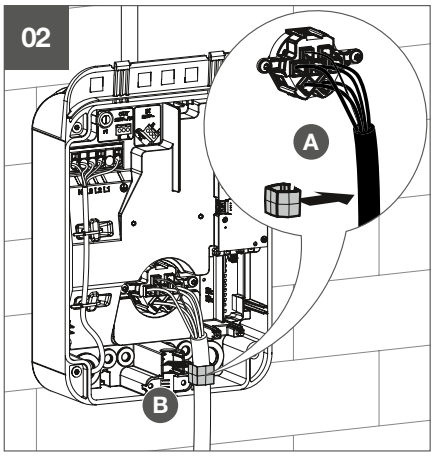
Danger of death by electric shock.

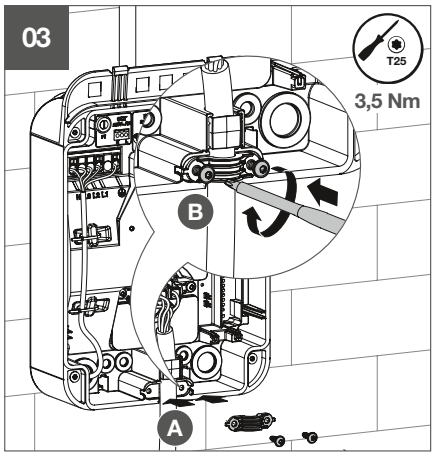
Contact with live parts can cause death by electric shock.

- The connecting screws of the attached cable as well as the flange mounting screws must be tightened as per the recommended torque.









Information

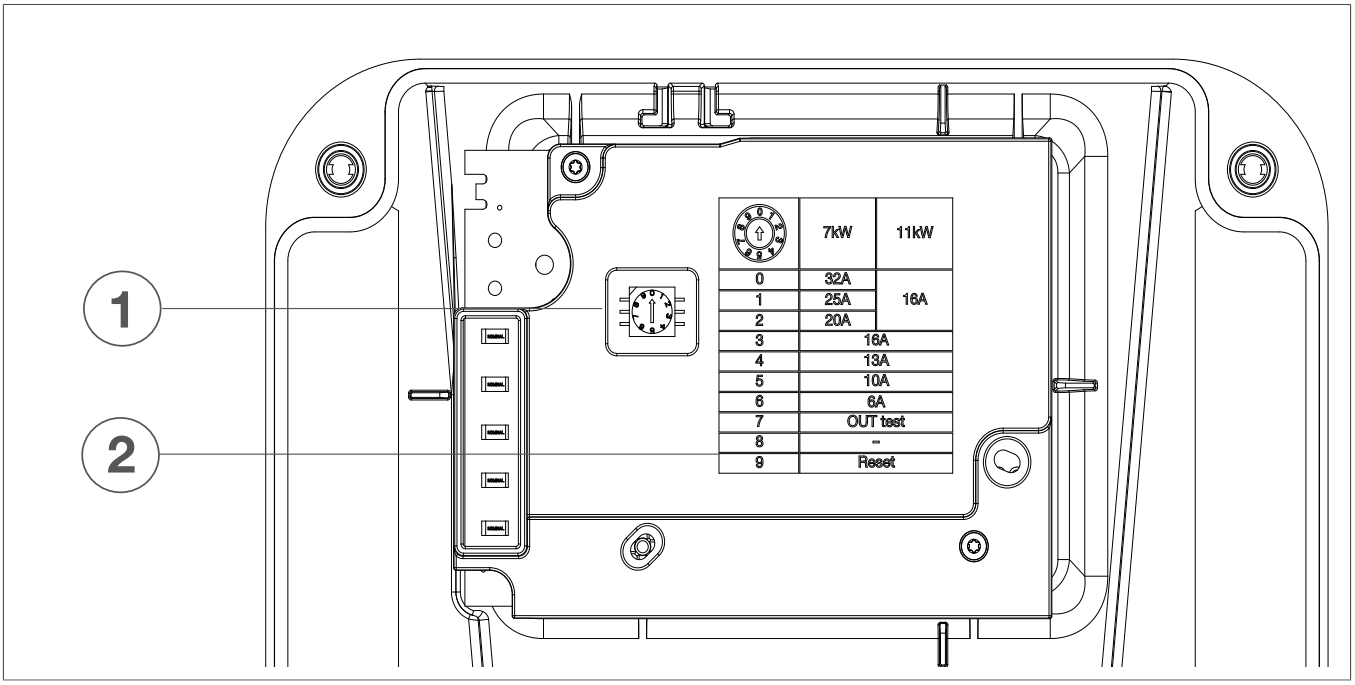
IP54 protection could be lost:

– if the seal surrounding the cable is incorrectly positioned (see picture 2).
– if the tightening torque is not respected (see tightening torque picture 3)

8 Settings

8.1 Operating current and connection type

The factory-set values (16 A operating current for a three-phase connection) must be checked and adjusted if necessary. The maximum operating current (2) can be set by means of the setting dial (1).



Note the maximum operating current setting on the device:

– Peel off the sticker corresponding to the adjustment made
– Attach this sticker to the charging station near the rating plate.

8.2 Reset from the charging station

This procedure resets the charging station without using the application.

Information

This procedure will delete :

– the connection with paired phones
– the connection to paired badges and their parameters

Reset procedure:

- Turn off the charging station for 20 seconds.
  When doing so, take the RCD and all circuit breakers into account.
- Set the dial to 9.
- Close the cover and turn on the charging station again.
  The charging station status LED turns red. The charging station is being reset to the factory settings when the LED flashes red.
- If the status LED lights red constantly, turn off the charging station for 3 minutes.
  When doing so, take the RCD and all circuit breakers into account.
- Open the charging station cover and set the dial between 0 and 6.
- Close the cover and turn on the charging station.

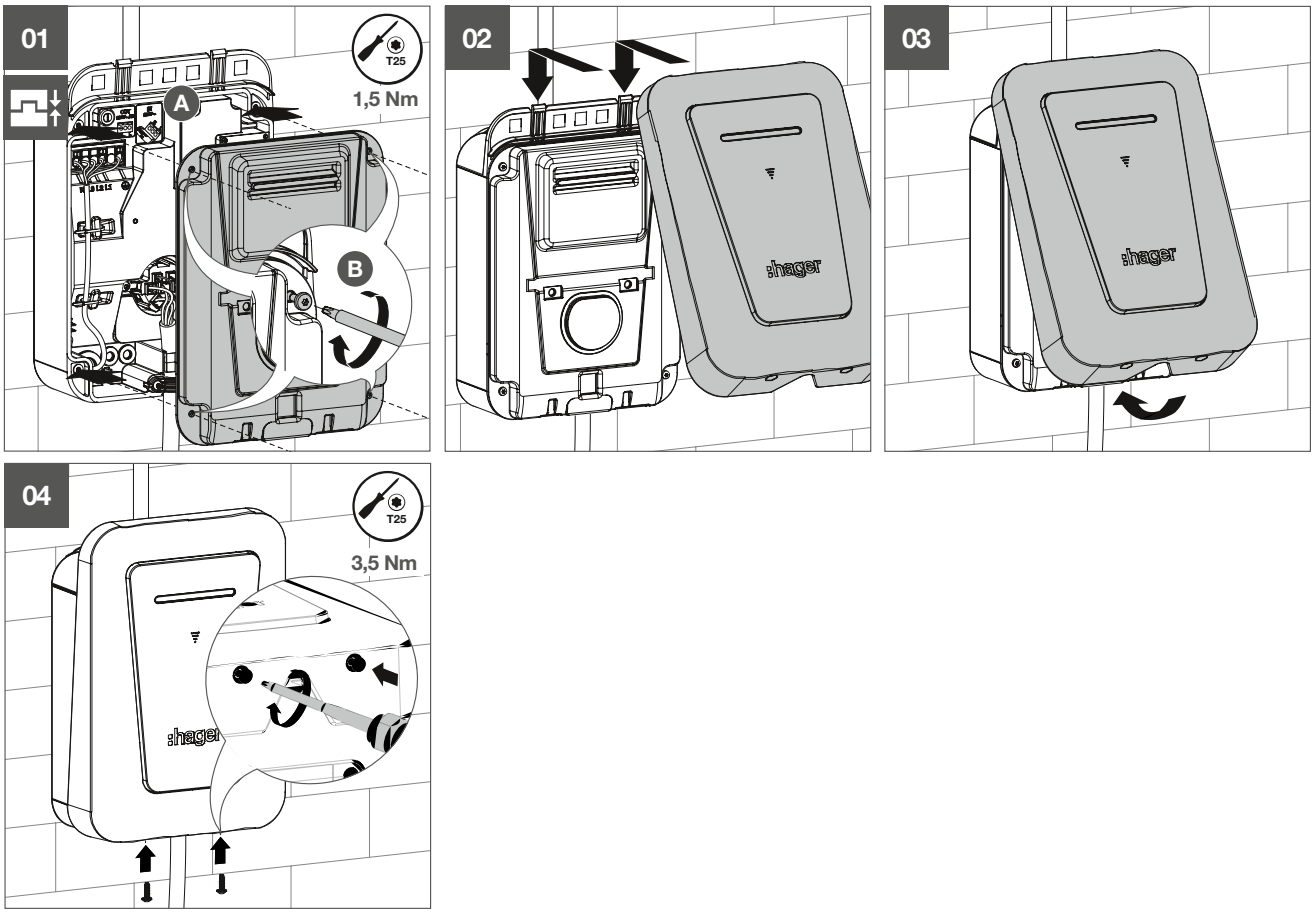
9 Final assembling

Danger

Danger of death by electric shock.

Contact with live parts can cause death by electric shock.

- Do not switch on the charging station until the front of the charging station is locked.



Information

IP54 protection could be lost:

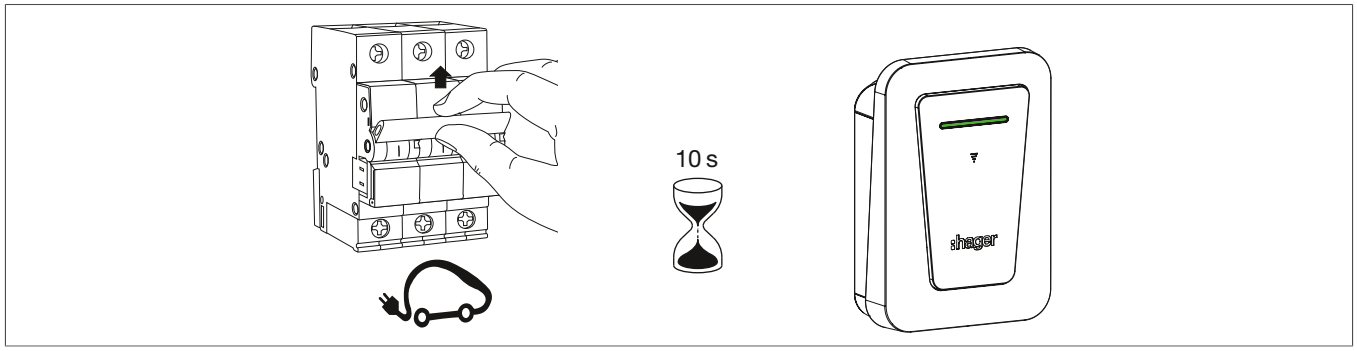
– If the tightening torque is not respected (see tightening torque picture 1)

10 Commissioning

Information

Before commissioning, check that the charging station is not connected to the electric vehicle.

