

Energy management Charging station E-vehicles



XVP222S, XVG222S

Charging station witty park 2 2x 22kW T2S Wall-mounted/on ground



















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1 About these instructions





These instructions set out how to safely and correctly install and commission the electric vehicle charging station. These instructions are part of the device. Keep the instructions for use throughout the life of the device and pass them on if necessary.



1.1 Symbols used

Symbol	Description				
●	Instruction for a single step or in any order.				
①	Instruction for multiple step actions. The order must be followed.				
①	Identification and description of device components				
-	List				
▶	Reference to documents / additional information				
	Contents of the packaging		Product dimensions		Required tools
	Installation		Save installation		Final installation
	Device overview		Settings		Optional accessories
	Installed by an electrician		Alternating current (IEC 60417-5032)		Protective earth (IEC 60417-5019)
	Applicable in all Europe and in Switzerland		Note on disposal of waste electrical and electronic equipment (WEEE)		For further information, refer to the installation and commissioning instructions
	Two people assembly				

Danger levels of warnings

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

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

Symbol	Signal word	Definition
	Note	Indicates important instructions.
	Information	Indicates useful information about the product.

1.2 Target groups



Electronic devices may only be assembled, installed and configured by a specialist with electrical training and certification in accordance with the relevant installation standards of the country. The accident prevention regulations valid in the appropriate countries must be complied with.

In addition, this manual is intended for the operator of the charging station and trained electricians. Knowledge of network technology is required for commissioning.

2 Safety

2.1 Correct use

The charging station is used to charge plug-in hybrid vehicles and electric vehicles. It is only suitable for use in commercial, public and semi-public areas with unrestricted access. It is equipped with an energy meter and monitoring system. It is designed for fixed, vertical-wall mounting or pedestal mounting indoors or outdoors.

The charging station must be permanently connected to the alternating current supply network. The charging stations with the article number **XVP222S** , **XVG222S** comply with the radio equipment directive 2014/53/EU (RED).

The device can only be operated in conjunction with a Hager load manager, local RFID management and direct connection to a charging point operator (CPO).



Note

The witty park 2 charging station can be operated stand-alone. An additional configuration application is required for configuration.

2.1.1 Predictable incorrect use

Any intervention in internal-component areas and any change to the pre-wiring that goes beyond the instruction set out in these instructions, is prohibited and will result in the legal warranty, along with any other form of warranty, becoming null and void. These interventions can damage electronic components.

2.1.2 Location for installation



Danger

Risk to life from fire or explosion!

A fire can occur on electrical devices.

- Do not mount the device in an explosive area (so-called explosion zone) or in the immediate vicinity of a potential explosion source, such as a gas pipe or gas tank (explosion zone 0 for gases and vapors, explosion zone 20 for fog).
- Rooms that require fire protection regulations or avoid areas with highly flammable materials.
- Do not mount the device in areas that are susceptible to flooding.

The charging station must only be used for fixed installation. It can be mounted on a wall or a pedestal. Horizontal mounting on a ceiling or horizontal on the floor is prohibited.

The following must be taken into account when selecting an appropriate location for installation:

- The charging station is suitable for use in indoor areas and can also be used in weatherproof outdoor areas (IP protection class 5x): Operation in a garage, under a carport or under an outside canopy is possible, provided that the charging station will not be exposed to strong jets of water.
- At the location for installation, operation must be ensured throughout the year within the permissible ambient temperature range of -25°C to +50°C. Direct sunlight and strong temperature fluctuations must be avoided. Operation outside this temperature range will cause the device to overheat and may result in a function loss and loss of legal warranty.
- Install the charging station away from heat sources and ensure sufficient air circulation when in operation.

2.2 Safety instructions

Risk of injury with possible death from electric shock

- Before working on the device, disconnect the power supply from the upstream protection devices. After opening the charging station, check that all leads are current-free.
- When installing the charging station, make sure that environmental conditions such as rain, fog, snow, dust and wind do not pose a risk when working on the device or when restarting the power supply.

Fire risk due to device overload

In case of an insufficient dimension of the supply cable, there is a risk of fire due to overload of the device.

- Design power supply cables in accordance with local standards and regulations.

Risk of injury from falling/tipping charging station

Using unsuitable fixings can cause the charging station to fall and cause injury.

- Adapt the mounting accessories to the specific conditions at the location for installation. The supplied fixings are suitable for concrete and brick wall.

Risk of damage to the charging station due to improper charging accessories

- Do not use connection adapters between the charging station and the charging cable, or between the charging cable and the vehicle.
- Only use a charging cable up to a maximum of 7.5 m in length.
- The charging cable must not be extended.

Risk of data loss when connected to the Internet

Unauthorized access can result in data loss.

- Safety precautions must be put in place to protect the network against unauthorised access before operating the device.

Risk of malfunction due to electromagnetic influences

Electromagnetic fields can interfere with signal transmission over extra low voltage cables.

- When installing and routing cables, always comply with the applicable regulations and standards for SELV circuits.
- Route high-current and extra low voltage cables (Ethernet) separately from each other.

2.3 Rated operating conditions

The charging station is used for its intended purpose only if the national environmental regulations are complied with. The charging station and its counters are not designed for measuring time periods to

determine the charging service duration or for time stamping kWh measured values for subsequent central charging.

The accuracy of the charging station at the discharge point corresponds to MID class B and is indicated accordingly on the type label.



Note

To prevent manipulation and ensure data security, the witty park 2 only works in conjunction with a Hager load manager or when directly connected to an external billing system.

3 Overview

3.1 Scope of delivery

- Check the contents of the package for completeness and damage.

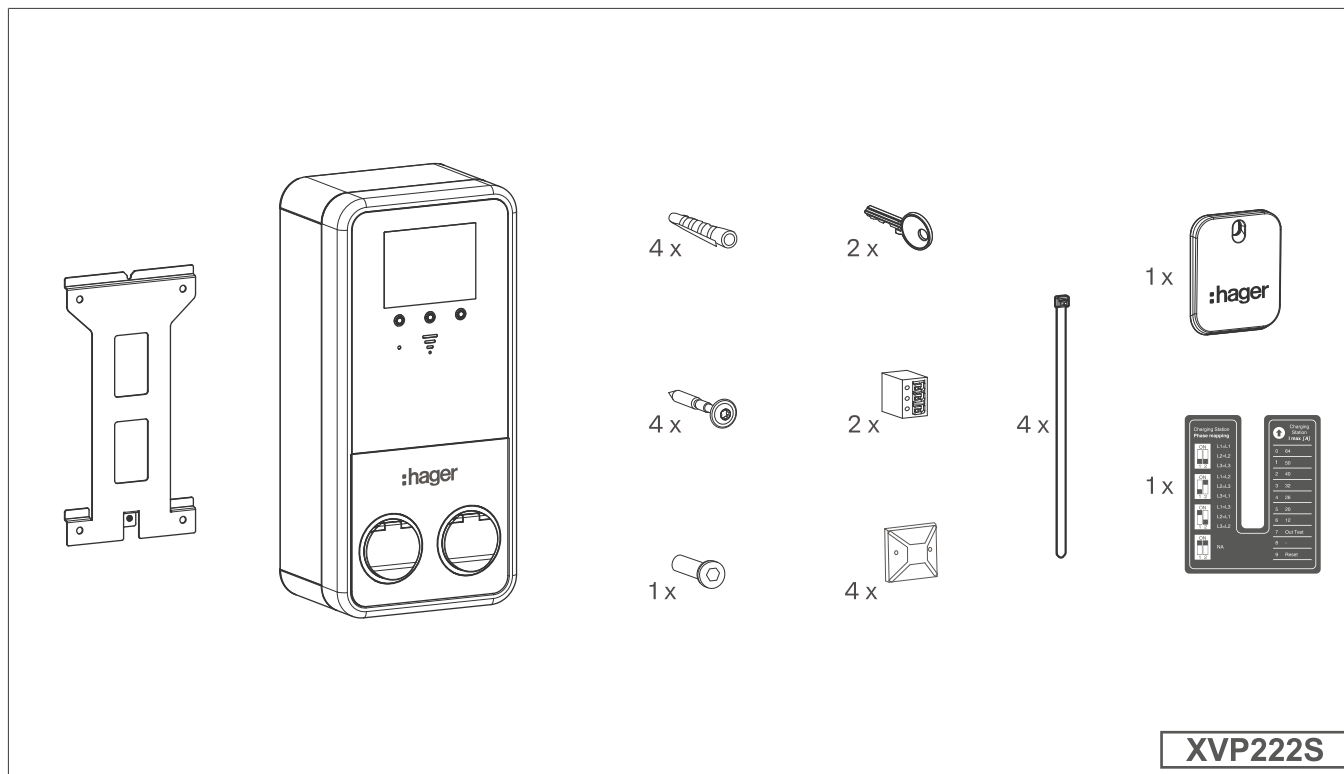


Fig. 1: Scope of delivery for charging station witty park II 2x 22 kW T2S wall mounting

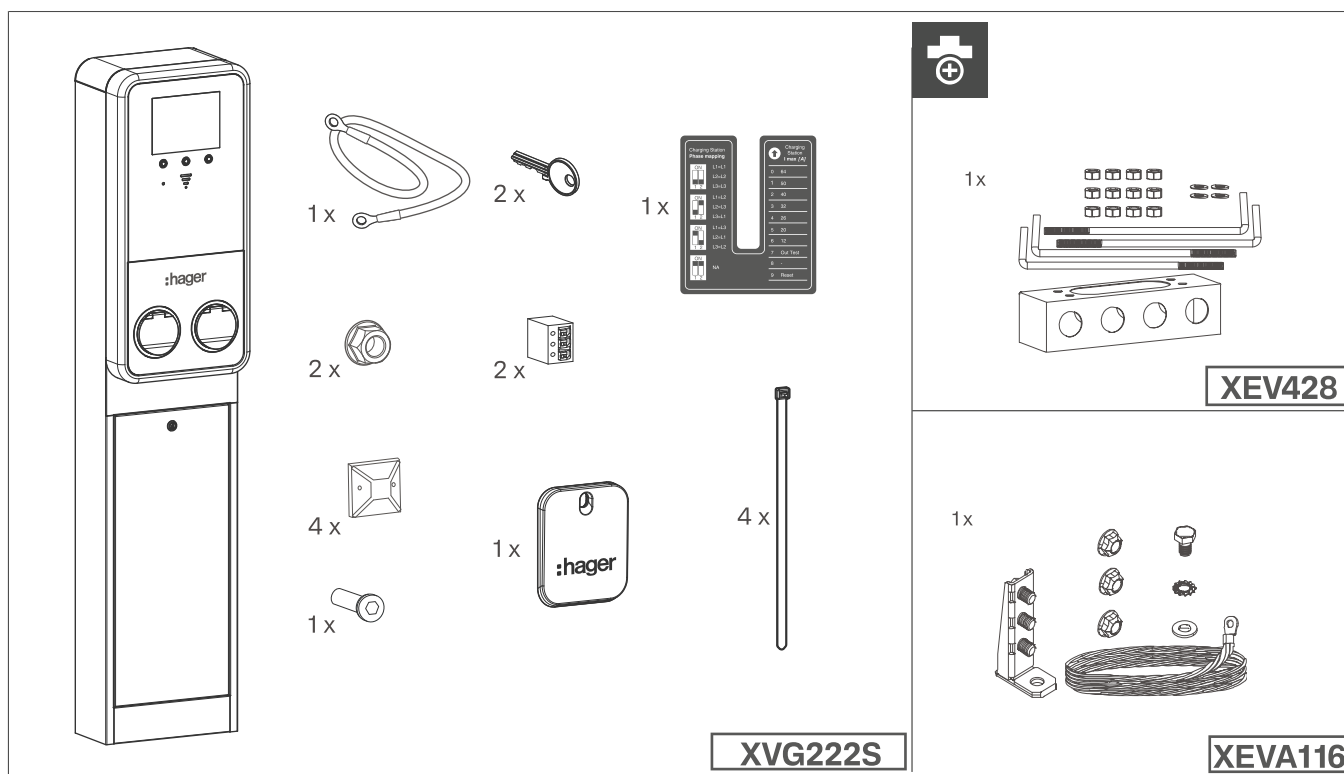


Fig. 2: Scope of supply for charging station witty park II 2x 22kW T2S on ground

3.2 **Dimensions and required tools**

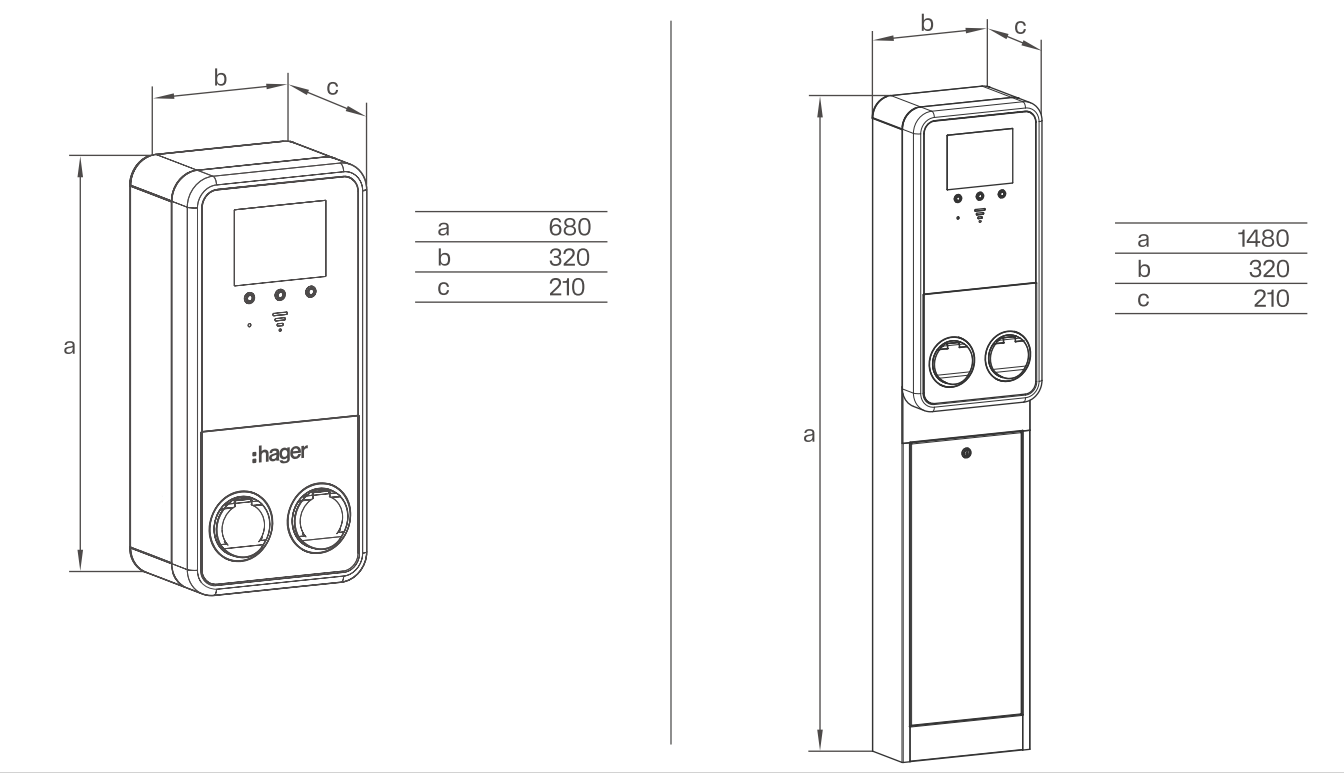


Fig. 3: Dimensions of charging station (wall-mounted/on ground)

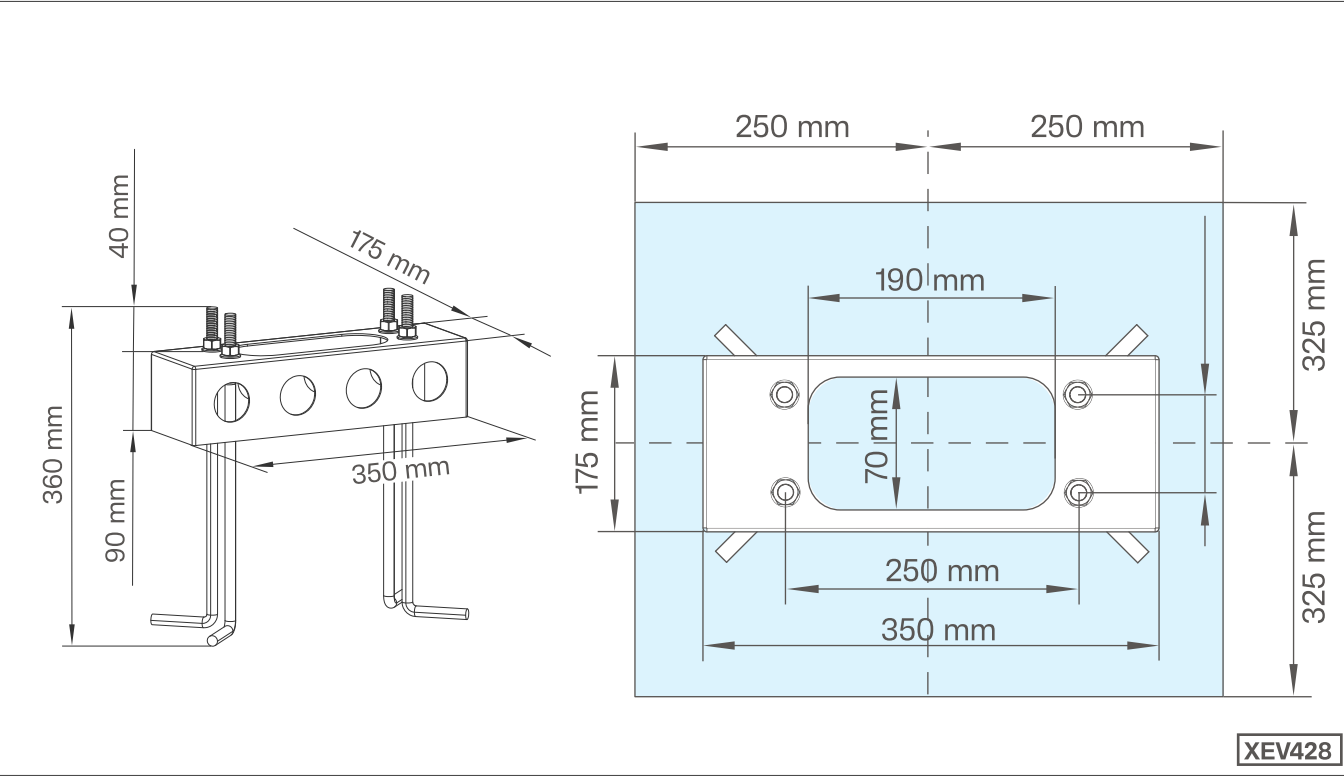


Fig. 4: Dimensions of ground anchor XEV428

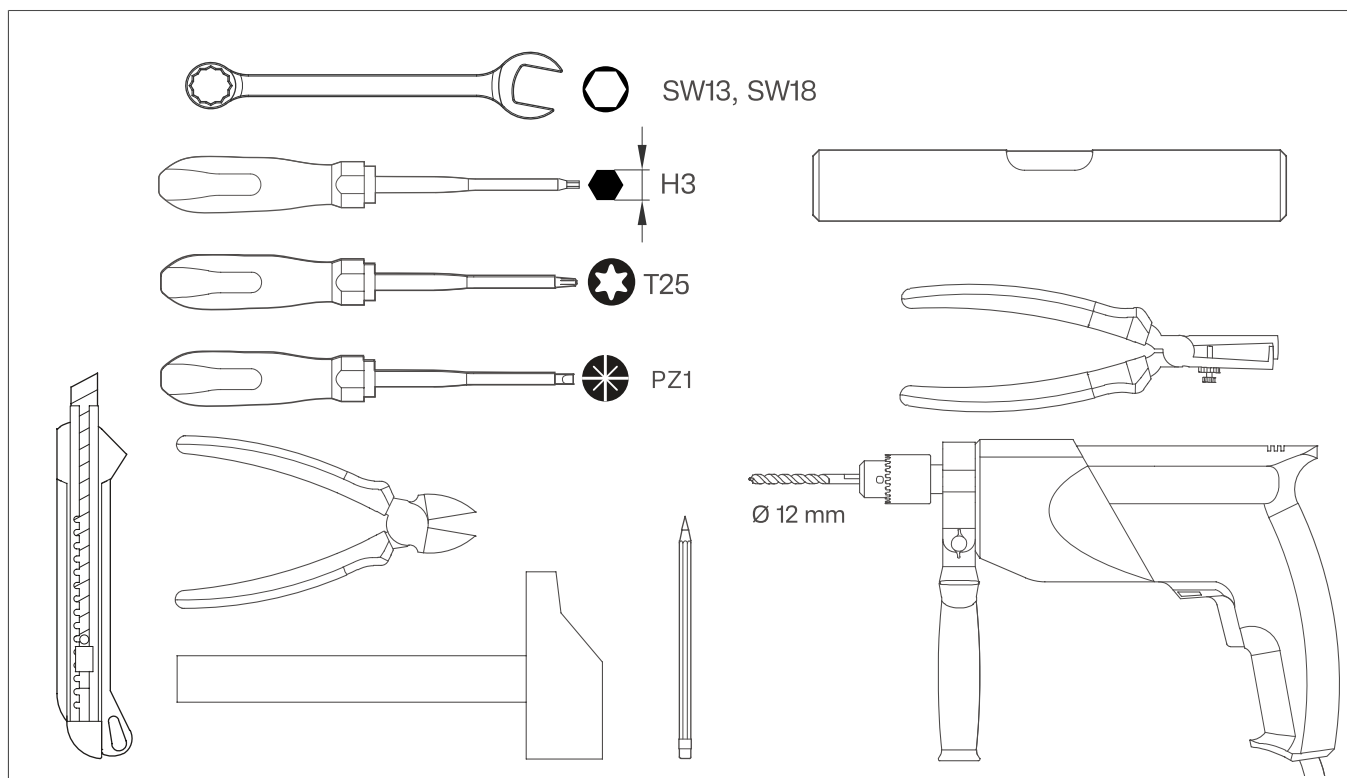


Fig. 5: Tool

4 Device overview

4.1 Exterior device overview

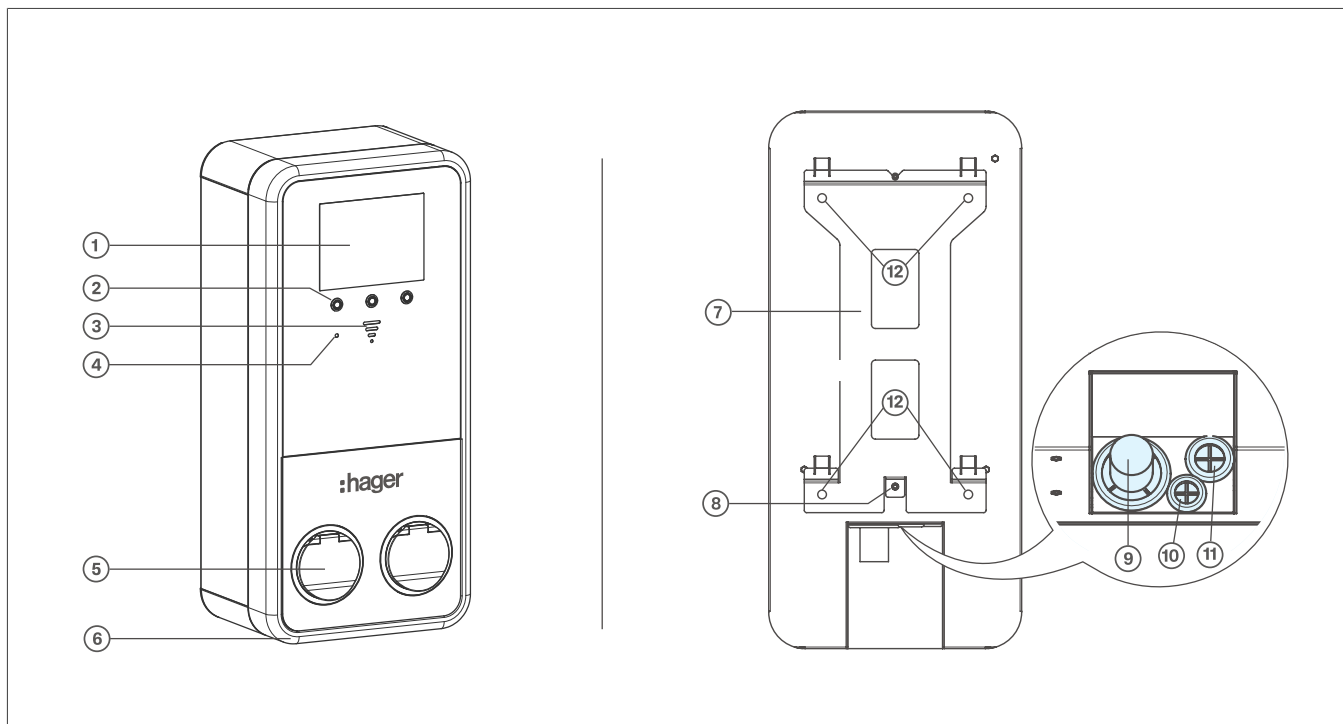


Fig. 6: exterior view

- ① Display
- ② Menu keys
- ③ RFID reader
- ④ Brightness sensor
- ⑤ Mode 3 T2S charging sockets
- ⑥ Edge protection
- ⑦ Wall-mounting plate
- ⑧ Screw for fixing the charging station to the wall-mounting plate
- ⑨ Power supply cable $\leq 25 \text{ mm}^2$
- ⑩ Ethernet/LAN cable
- ⑪ Optional connections
- ⑫ Four holes for fixing the wall-mounting plate

4.2 Interior device overview

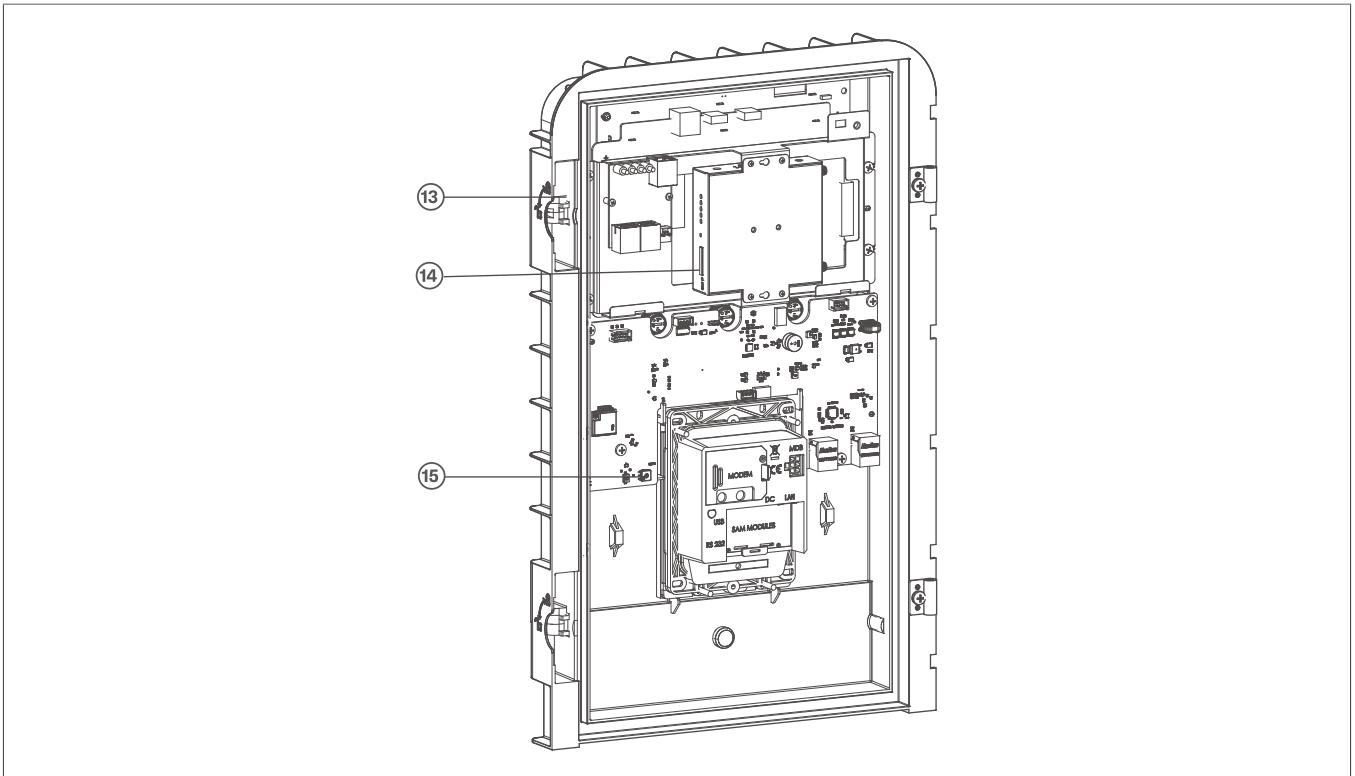


Fig. 7: Device cover

- ⑬ Lock cylinder
- ⑭ Plug-in interface for SIM card
- ⑮ Selector switch to select maximum current

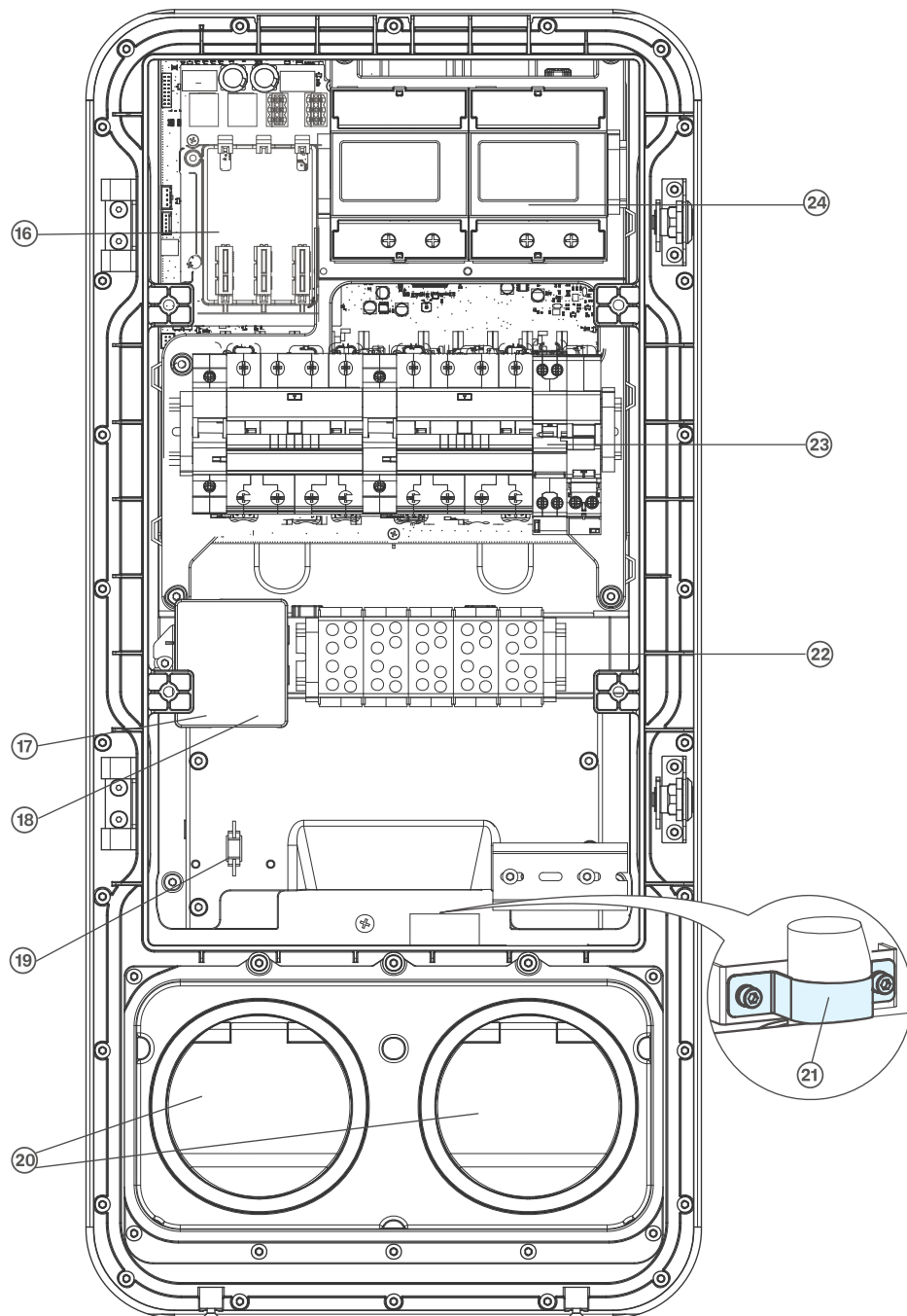


Fig. 8: Device plinth

- ①⑥ Slots for optional cards
- ①⑦ RJ45 socket: Ethernet for **IN**
- ①⑧ RJ45 socket: Ethernet for **OUT**
- ①⑨ Strain relief for LAN cables
- ②⑦ 2 x Mode 3 Type T2S socket
- ②① Cable clamp
- ②② Terminals for power supply 3-phase, 380-415V~ 3N.
- ②③ Protection devices
- ②④ Measuring devices