After the charging station is switched on for the first time, initialization is complete when the LED indicator strip remains solid green.



The charging station is now functional. It can be used to recharge an electric vehicle.

11 Advanced Configuration

The device has a Bluetooth interface. This interface enables control and parameterization of the device using the Hager Charge app through mobile devices such as smartphones and tablets that support this standard.

The Hager Charge app is compatible with Apple devices with iOS 8 (and above) and Android devices from version 10 and up (compatible with Bluetooth version 4.2 or above).

11.1 Pairing

Download the free Hager Charge app to your mobile device.

Hager Charge

Download on the App Store

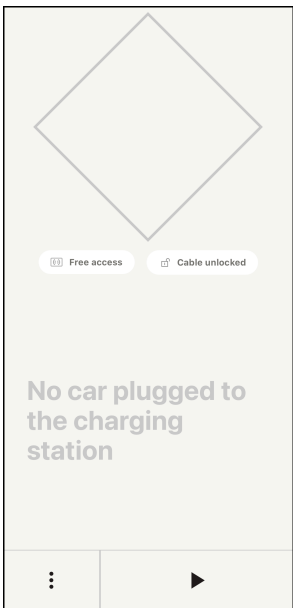
GET IT ON Google Play

Information

Bluetooth function and the localisation feature on your charging station should be turned on.

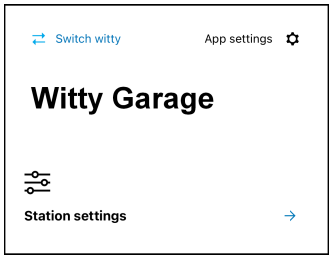
- Start the application
- Accept the general terms and conditions of use
- Click on Next
- Click to Activate the Bluetooth function
- Click on ‘Start pairing’.
- Position the pairing badge on the front of the charging station
- Remove the badge when the LED on the front panel flashes blue from left to right (this action takes approximately 7 seconds)
- In the application, confirm by clicking the button
  The application performs a scan and displays the device identified.
- Enter device name (optional)
- Click on “Pair with this charging station”
- Confirm by clicking ‘Pair’

When the pairing process is complete, the following screen appears:

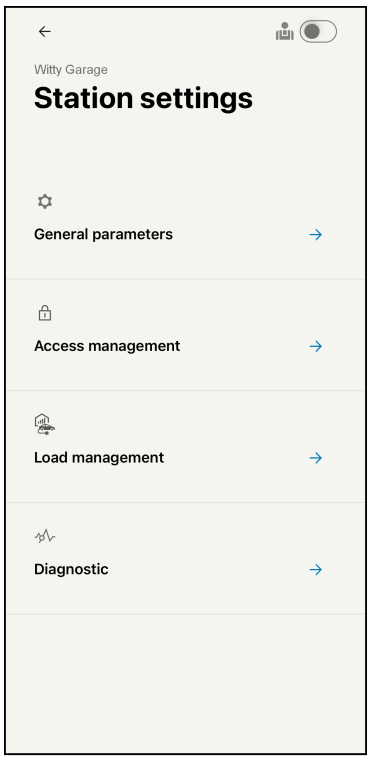


11.2 Dashboard

To access the dashboard, click ⋮



Charging station settings: Allows you to access the various setting menus of the charging station.



There are 2 different profiles (User and Installer) giving access to various settings.

Menu	User	Installer
General settings	o	o
Access management	o	o
Load management		
- Load ratings	o	o
- Charging mode	o	o
- Load strategy	o	o
- Phase sequence		o
- Input function		o
230 V Output		o
Diagnostics	o	o
Editing the device report		o

Installer Mode is activated by clicking on the icon in the top right of the screen.

This icon changes to blue when the installer mode is active: 

Change charging station: for connecting to another charging station (10 charging stations max. per mobile)

Application settings: Allows you to define the settings of the application

Language: Set the language of the application menus

About: Displays information about the application

11.3 General settings

- Charging station name: Allows you to change the name of the charging station
- LED power: Adjusts the light intensity of the indicator on the front of the charging station
- Update charging station: Allows you to perform a software update for the charging station via smartphone.
  - Start the update when it is available
  - Download the update file to the smartphone
  - Start the update installation

Information

Installation of the update:

- Requires your smartphone to be connected
- May take up to 10 minutes

- Restarting the charging station: Allows you to reset the charging station without switching off the power

Information

If a charging session is in progress, it will be stopped.

- Always keep the cable locked to the charging station: this locks or unlocks the plug connected to the charging point.
- Reset all the settings: Used to reload the factory configuration

Information

All the settings for this charging station will be lost after the reset. Communication with this device is lost after the reset.

- Delete this witty: Deletes the charging station from the smartphone application

Information

Access to this charging station is lost and pair up with a pairing badge is needed to regain access.

It is also necessary to remove the device from the Bluetooth connection settings.

11.4 Access management

Who can charge their car at your charging station? :

- Everyone: Anyone can charge their car at this charging station
- Badge wearers: Only a list of authorised badges can interact with the charging station

Manage Badges: Allows you to add or remove badges allowing access for charging from this charging station.

Two possible methods:

- Bring your badge close to the scanning area just below the LED
- Add a badge manually: Enter the ID and name of the badge

For each badge, you can define the different rights:

Start/stop my charging sessions

Charging to full power or returning to default mode

Stop a load session started by another user

Pairing badge

Administrator devices

List of devices that can access the charging station

: indicates the device currently connected to the charging station

: remove the corresponding device from the list of charging station administrators.

11.5 Load management

This menu is used to configure vehicle load parameters.

Optimisation

- Charging modes: for choosing default charging mode.
  - Slow
  - Normal
  - Automatic (only when the TIC card is present)

- Charging strategy: to set the operation of the charging station according to the tariff in force (only possible if the TIC card is available on the charging station).
- Input function: Allows you to configure the operation of the 230 V input.
  - Day/night
  - Forcing
- Phase order: Allows you to set the phase order corresponding to the connection of the charging station power supply.

Information

Access to this menu is only possible with the Installer profile

Load ratings

- This menu is used to set the current according to the type of load.
  - Slow load
  - Normal load
  - Automated (only when the TIC card is present)

11.6 Outlet 230 V

This menu allows you to set the operation of the 230V output of the charging station.

Output function: **Safety switch**

The shunt trip - 230/415 VAC - HAGER MZ203, also called shunt trip coil, provides comprehensive electrical safety for your charging station as an optional addition to the compulsory dual-safety provided by the residual-current disconnector and circuit breaker. It cuts-off the power supply to the charging station in case the switch T2/T2S gets stuck. It is paired with the circuit breaker, which can be tripped remotely.

11.7 Diagnostics

This menu allows you to view the status and measured values of the charging station.

You have acces to a real-time display of values. The log file can be exported and is stored in the smartphone memory.

11.8 Installation report

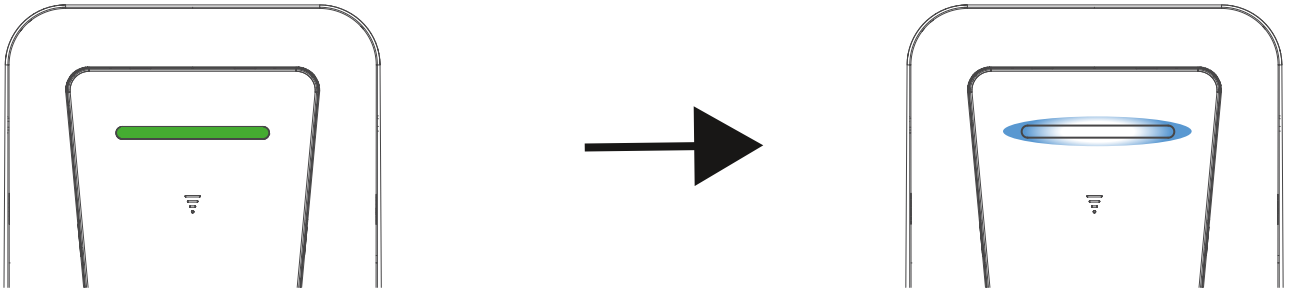
This menu allows you to edit the report including all the settings of the charging station.