:hager

witty park 2

XVP222S

Un: 380-415V~ 3N

Ina: 64A

Freq: 50/60Hz

IP55 IK10

-25...+50°C

IEC 61439-7/AEVCS

Mode 3-2x3P+N+PE/32A

WIFI: 2,412-2,472GHz-100mW

RFID: 13,56MHz-52dBμA/m

4G: B1/3/5/7/8/20/28-23dBm

22/08/2025

CE



Designed in France
Hager Controls
BP10140- 67703 Saverne cedex-France
info@hager.fr



MGB4
-zUxvLQ
-zEoV9F
gtKmAR

Made in China

Fig. 9: XVP222S type label

:hager

witty park 2

XVG222S

Un: 380-415V~ 3N

Ina: 64A

Freq: 50/60Hz

IP55 IK10

-25...+50°C

IEC 61439-7/AEVCS

Mode 3-2x3P+N+PE/32A

WIFI: 2,412-2,472GHz-100mW

RFID: 13,56MHz-52dBμA/m

4G: B1/3/5/7/8/20/28-23dBm

22/08/2025

CE



Designed in France
Hager Controls
BP10140- 67703 Saverne cedex-France
info@hager.fr



MhbJ
-xH4wpw
-ByoBdG
XT1mJ9

Made in China

Fig. 10: XVG222S type label

4.3 Pedestal device overview

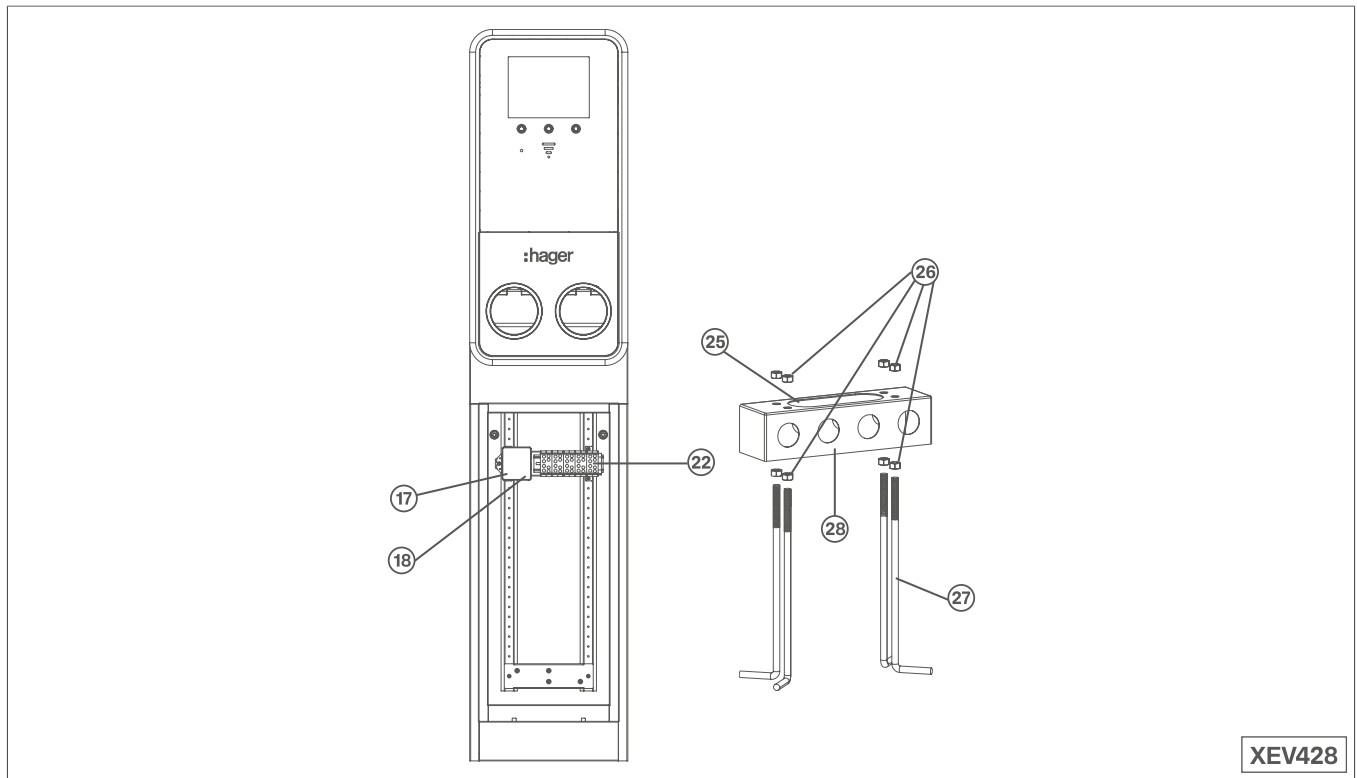


Fig. 11: Pedestal

- ①⑦ RJ45 socket: Ethernet for **IN**
- ①⑧ RJ45 socket: Ethernet for **OUT**
- ②② Terminals for power supply 3-phase, 380-415V~ 3N.
- ②⑤ Cable penetration
- ②⑥ Fixings (in scope of delivery)
- ②⑦ 4 x concrete anchor
- ②⑧ Base

5 Construction-side installation



Danger

Risk to life from electric shock.

- Before working on the device, disconnect all associated miniature circuit breakers, check that they are volt-free and secure them against restarting.
- Cover all live parts in the vicinity.



Warning

Fire risk due to device overload.

In case of an insufficient dimension of the supply cable, there is a risk of fire due to overload of the device.

- Design the power-supply cable in accordance with the technical data of the device and install it in accordance with the applicable installation regulations.

5.1 Requirements for the protection device

This charging station contains two charging points and is designed for connection to only one lead. The protective devices between the house connection point and the charging station must be designed for double the charging current. Each charging point is fused with a built-in type A residual-current circuit breaker at 4P 10 kA C-40A 30 mA (ADX490D).

The protective devices outside the charging station must meet the following requirements:

- ☑ The charging station must be protected in the main distributor with a 80 A four-pole miniature circuit breaker to prevent damage to the supply line.
- ☑ The protective device must be able to switch off all phases - including neutral conductors - in the event of a fault.
- ☑ The charging station must be powered by a circuit that cannot supply more than 6 kA short-circuit current at the connection point.
- ☑ An RCD switch, 4-pole, 6kA, 63A, 30mA, type A, was added as an upstream protective device.

Design of the protection device

The maximum charging current at the rotary switch must be set in accordance with the specifications on the type label and in the technical data in these instructions.

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

Depending on the required charging current, you can use, for example, Hager:

- Residual current circuit breaker, 4-pole: HMC480

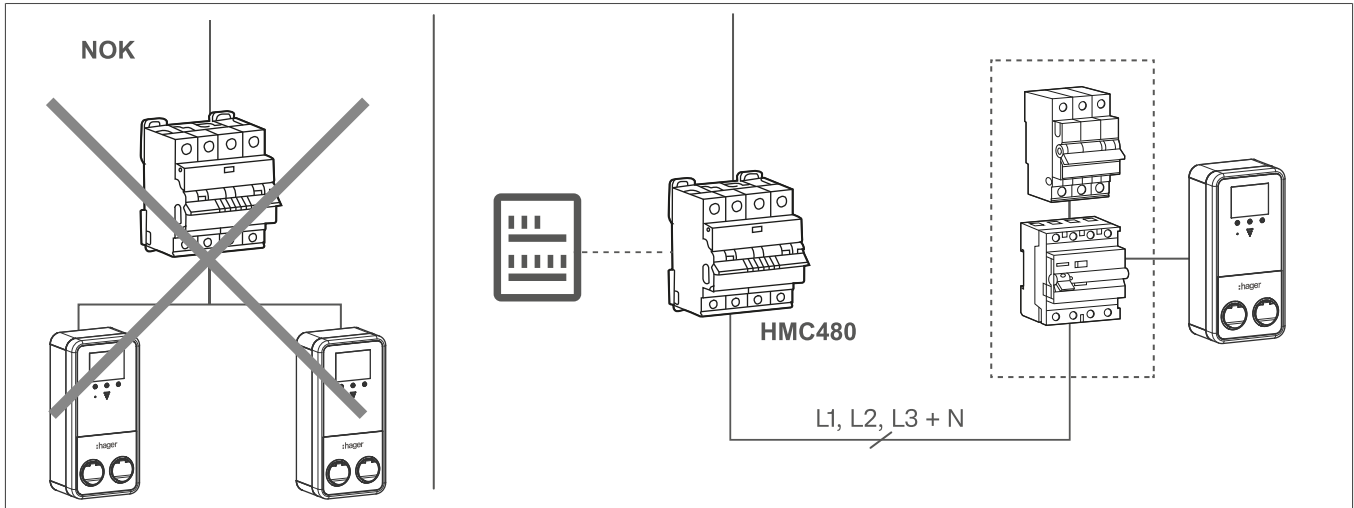


Fig. 12: Connection 3-phase



Caution

In accordance with EN IEC 61851-1, a DC-CDC is integrated in this charging station, which meets the requirements of IEC 62955.

If more than 6 mA DC is detected in the fault current, this DC-CDC acts on the integrated power relays of the charging station and automatically interrupts the power supply to the charging point.

- Do not use a type B residual current circuit breaker with this 6 mA DC detector.
- Install all electrical circuits of the building completely in the same structure (from an electrical point of view).



Operation of multiple charging stations

The number of charging stations that can be operated at a house connection point depends on the capacity of the house connection provided by the network operator. An increase in the rated current at the house connection point must be requested from the local network operator and usually also requires adjustments in the house installation.



Detection of welded contacts

The witty park 2 charging station is equipped with a welding contact detection system for each charging point. This feature provides additional protection by interrupting the power supply to a charging point when the internal relay contacts are welded or blocked.

Dimensioning of the cable cross-section

The cross-section of the lead to the charging station depends on the charging capacity, cable length, ambient temperature and type of installation. A larger cable cross-section may be required to reduce voltage drop and power dissipation.

Over voltage protection**Attention**

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

Transient overvoltages caused by atmospheric influences or switching operations can destroy electronic components.

- Install prevoltage protection devices in front of the electronic household meter. The design should take conditions at the location into consideration when designing.

Surge protection devices shall be provided for charging stations in public and semi-public areas in accordance with the applicable standards of the respective country.

6 Installing the charging station

6.1 Preparation



Danger

Risk to life from electric shock.

If live parts are touched, an electric shock may result in death.

- Before working on the device, disconnect all associated miniature circuit breakers, check that they are volt-free and secure them against restarting.
- Cover all live parts in the vicinity.



Warning

Risk of injury from falling charging station.

Using unsuitable mounting accessories can cause the charging station to fall over and cause injury.

- Use suitable mounting accessories for the specific conditions at the installation site. The supplied mounting accessories are suitable for concrete and masonry.



Warning

Risk of injury from heavy equipment.

If the charging station falls, people can be injured and the device can be severely damaged.
2 people are required to install the charging station.

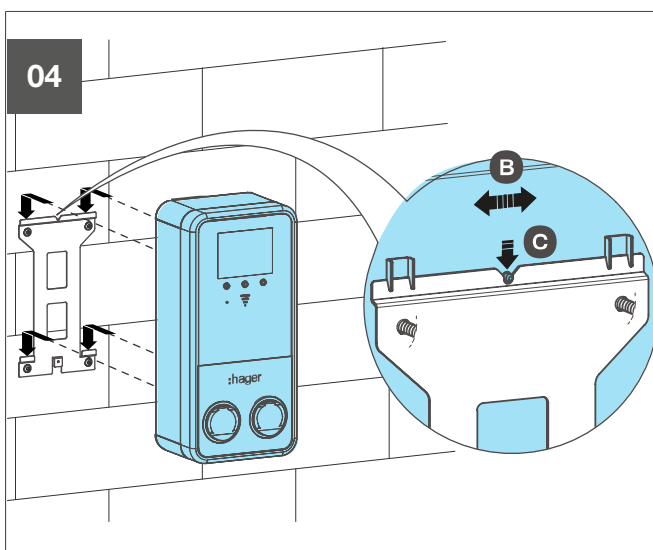
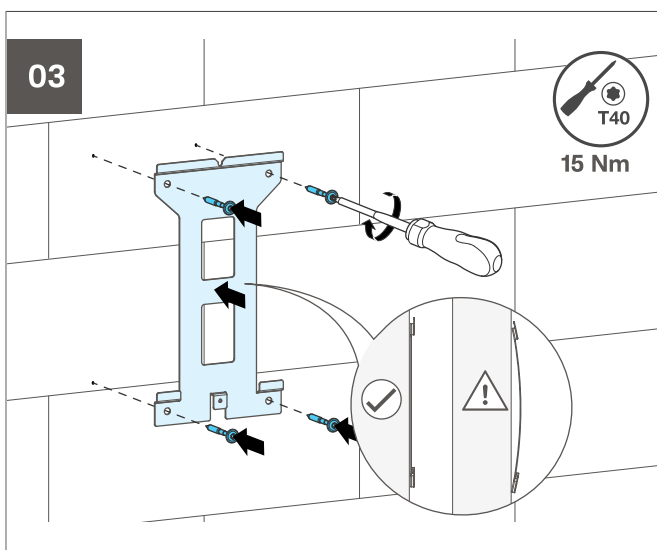
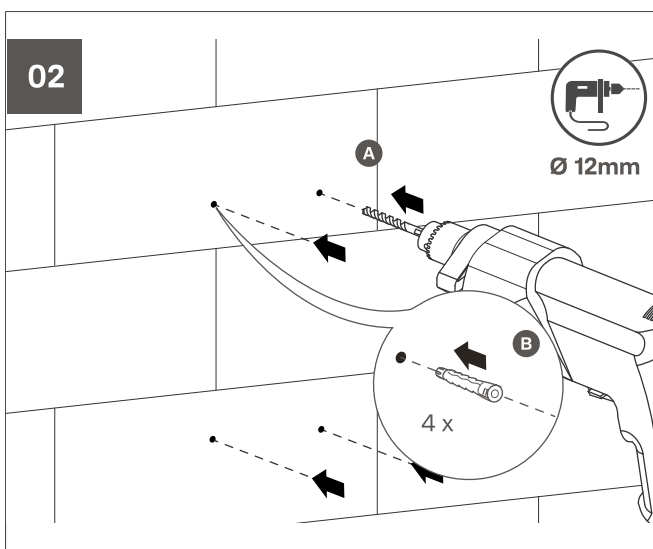
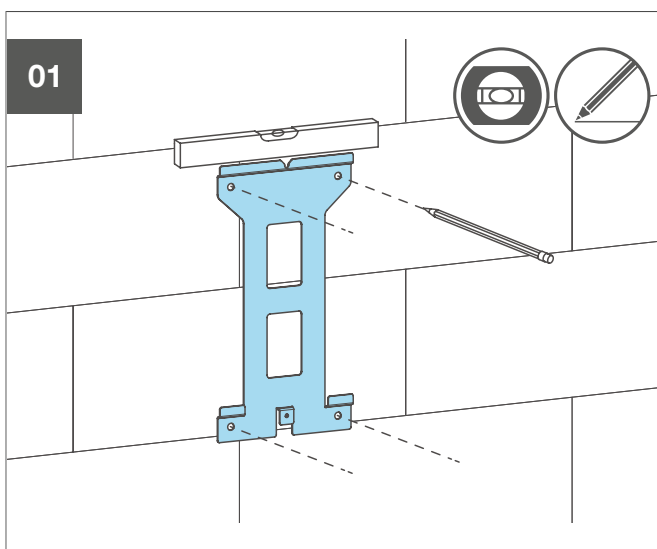
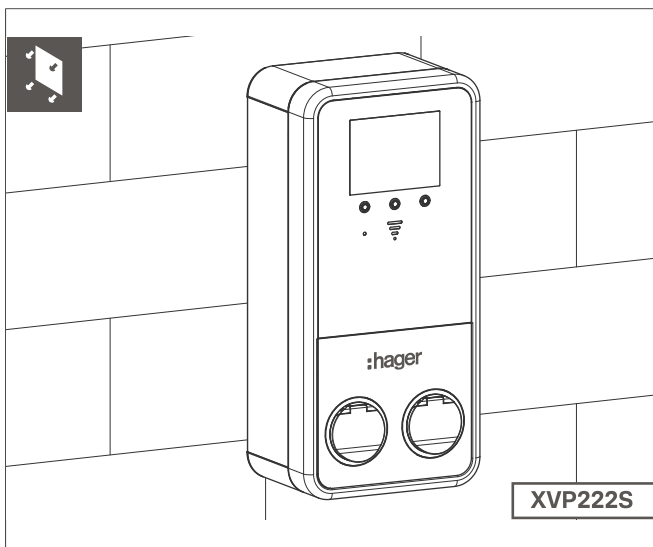
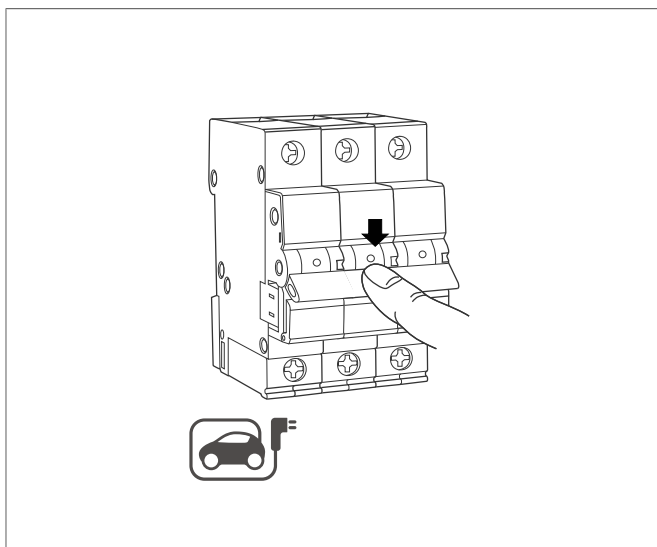
Requirements

The charging station can be mounted on a wall or on a pedestal. Horizontal installation on a ceiling or on the floor is prohibited.

All necessary cables and leads are routed to the location for installation:

- 3L + N + PE for 3-phase connection, 5G cables flexible or rigid.
- The minimum conductor cross-section for a charging station depends on the regional regulations of the country. It is essential to adhere to the maximum permissible cable length.
- The maximum conductor cross-section is 25 mm² for multi-wire and single-stranded conductors.

6.2 Wall installation



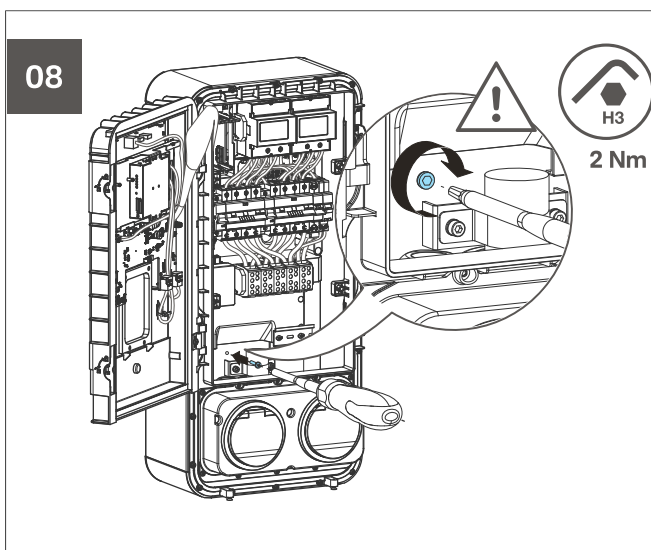
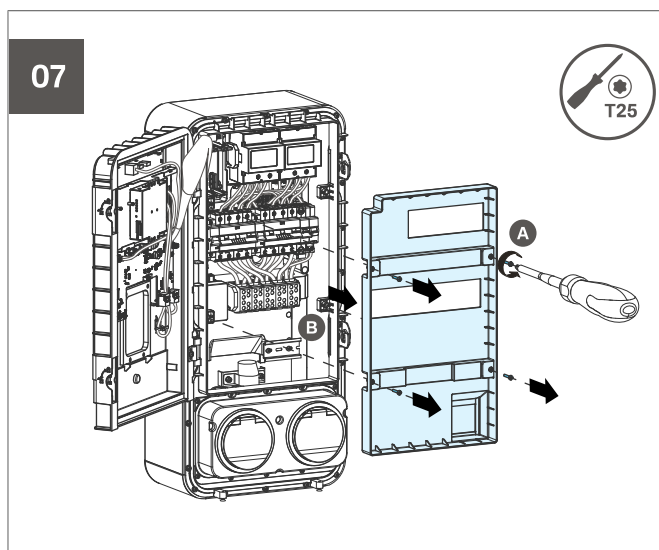
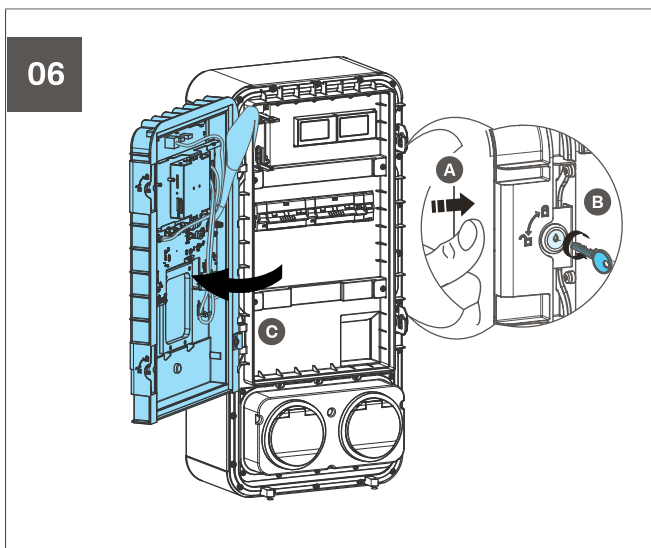
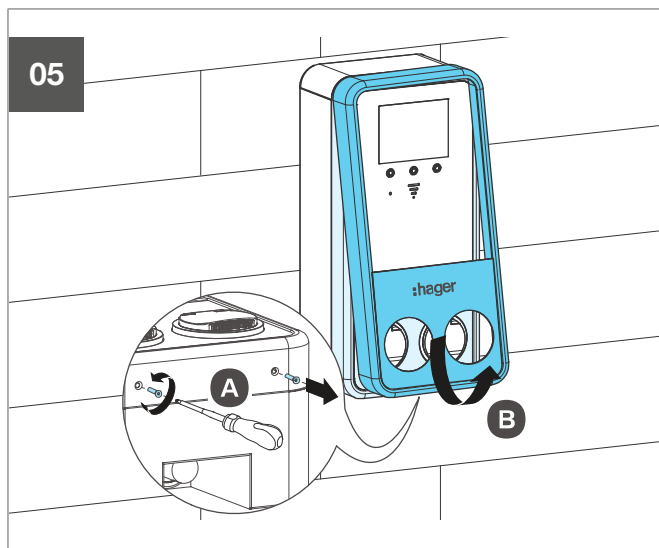


Caution

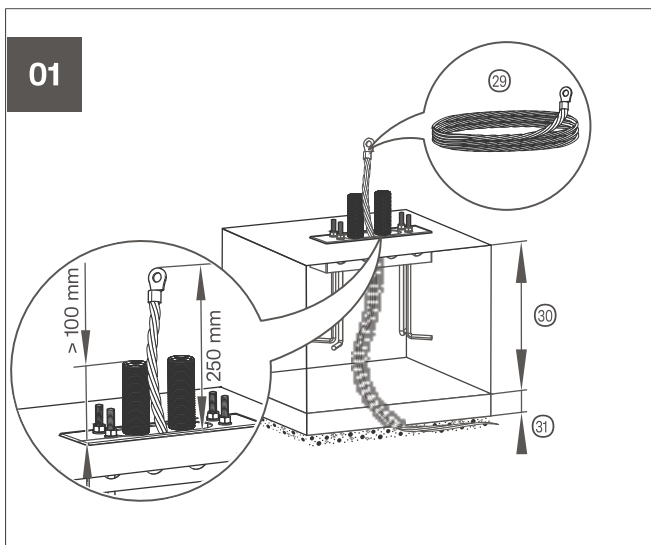
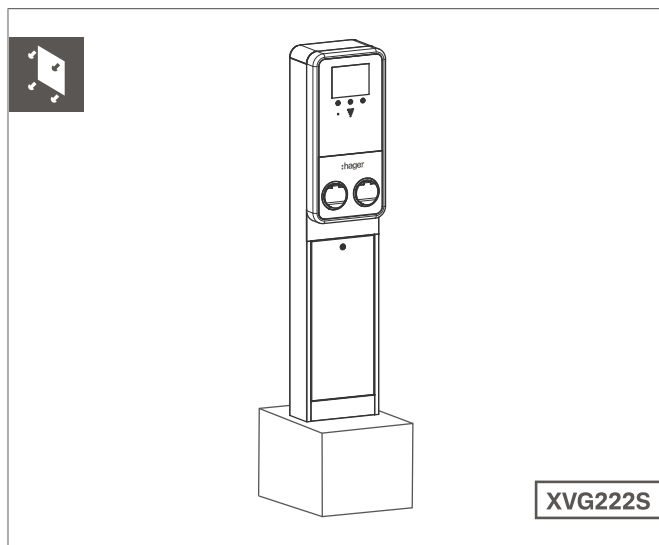
Risk of personal injury due to falling of the charging station.

The charging station can fall and injure people.

- Mount the charging station with at least 2 people.
- Follow step 8 to secure the charging station and ensure disassembly protection.



6.3 Pedestal mounting



- ②⑨ Grounding cable with braided shield (50 mm²), wound up to be buried in the ground before sealing
- ③① Fundament C20/25, X0 Depth: 80 cm
- ③① Binding layer: C8/10 Depth: 5 cm

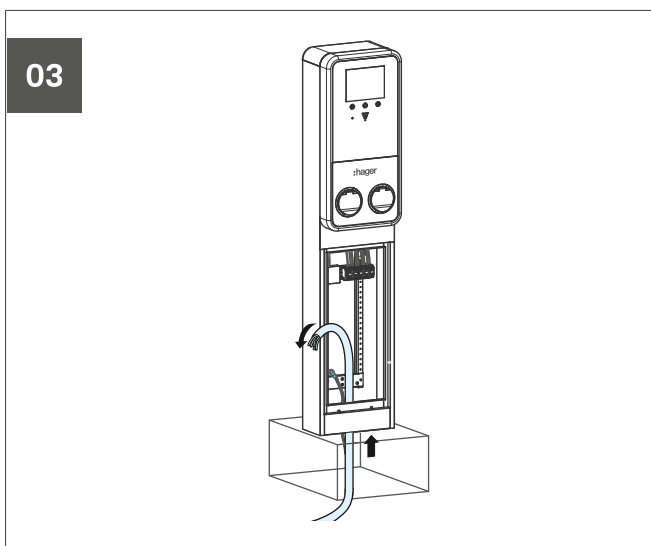
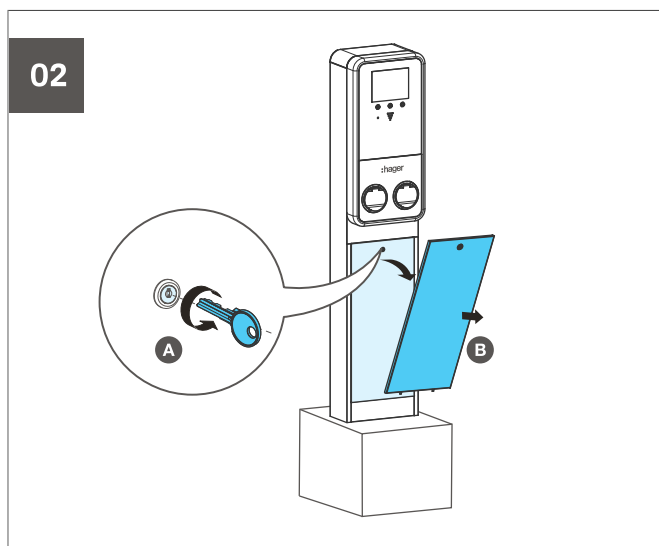


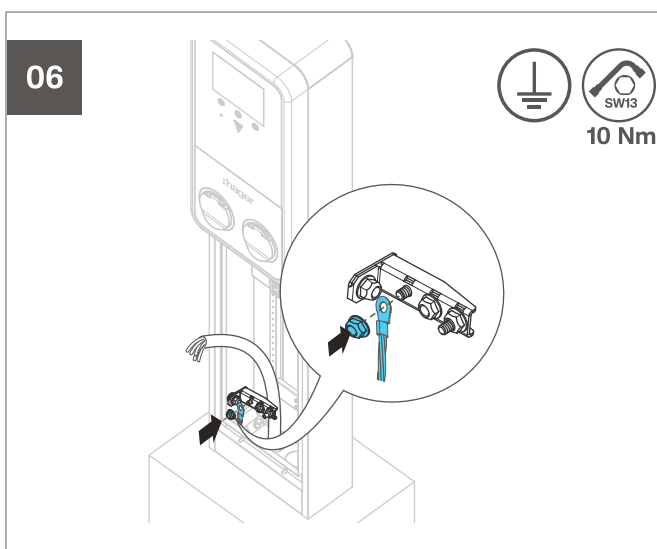
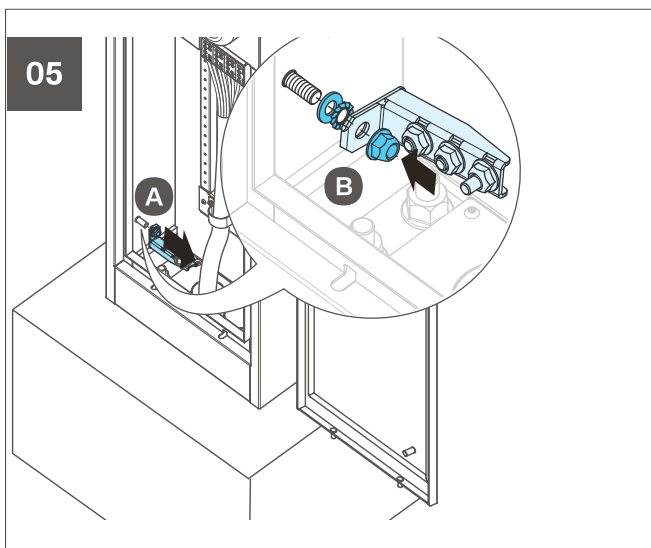
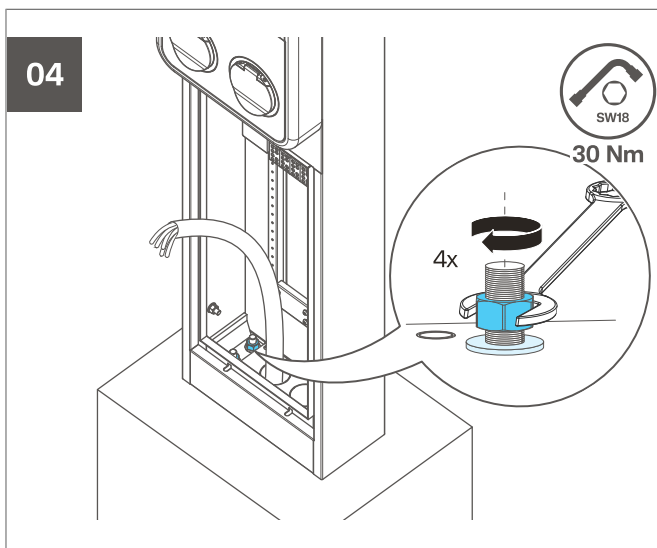
Caution

Risk of personal injury due to falling of the charging station.

The charging station can fall and injure people.

- Mount the charging station with at least 2 people.