- Click on Download to generate the PDF file and copy it to your smartphone.

12 Charging station operation

12.1 Operation without a badge

If the charging station does not have access management or restrictions linked to the 230 V input or an optional card, the charging process starts automatically.



The signal strip flashes blue when charging.

If the signal strip flashes green and white alternately, the charging station is waiting for a charging authorisation.

It can be done with an RFID badge properly configured to be passed close to the logo on the front of the charging station.

12.2 Operation with a badge

Access control can be configured on the charging station. To do so, a valid RFID badge for the charging station is needed.

After connecting the charging station plug to the vehicle, the signal strip flashes (green and white) while waiting for the badge.

– Display the badge close to the logo on the front of the charging station.



If the badge is valid, the signal strip flashes blue. Charging begins.

If the badge is not valid, the warning strip flashes red.

13 Charging an electric vehicle

13.1 Preparation for a charging session

The charging station is ready to operate when the LED signal strip is green.

– Connecting the charging cable to the vehicle
– Connect the charging cable to the charging socket of the charging station.

The vehicle is ready to be charged and the charging process can start.

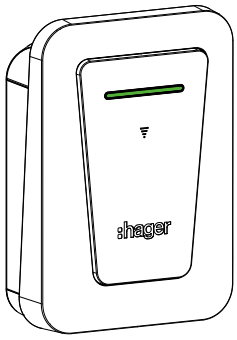
13.2 Stopping a charging session

If the charging station does not have access management, charging is stopped through the vehicle. Please refer to your vehicle's owner's manual for more information.

If access to the charging station is controlled, charging can then be stopped through the vehicle or by passing an authorised RFID badge near the logo on the front of the charging station.

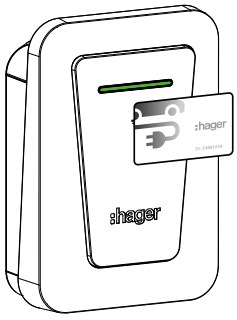
13.3 LED light strip

Operation:



	Charging Station Ready
	Waiting for vehicle authorisation or waiting for sufficient power on the network
	Waiting for user authorisation
	Charging in progress

Operation with the badge:



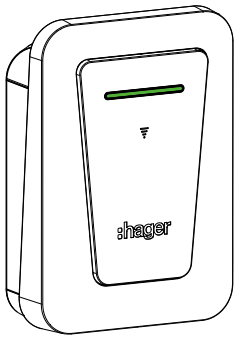
<1s		RFID badge reading
3s< <6s		Charging to forcing or returning to default mode
6s<		Pairing mode

Fault display:

Caution

Damage to the charging station due to a critical error.

- If a critical error is indicated by a solid red light, turn off the charging station for 2 minutes to clear the error.



Charging station faulty

14 Maintenance



Danger

Danger of death by electric shock.

Contact with live parts can cause death by electric shock.

- Before working on the device, switch off all relevant circuit breakers.
- Cover the nearby conductive parts.
- Before carrying out any work on the device, disconnect the charging cable from the charging station and the electric vehicle

Maintenance work must be carried out at regular intervals, taking into account the age and condition of the device, environmental factors as well as usage levels.

Semi-annual maintenance by operator/end customer (recommendation)

– Check that there is no damage to the outside of the unit. In case of damage, take the unit out of service immediately and contact a qualified electrician.
– Check that the electrical switching and safety devices in the secondary distribution system are functioning perfectly and have no visible defects.