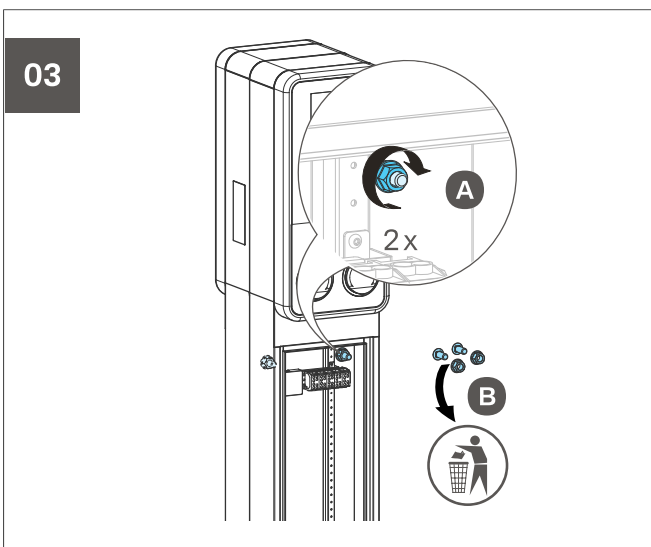
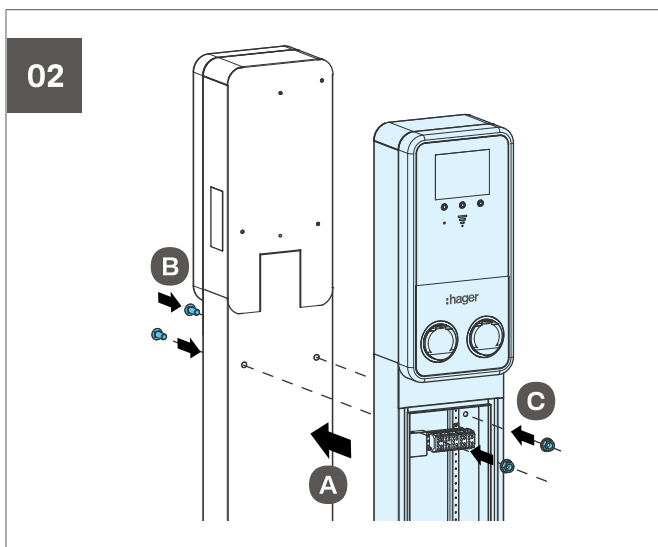
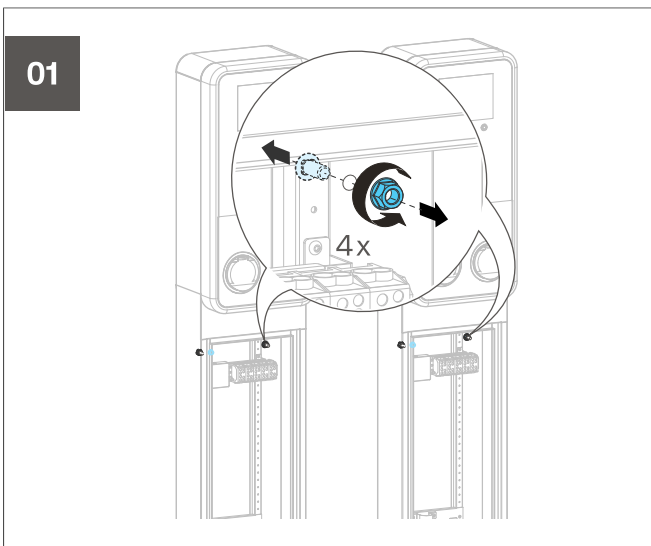
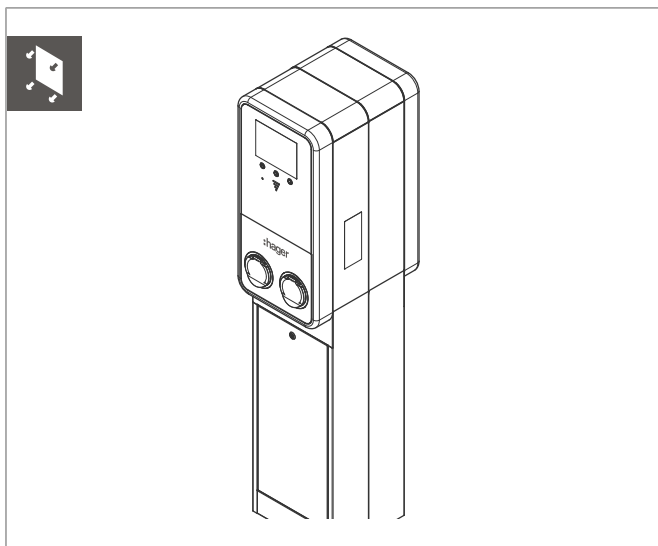




Double positioning of the column (optional)

The column is designed so that it can be connected to a second column.

- ☑ Sufficient space has been provided for the installation of a second column.
- ☑ The column has not yet been electrically connected.



7 Electrical connection



Danger

Risk to life from electric shock.

If live parts are touched, an electric shock may result in death.

- Before working on the device, disconnect all associated miniature circuit breakers, check that they are volt-free and secure them against restarting.
- Cover all live parts in the vicinity.

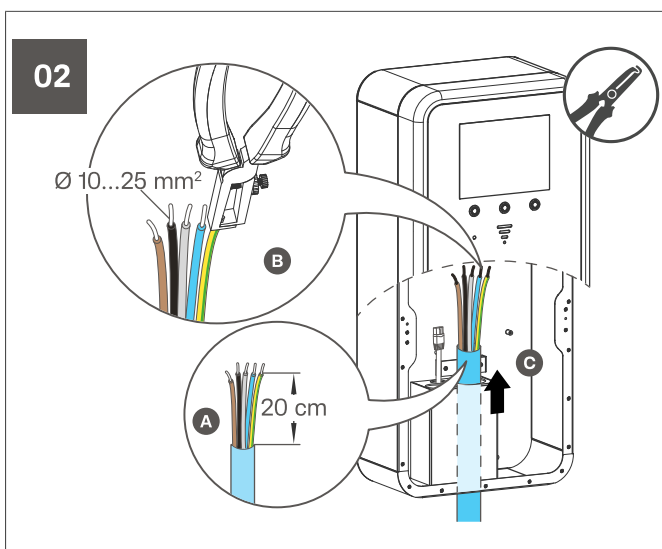
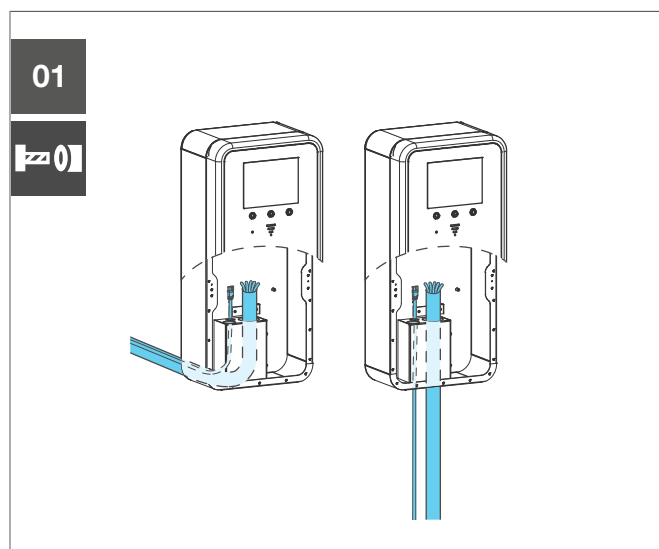


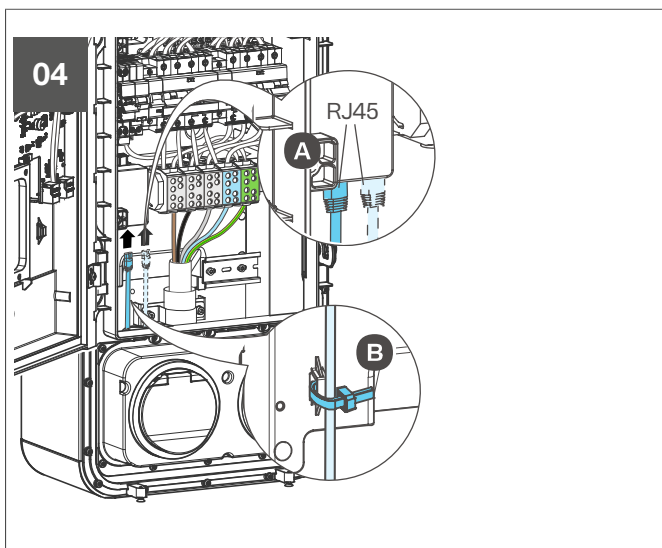
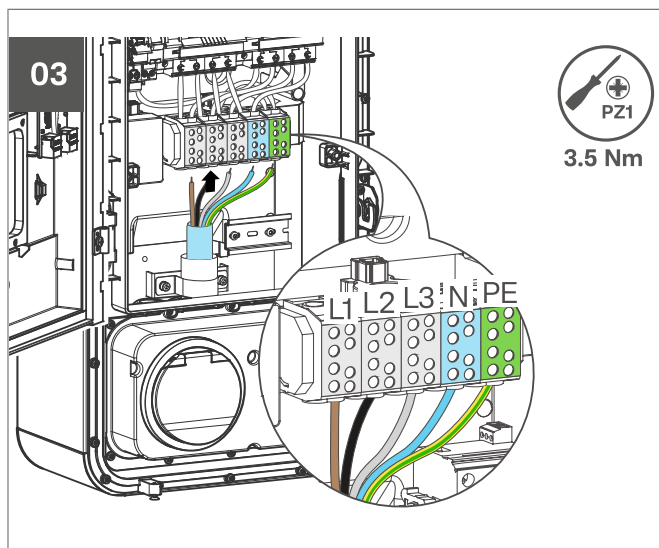
Notice

When connecting to the terminal strip (labeled with L3-L2-L1-N), special attention must be paid to the phase sequence. A critical error that causes the status LED to glow red continuously occurs if the phase sequence is not followed. This safeguard ensures that the consumption data is measured and calculated correctly.

- Connect the connecting cables to the terminal block as follows:
 - N-L1-L2-L3 OR
 - N-L3-L1-L2 OR
 - N-L2-L3-L1.

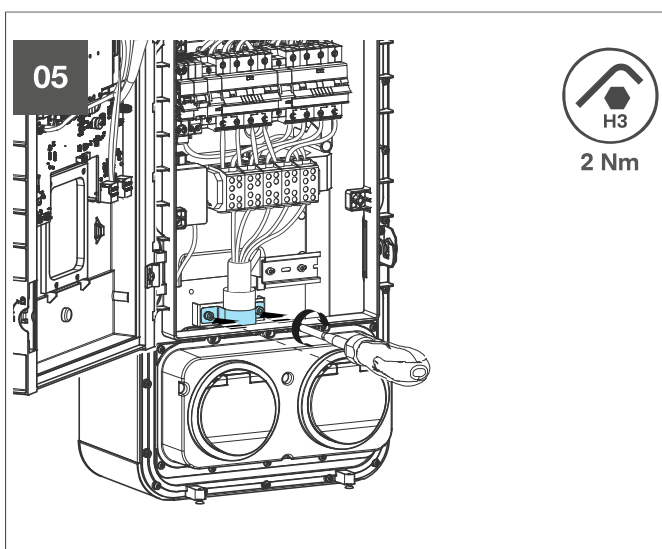
7.1 Wiring the device



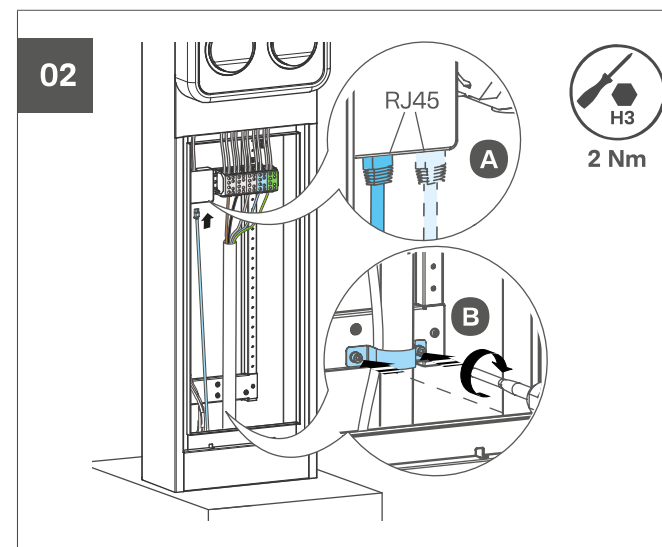
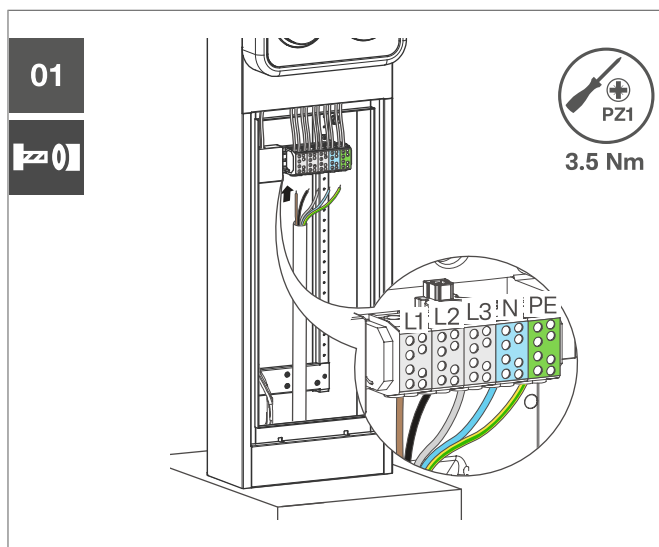


Daisy chain

In daisy-chain daisy-chaining from the witty park 2, the first charging station is connected via the router or network distributor, while all other charging stations are connected in series via an RJ45 cable.



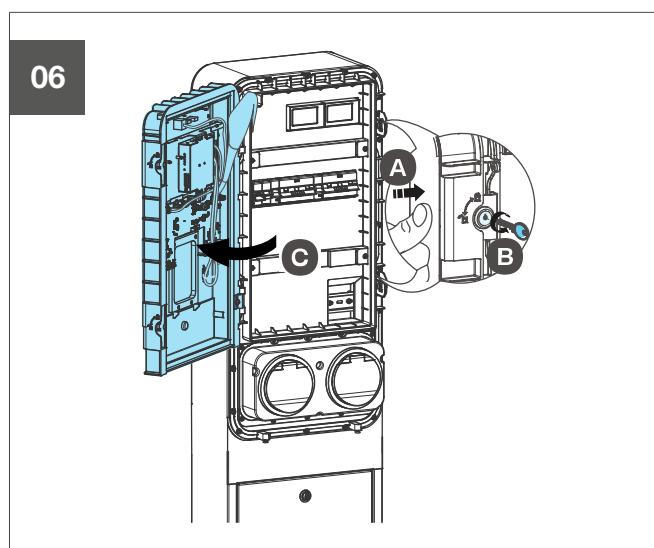
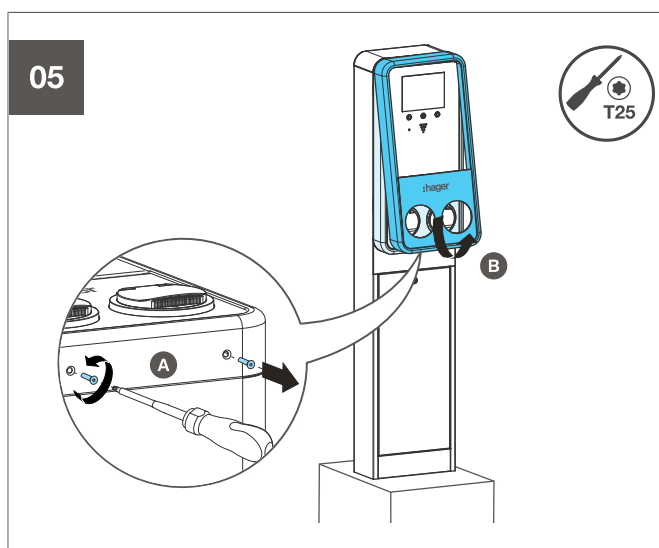
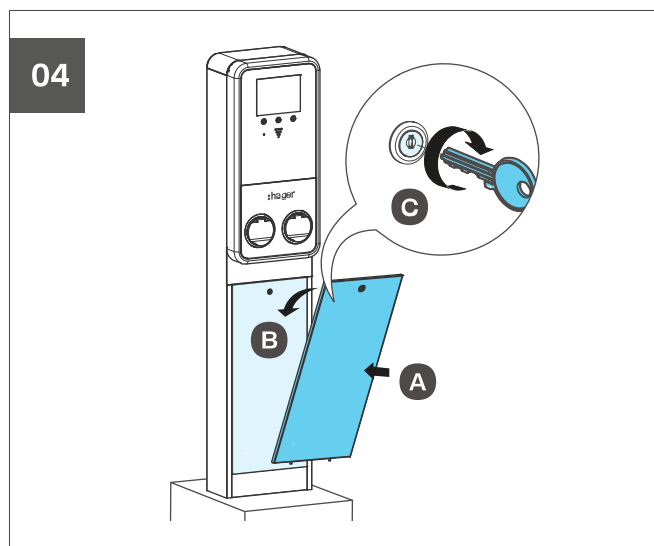
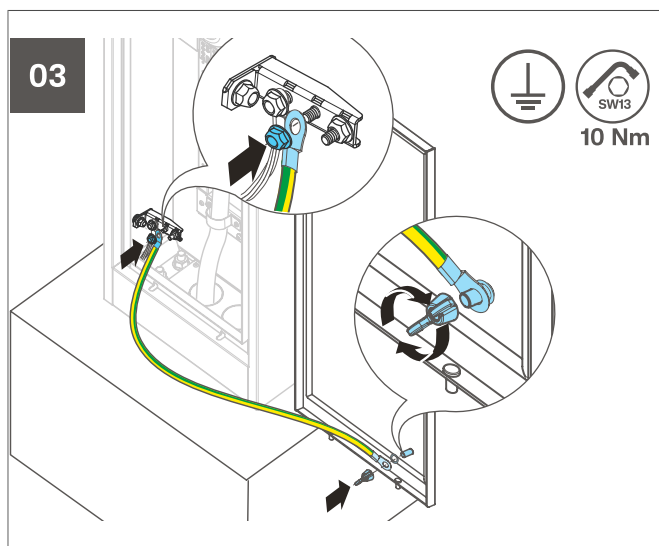
7.2 Wiring the pedestal





Daisy chain

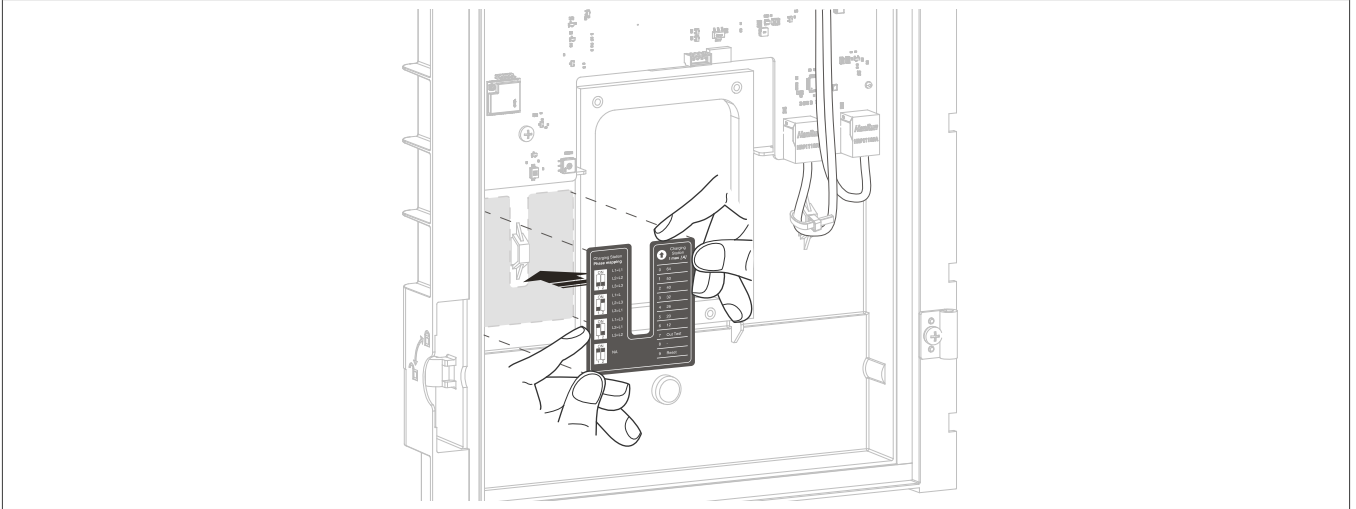
In daisy-chain daisy-chaining from the witty park 2, the first charging station is connected via the router or network distributor, while all other charging stations are connected in series via an RJ45 cable.



8 Settings

8.1 Operating current and connection mode

- Apply the sticker showing the operating current and the connection type.



The factory-set values (64 A operating current for 3-phase connection) must be checked and adjusted if necessary.

The rotary switch sets the maximum operating current, and the selection switch sets the phase sequence.



Information

The application is only suitable for a 3-phase connection.

If the software configuration settings and the hardware board settings are different, the smaller value is used.

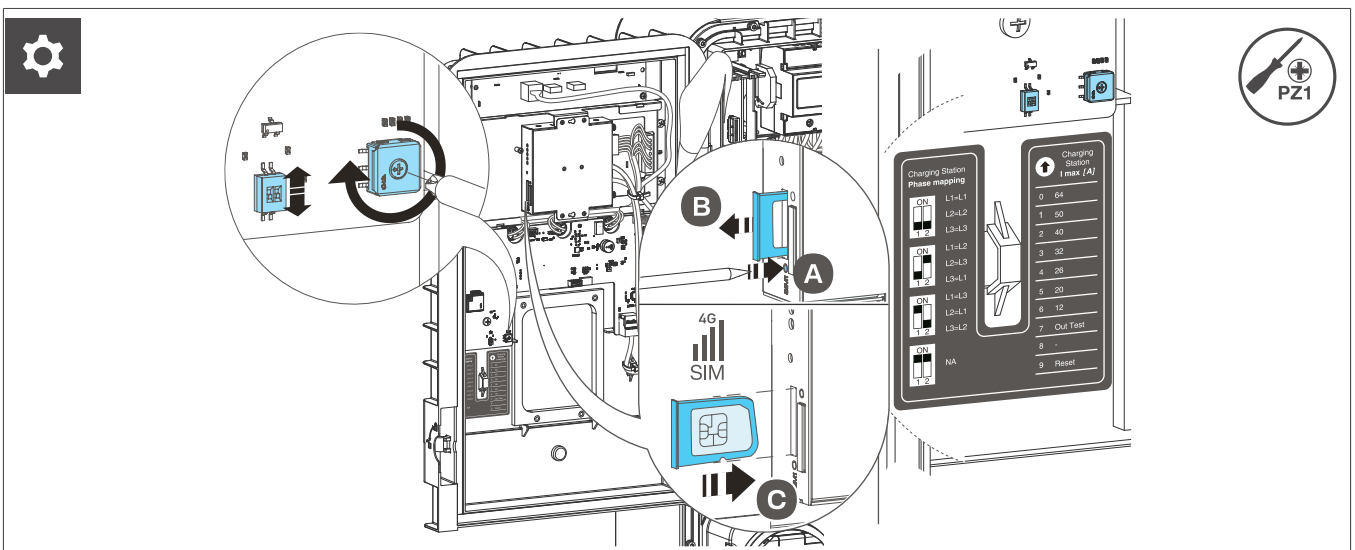
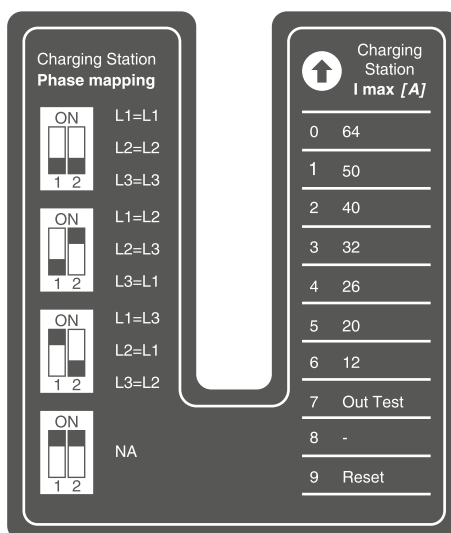


Fig. 13: Rotary and selection switch settings



8.2 Resetting to factory settings



Information

If a setting has already been changed, or in the event of an error, reset the charging station to factory settings first.

Reset using the rotary reset switch:

- 1 Reset the password using the configuration application.
- 2 Delete all local RFID tags.
- 3 Complete reset via the configuration application.

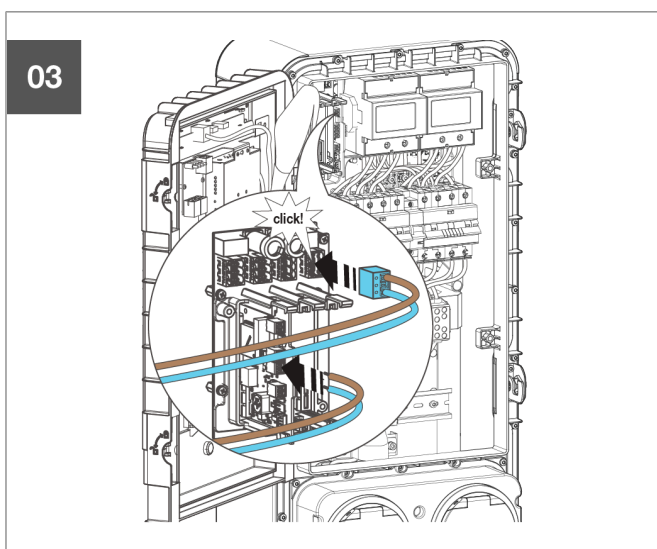
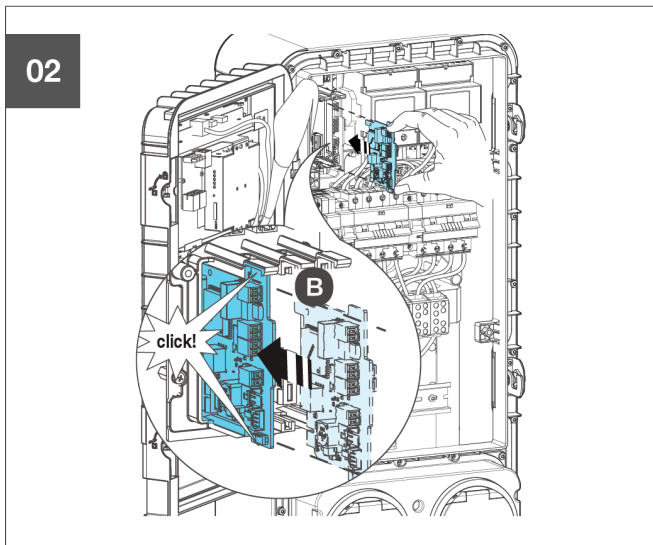
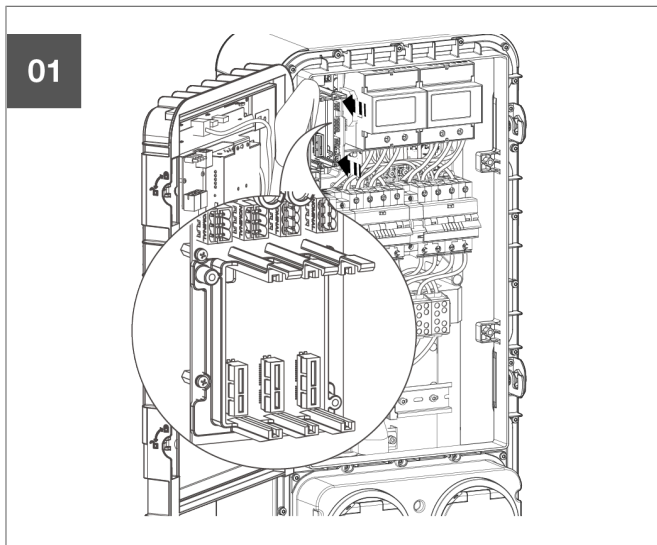
8.3 Install the optional load balancing card

Further information on the product can be found in the operating instructions.

Circuit board

XVA200

► www.hgr.io/r/XVA200



9 Final installation

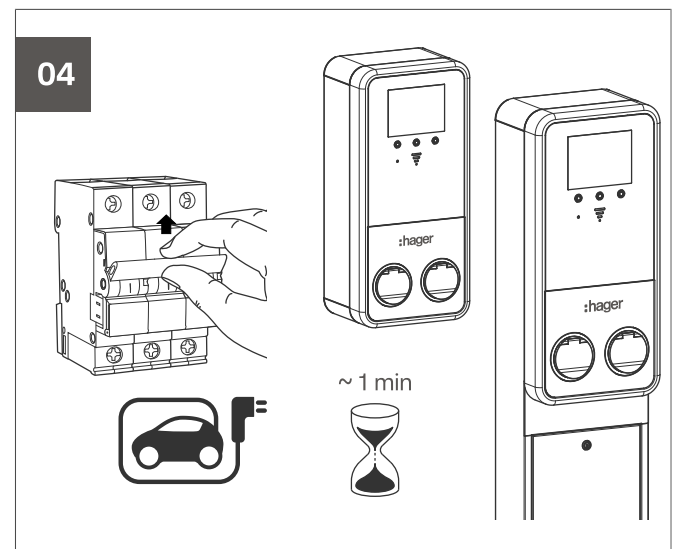
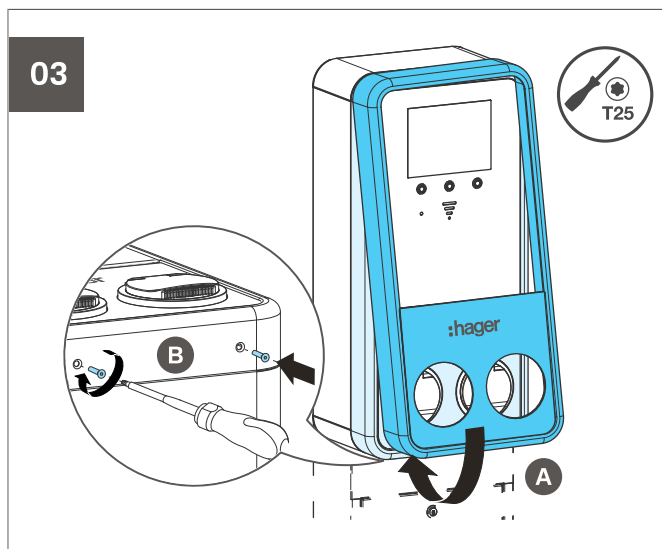
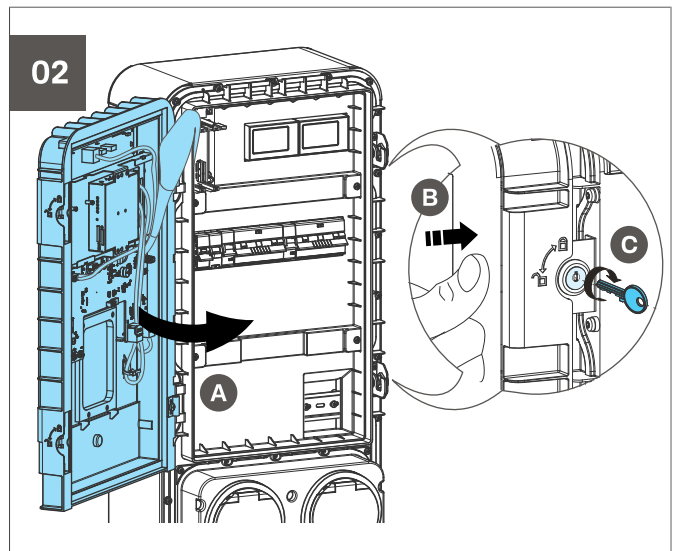
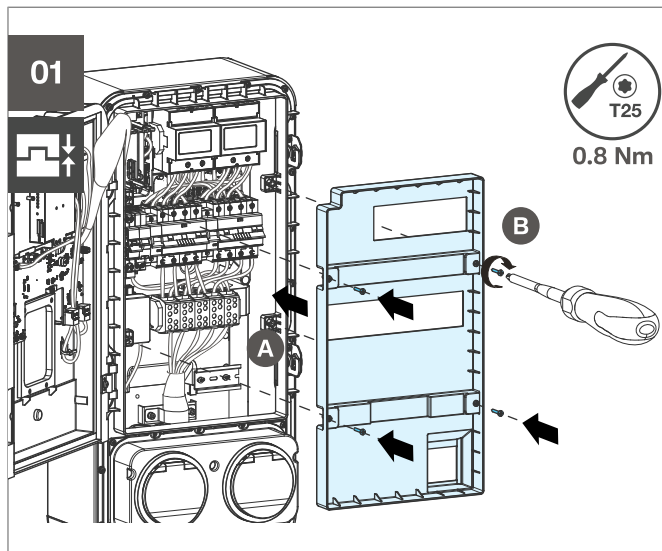


Danger

Risk to life from electric shock.

If live parts are touched, an electric shock may result in death.

- Do not switch on the charging station or connect an E-vehicle until the front of the charging station is locked.



Note

Wait up to one minute for charging operation to start.



Note

IP-55 protection could be lost due to incorrect tightening torque.

10 Commissioning



Information

Before commissioning, ensure that no electric vehicle is connected to the charging station.

The charging station can be commissioned three ways.