15 Appendix

15.1 Technical specifications

Information

This document is not contractually binding and is subject to change without notice

Environmental conditions

Operating temperature	-25°C to +50°C
Storage temperature	-35°C to +70°C
Relative humidity	5% to 95%
Protection	IP 54 – IK 10
Maximum operating altitude	2000 m
Degree of contamination	3
Shock voltage U_{imp}	4 kV
Rated breaking capacity I_{cn} AC according to IEC60898-1	6 kA

Electrical characteristics

Voltage U_e	230 V~ / 400 V~ -15 % / +10 %
Nominal insulation voltage U_i	250 V~ / 500 V~
Frequency of use f_n	50/60 Hz +/- 1%
Maximum charging current / power mode 3	16 A - 11 kW
Electrical protection class	Class I (protective earth)
Overvoltage category	III
Earth connection diagram	TN-S, TN-C, TT
Upstream protection	RCBO C20 6000 3 (according to IEC60898-1)
Power consumption at idle	5 W
Conductor cross-section (rigid)	2.5 – 10 mm^2
Conductor cross-section (flexible)	2.5 – 10 mm^2
Integrated residual-current protection	6 mA DC

Mechanical properties

Weight	3.9 kg
Weight with cable	6 kg
Height	370 mm
Width	250 mm
Depth	150 mm
Maximum charging capacity of the cable holder	7 kg
Attached cable length	6.5 m

Packaging specifications

Weight	7.9 kg
Height	595 mm
Width	270 mm
Depth	300 mm

Classification

Power input	power supply system for electric vehicles (EV) permanently connected to alternating current power supply
Power output	alternating current power supply system for EV
Environmental and operating conditions	for indoor and outdoor use
Location	for open or restricted access areas
Mounting type	surface mount for wall, stand, fixed post, column and conduit mounting. DO NOT INSTALL horizontally on ground or ceiling
Charging mode	mode 3 via T2S socket

Classification	
Adapter (in accordance with the standard EN IEC 61851-1)	No plug adapter may be used between the charging station and the charging cable or between the charging cable and the car. Adapters may only be used in the charging socket of the electric vehicle if they have been specially designed and approved for this purpose by the vehicle or charging station manufacturer and comply with applicable national standards. These adapters must comply with all standards applicable to the adapter parts that are connected to the charging cable plug or the charging socket of the electric vehicle. These specific conditions of use must be indicated on the adapter, e.g. IEC 62196 series. The use of adapters that change the charging mode of the charging station is prohibited.
Cable length and cable extension	no extension of the charging cable is permitted; the charging cable must be in one piece and not longer than 7.5 m

Input (IN) / Output (OUT)	
Input voltage	230 V~
Output voltage	230 V~
Max. output current	1 A

RFID	
Frequency band	13.553 - 13.56 MHz
Max. radiated power	42 dBµA/m (at 13.56 MHz)

Bluetooth	
Frequency band	2.402 - 2.480 GHz
Max. radiated power	100 mW

Wi-Fi	
Frequency band	2.412 - 2.472 GHz
Max. radiated power	100 mW

15.2 Identification of compatible vehicles in accordance with EN 17186

Alternating current	EN 62196-2	Type 2	Plug Power socket base	< 480 V RMS	C

15.3 CE Declaration of Conformity

Hager hereby declares that the charging station products with reference XVR111C comply with the RED 2014/53/EU directive. The EU declaration may be viewed at: www.hagergroup.net.

15.4 Disposal of the charging station

Disposal note



Correct disposal of this product (electrical waste).

(Applicable in the European Union and other European countries with separate collection systems).

This marking shown on the product or its documentation indicates that it should not be disposed of with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste

disposal, please separate this device from other types of waste. Recycle the device responsibly to promote the sustainable reuse of material resources.
Household users should contact either the dealer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe disposal.
Commercial users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.

15.5 Warranty

We reserve the right to make technical and design changes to the product in the interest of technical progress.

Our products are under warranty within the scope of the statutory provisions in force. For warranty cases, please contact your trade partner.

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