- 1 Connection via WiFi hotspot on the charging station
- 2 Connection via Ethernet to the local load manager
- 3 Connection via Ethernet

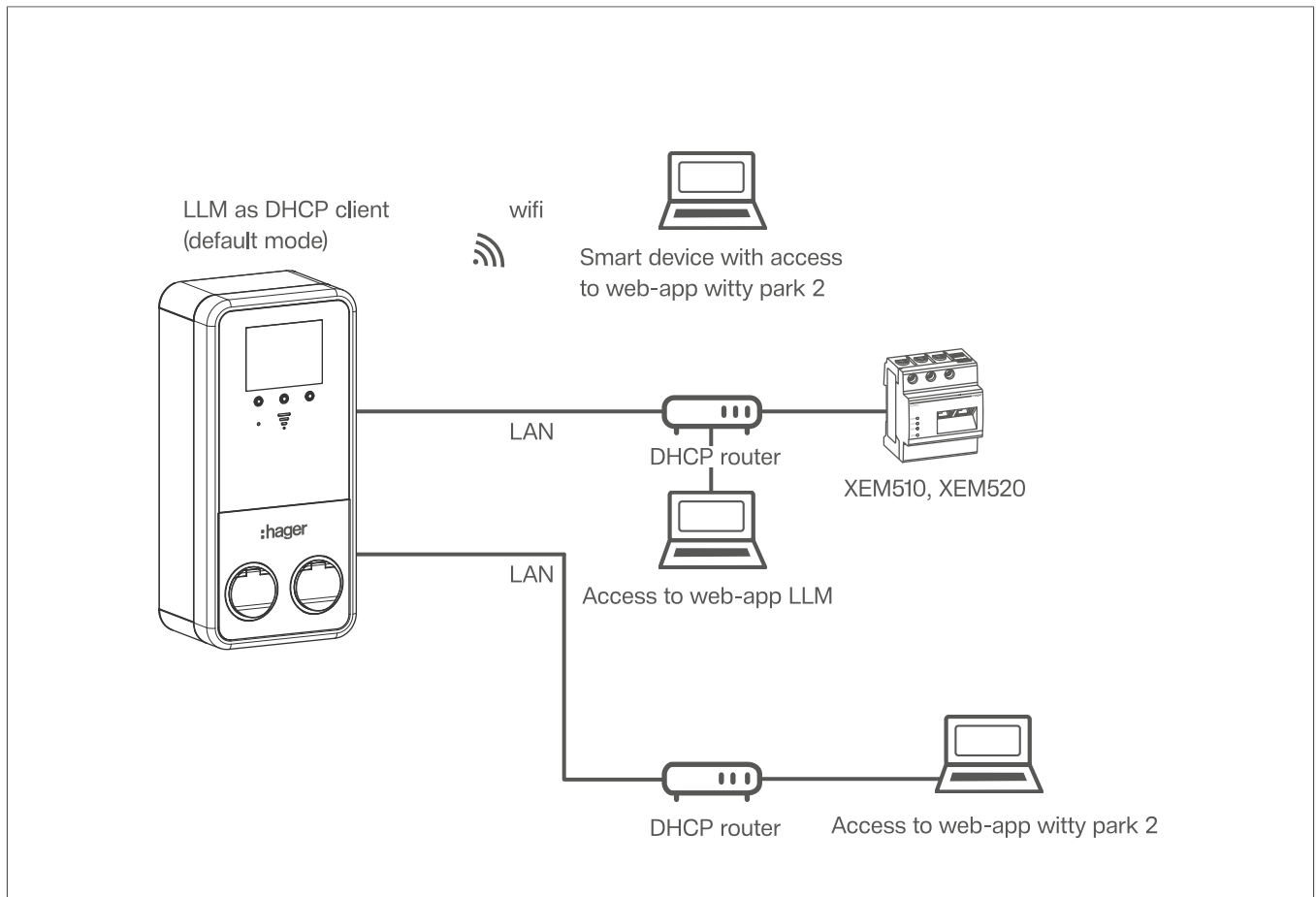


Fig. 14: Connection options



Notice

Data loss when connected to the Internet.

Unauthorized access can result in data loss.

- Before operating the device, take security measures to protect the network against unauthorized access.



Note

Only one connection is permissible. The configuration can therefore only be operated by one person.

10.1 Access via Wi-Fi

Connect to the network using a Wi-Fi hotspot

- Hold the RFID tag in front of the RFID reader for more than 7 seconds with pairing access rights.

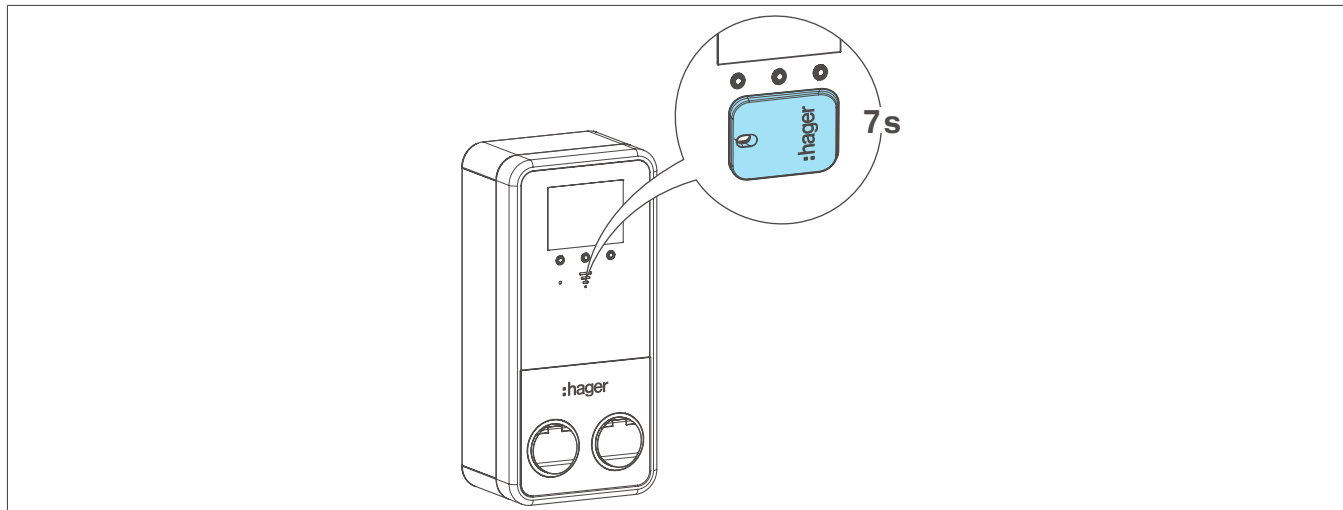


Fig. 15: Activate the WLAN hotspot using the RFID tag

Access point is created when the RFID tag is released.

The LED lights blue when the release is successful.



Note

Each charging station has its own serial number, which can be found on the configuration label.

- On the end device, select and connect the correct network name of the WLAN network.

Network name: **Witty-xxxxxx (the last 6 digits of the serial number)**

No password is required.



Fig. 16: Connect via Wi-Fi



Note

If no activity is detected after 30 minutes, an automatic deactivation occurs.

Connection to the configuration application



Note

The configuration application can be accessed directly by entering the computer name (hostname) or the IP address of the charging station.

- Open the favorite web browser.
- Enter the IP address of the charging station or the computer name (host name) in the URL bar of the browser.

IP address: **192.168.3.5**

Computer name: **Hager.local**

The configuration application opens.

10.2 Access via Ethernet

Connect to the network via Ethernet

If the connection is via Ethernet, the charging station uses the IP address of the external router (DHCP server).

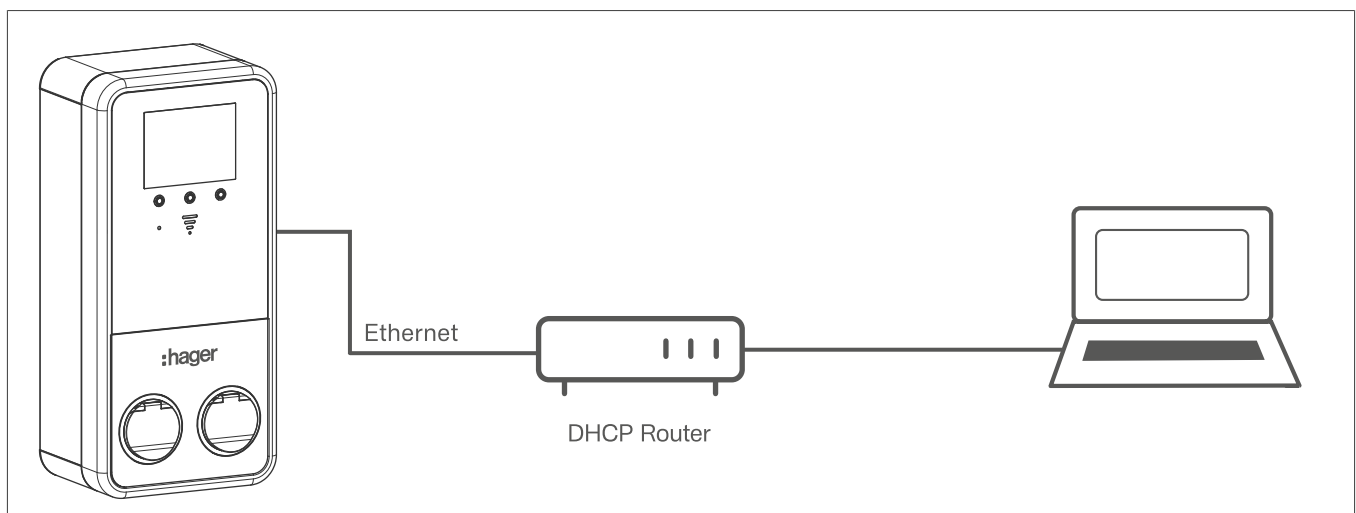


Fig. 17: Connection via Ethernet

Connection to the configuration application



Note

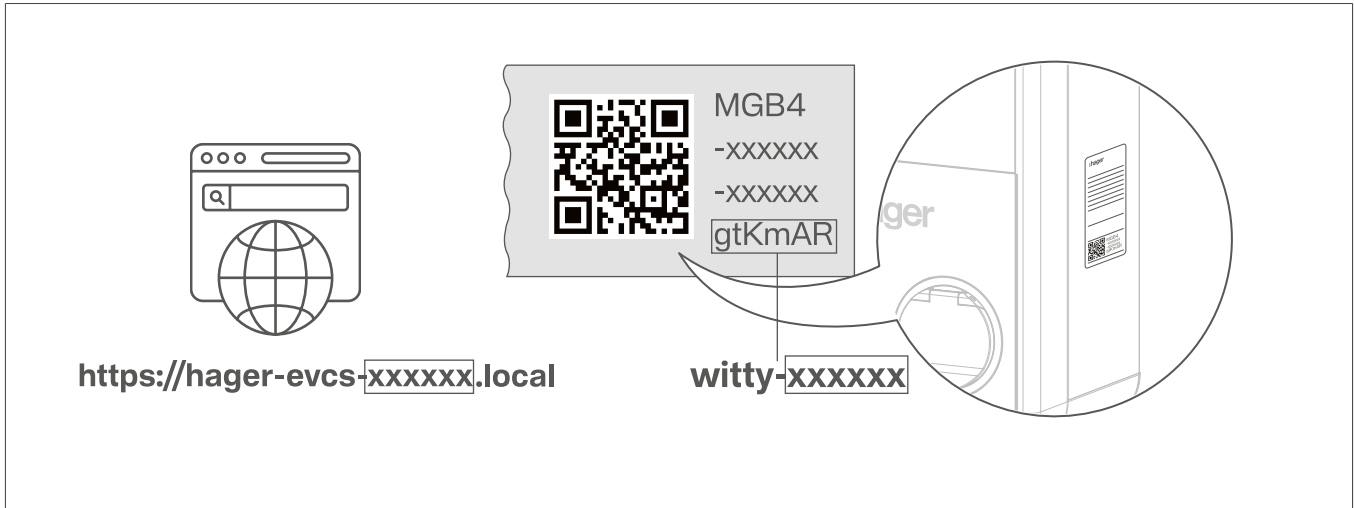
The configuration application can be accessed directly by entering the computer name (hostname) or the IP address of the charging station.



Note

Each charging station has its own serial number, which can be found on the configuration label.

- Open the favorite web browser.
- Enter the IP address of the router or the computer name in the URL bar.



Computer name: **Hager-evcs-xxxxxx.local** (the last 6 digits of the serial number)
The configuration application opens.

10.3 Access via Local Load Manager (LLM)

For more information on accessing the Local Load Manager (LLM), refer to the user manual.

Local Load Manager (LLM)

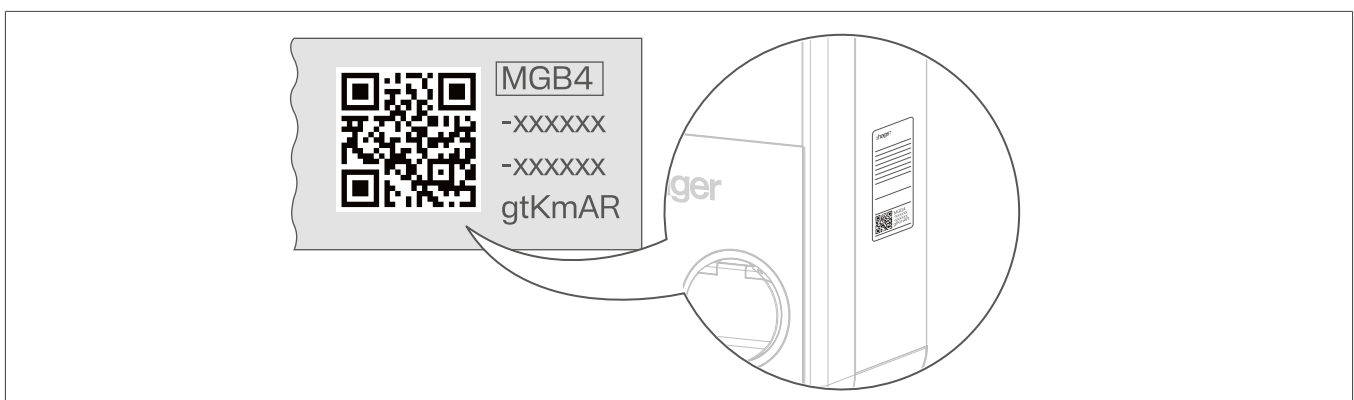
XEM510, XEM520

► hager.com/de

10.4 Logging in

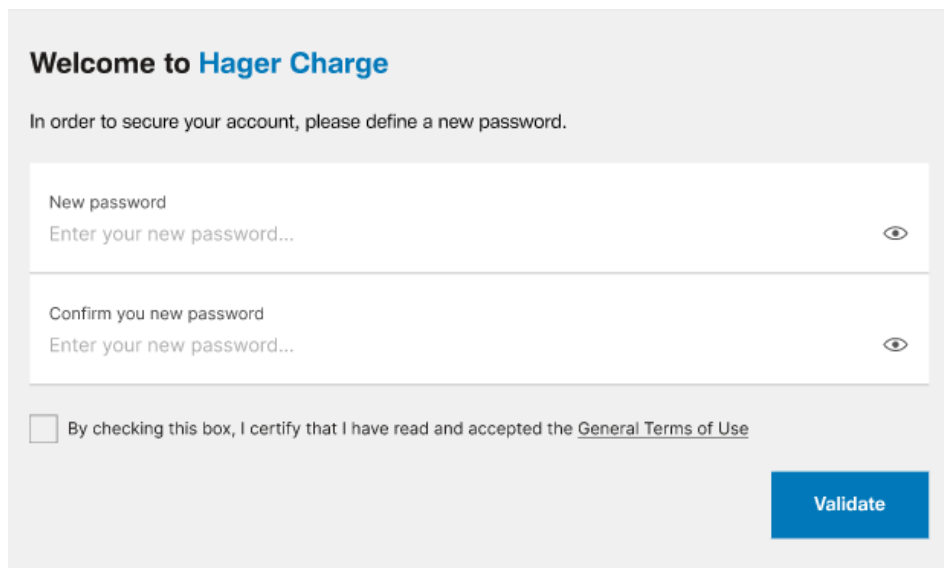
☑ This assumes that the device has a stable connection to the network.

- Enter credentials.
Username: **admin**
Password: The **first 4 digits of the serial number**



After the first login, the user is prompted to change the password and set a strong password. A strong password must meet the following requirements:

- At least 8 characters,
- At least 1 special characters,
- At least one uppercase character,
- At least one lowercase character,
- At least one number.



Welcome to Hager Charge

In order to secure your account, please define a new password.

New password
Enter your new password...

Confirm your new password
Enter your new password...

☐ By checking this box, I certify that I have read and accepted the [General Terms of Use](#)

Validate

Fig. 18: Set a new password

If this login data is lost or after 10 input attempts, the charging station must be reset to the factory settings (see [Resetting to factory settings](#)).

i

Information

Resetting to factory settings will clear all parameters.

10.5 Configuration application

This configurator provides an overview in real time and is used to customize the parameters of the witty park 2.

Connect the charging station to the network

- 1 Open the **charging station** tab.
- 2 Select a **network**.

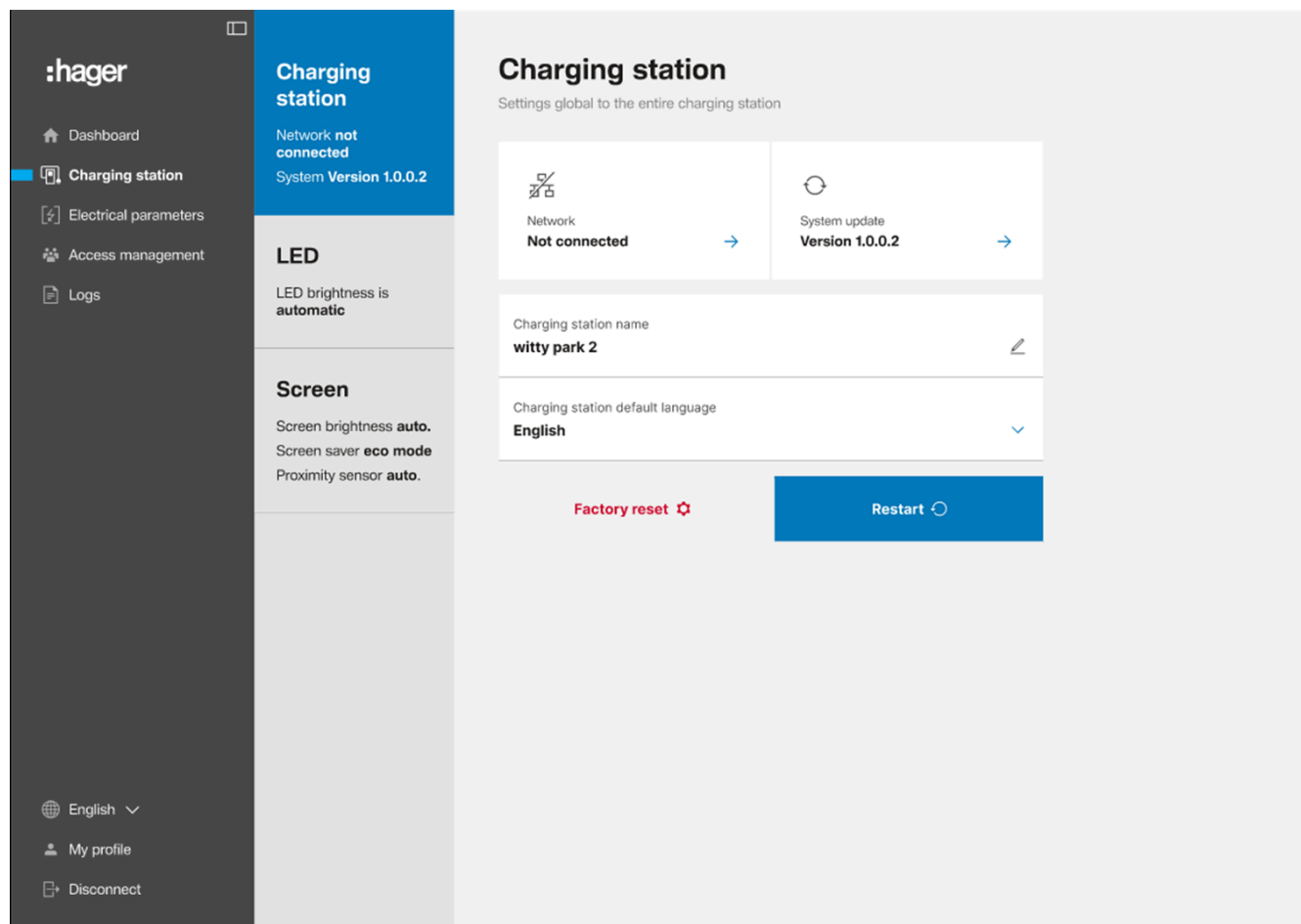


Fig. 19: Connect the charging station to the network

The **Network** dialog box appears.

- 3 Activate the connection.



Note

A connection is automatically established if it is made via WLAN or Ethernet. To do this, the connection must be activated in the **Network** dialog box.

When using a SIM card, however, specific configuration settings are required in the corresponding application.



Note

Specific settings can be made in the **Charging Station** tab to adjust the charging station individually. These include the brightness settings for the LED displays and the screen, as well as the sensitivity of the proximity sensor.

Connect the charging station via mobile data

☒ A SIM card has been inserted.

- 4 Select mobile data.
- 5 Activate the connection.
- 6 Enter the APN (Access Point Name) and associated PIN code.
- 7 Select authentication types.

Password Authentication Protocol (PAP): Password is passed in plain text.

CHAP (Challenge Handshake Authentication Protocol): Password is not transferred directly. Challenges are sent so that the password is only used to calculate a hash.

Set electrical parameters

- 1 Open the **Electrical Parameters** tab.
- 2 Set the maximum charging power of the charging station.

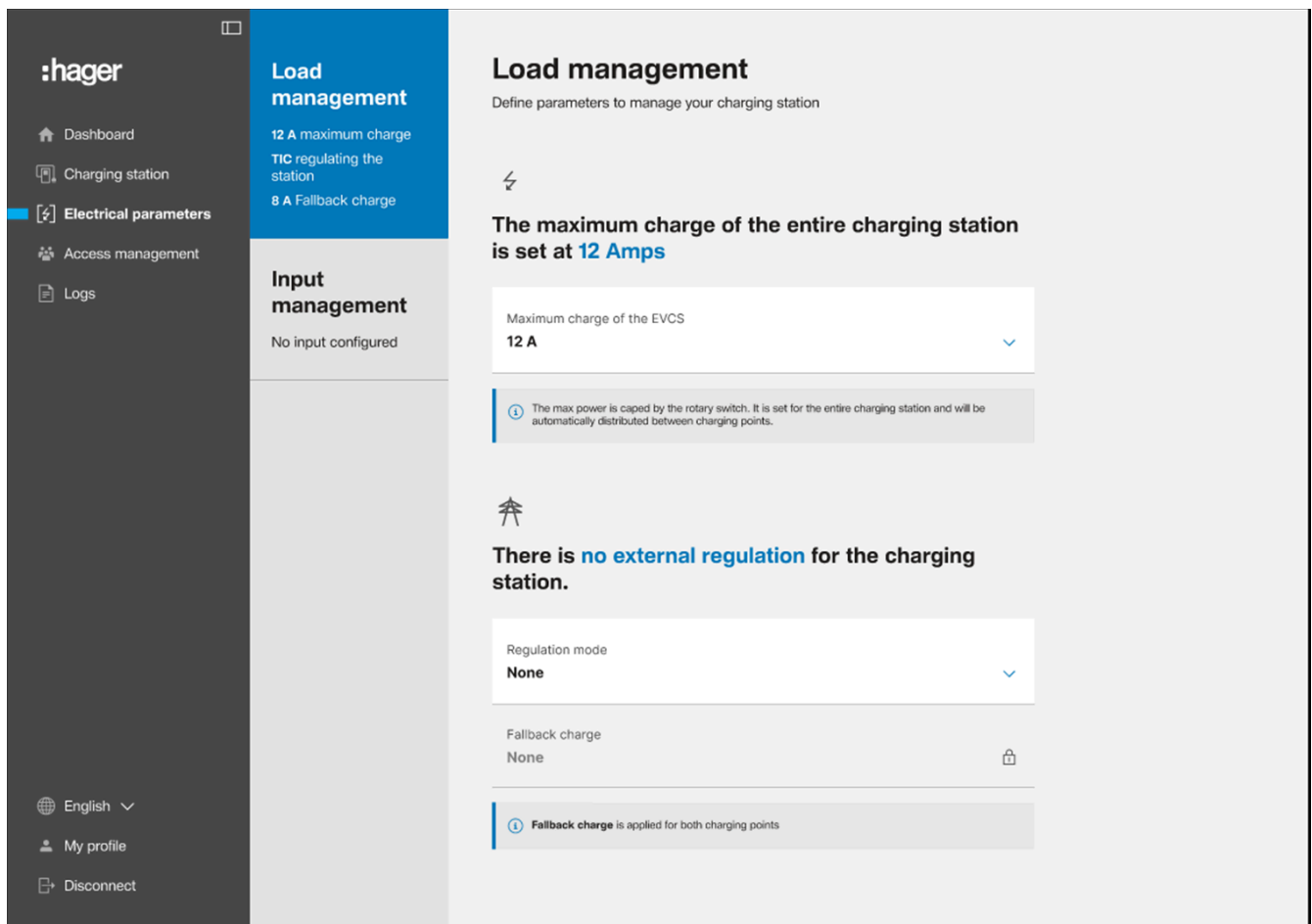


Fig. 20: Set electrical parameters

- 3 Determine the mode of regulation.
- 4 Determine a relapse value in the event of communication loss.

Set access methods

Access is via assigned RFID tags.

Dashboard

The dashboard provides a global overview of the set parameters and the usage of the charging station in real time.

Diagnosis

The diagnostics provide a detailed overview of the various charging points.

Protocol

The log displays all loads for a certain period of time.

11 Charging the electric vehicle

11.1 Make the device ready for charging

☑ The charging station is ready for use and the status LED lights up green.

① Connect the charging cable to the vehicle.



② Connect the charging cable to the charging socket on the charging station.

The device is ready for charging and the charging operation can be started. If the status LED lights up red, contact the operator.



11.2 Starting the charging operation

☑ The charging station is ready for use and the status LED lights up blue.

- Hold the RFID card in front of the charging station below the screen.

Card accepted: The RFID reader lights up green.

Card not accepted: The RFID reader lights up red.

The charging plug is locked in the charging socket of the charging station and can no longer be pulled out.

The status LED is flashing blue and the charging operation begins.

The display counts the amount of energy that has been charged.



11.3 Ending the charging operation



Information

The charging operation can only be stopped by the user who started it.

☑ The charging operation is complete and the status LED is solid blue.

① Unlock the charging socket on the vehicle.



② Disconnect the charging plug from the vehicle's charging socket.



③ Disconnect the charging plug from the charging station's charging socket and stow it away.



Information

Grasp the charging plug on the connector housing to prevent damage to the charging cable.



Information

In the event of a mains breakdown or a loss of voltage to the charging station, the mechanical interlock of the charging plug in the charging station is automatically unlocked. The plug can be pulled out of the charging socket.

11.4 Malfunction during charging

If the status LED lights up red continuously, there is a fault with the charging station. Charging is not possible on this charging station.

- Contact the operator of the charging station.

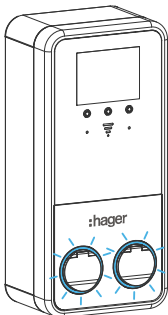
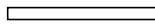


11.5 Payment options

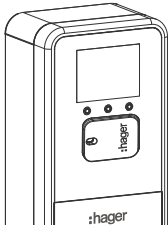






The cost of the energy varies and depends on the provider and operator of the charging station. Information on payment options can be obtained from the operator of the charging station or the corresponding provider.

12 LED display

The charging station offers a range of checking parameters that allow diagnosis to be performed during all operating phases. The results can be found in the built-in configurator on the Live Debug and Logs page.

12.1 Operating status

LED signal		LED status description	
		Permanent white light	Charging station switched on
		Permanent green light	Charging station ready for use (without vehicle)
		Permanent blue light	A connection between the vehicle and the charging station has been established

LED signal		LED status description	
		Permanent blue light	Waiting for RFID authentication
		Permanent green light	RFID tag accepted
		Permanent red light	RFID tag rejected
		Flashing blue light	Waiting for authorization User successfully authenticated
		Permanent blue light	Charging operation is in progress
		Flashing red light	Error in the charging station

12.2 Error indication



Attention

Damage to the charging station due to critical faults.

- In the event of a critical fault indicated by a continuous red light, turn off the charging station for 2 minutes to reset the fault.

Error messages are displayed on the witty park 2 screen.

For example, an error message can affect the hardware, a faulty power supply, or a communication error between the vehicle and the charging station.

- Follow the instructions on the screen.

13 Requirements for vehicle adapters

According to EN IEC 61851-1-1, vehicle adapters must not be used to connect a vehicle coupling to a vehicle appliance plug.

Adapters between the electric vehicle socket and the electric vehicle plug may only be used if they are specifically designed for this application and approved by the manufacturer of the vehicle or electric vehicle power supply and, where applicable, comply with national requirements.

These adapters must comply with the requirements of this standard and other applicable standards relating to the electric vehicle plug or electric vehicle socket part of the adapter. The adapters must have labels that reflect the specific conditions of use approved by the manufacturer, such as in the IEC 62196 series.

These adapters must not allow the transition from one charging mode to another.

14 Maintenance



Danger

Risk to life from electric shock.

- Before working on the device, unlock all associated miniature circuit breakers.
- Cover all live parts in the vicinity.
- Disconnect the charging cable from the charging station and the electric vehicle before working on the device.

The maintenance work should be carried out at regular recurring intervals, subject to the age and state of the device, ambient influences and loads.

Half-yearly maintenance by the operator/end customer (recommendation)

- Check the housing for external damage. In cases of damage, decommission the device immediately and contact a qualified electrician.
- Check the electrical switching and safety equipment in the distribution box for its function and for visual defects.

Cleaning and care



Attention

Damage to the charging station due to improper cleaning.

- Do not use cleaning agents such as glass cleaners, waxes or solvents, or abrasive sponges or a high-pressure cleaner.

- Clean the charging station using a dry cloth or a cloth dampened with mild soapy water.

Annual maintenance by an electrician (recommendation)

- Check the connection connections.
The following tightening torques must be observed.

Meters (MID): 2 Nm

Fault protection device: 2 Nm

Connection terminals: 3.5 Nm

15 Appendix

15.1 Technical data

Environmental conditions

Operating temperature	-25°C to +50°C
Storage temperature	-35 °C to +70 °C
Relative humidity	5 % to 95 %
Protection class IP - shock resistance protection IK	IP 55 – IK 10
Screen protection IK	IK 08
Maximum operating altitude	2000 m
Pollution degree	3
Pulse voltage Uimp	4 kV

Electrical properties

Rated voltage U	380-415V~ 3N -15%/+10%
Nominal insulation voltage UI	500 V~
Frequency fn	50/60 Hz
Rated current Ina / charging power mode 3 connection T2S	64A - 2x22kW (3-phase)
Output Current Range (Class B Integrated MID Counter)	Mode 3: 1-32 A
Electrical protection class	Class 1 (earthing)
Overvoltage category	III
Earthing diagram	TN-S / TN-C / TT
Conductor cross-section, single-stranded	10 mm²... 25 mm², use only copper conductors
Conductor cross-section, multi-wire	10 mm² ... 25 mm², use only copper conductors
Compatibility with upstream differential protection	Type A (6 mA DC detection integrated)
Allowed Modbus/Ethernet circuit type	SELV (safety extra-low voltage) according to IEC62368-1

Upstream protection

Circuit breakers	80 A
Limiting the power supply (under short circuit conditions)	max. 6 kA

Mechanical properties

XVP222S, XVP222SY0:	
Weight	20.8 kg
Height	680 mm
Width	320 mm
Depth	210 mm

XVG222S, XVG222SY0:

Weight	33.3 kg
Height	1480 mm
Width	320 mm
Depth	210 mm

Classification

Classification of the charging station	Closed mount, ACSEV, stationary equipment
Supply input	Electric vehicle supply system (EV), permanently connected to AC power supply
Supply output	Alternating current supply system for EV
Charging mode	Mode 3 via connection T2S
Electrical connection	via plug
Intended environmental conditions	Indoor/outdoor use
Special environmental conditions	Set up for locations with restricted access Set up for locations with unrestricted access
Type of fastening	Fixed equipment Surface mounting: Wall mount Column mounting: Anchored to the floor Horizontal mounting on the ceiling or floor is not permitted.
External ventilation	not supported
Type of user	Ordinary and authorised persons.
EMC classification	Residential and non-residential areas (commercial, light industrial and industrial).

RFID reader

Frequency range	13.553 to 13.567 MHz
Maximum radiated power	42 dBµA/m (for 13.56 MHz)

Wi-Fi


Appendix

Identifying compatible vehicles in accordance with EN17186



Frequency range	802.11b, 802.11g, 802.11n20 :2412MHz~2472MHz 802.11n40: 2422MHz~2462MHz
Radio transmission power	Max. 100 mW
WLAN protocol	802.11xxxx
Mobile service	
4G LTE	
Frequency range	B1/B3/B7/B8/B20/B28
Max. Radiant power	> 23 dBm
GSM	
Frequency range	GSM 900 (≈ 900 MHz) DCS 1800 (≈ 1800 MHz)
Max. output power	2 W/1 W
3G WCDMA	
Frequency range	Band I (≈ 2100 MHz) Band VIII (≈ 900 MHz)
Max. output power	250 mW

15.2 Identifying compatible vehicles in accordance with EN17186

Alternating current	EN 62196-2	Type 2	Plug base power socket	≤ 480 V RMS	
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15.3 Valid standards

Electromagnetic Compatibility (EMC)	EN IEC 61851-21-2 EN 301489-3 EN 301489-17 EN 301489-52
Safety	EN IEC 61851-1 IEC 62955
Cybersecurity	EN 18031-1
Radio frequency	EN 301908-1 EN 300328 EN 300330 EN 300440 EN 301511
Evaluating electrical and electronic equipment with respect to limitations on exposure of persons to electromagnetic fields (0 Hz to 300 GHz)	EN 50364 EN IEC 62311
ROHS	EN IEC63000

15.4 EU Declaration of Conformity

Hereby declares Hager Control that the radio station type for electric vehicles XVP222S, XVG222S complies with Directive 2014/53/EU. The complete text of the EU declaration of conformity is available at the following Internet address: hager.com

15.5 Disposal of the charging station



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.



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