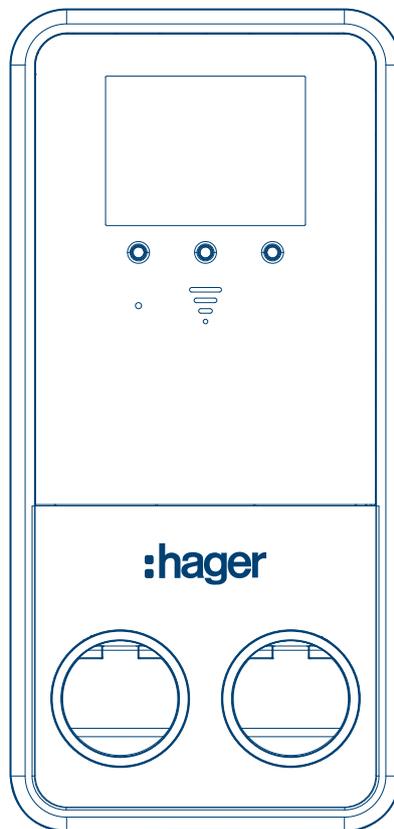


Operating and installation instructions

# Energy management Charging station E-vehicles



**XVP222S, XVG222S**

Charging station witty park 2 2x 22 kW T2S wall  
mounting/on ground

CE

**:hager**

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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
	Assembly		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-person assembly				

## Danger levels of warnings

Symbol	Signal word	Consequences in the event of non-compliance
	<b>Danger</b>	Causes serious injury or death.
	<b>Warning</b>	May cause serious injuries or death.
	<b>Caution</b>	May cause minor injury.
	<b>Caution</b>	May cause serious damage to the device.
	<b>Note</b>	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
	<b>Note</b>	Indicates important instructions.
	<b>Information</b>	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.

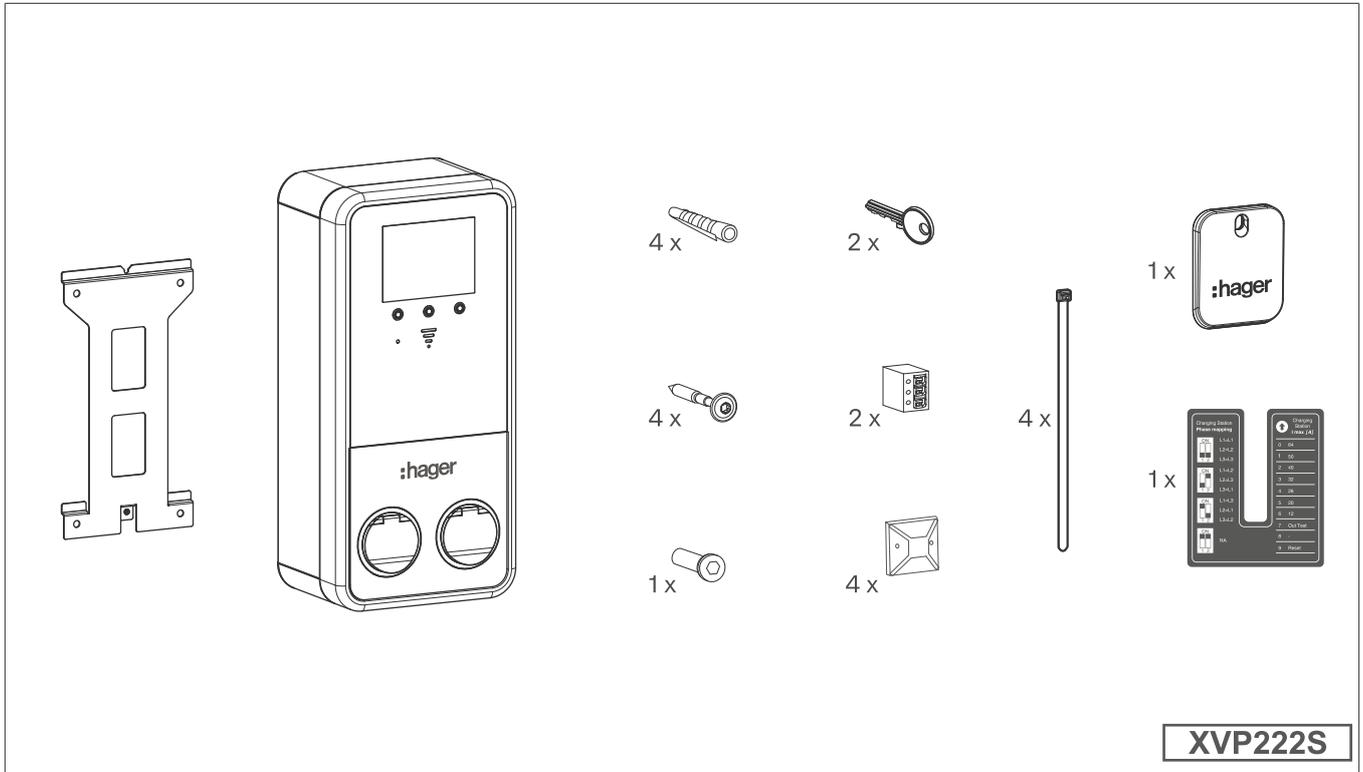


Fig. 1: Scope of delivery for charging station witty park 2 2x 22 kW T2S wall mounting

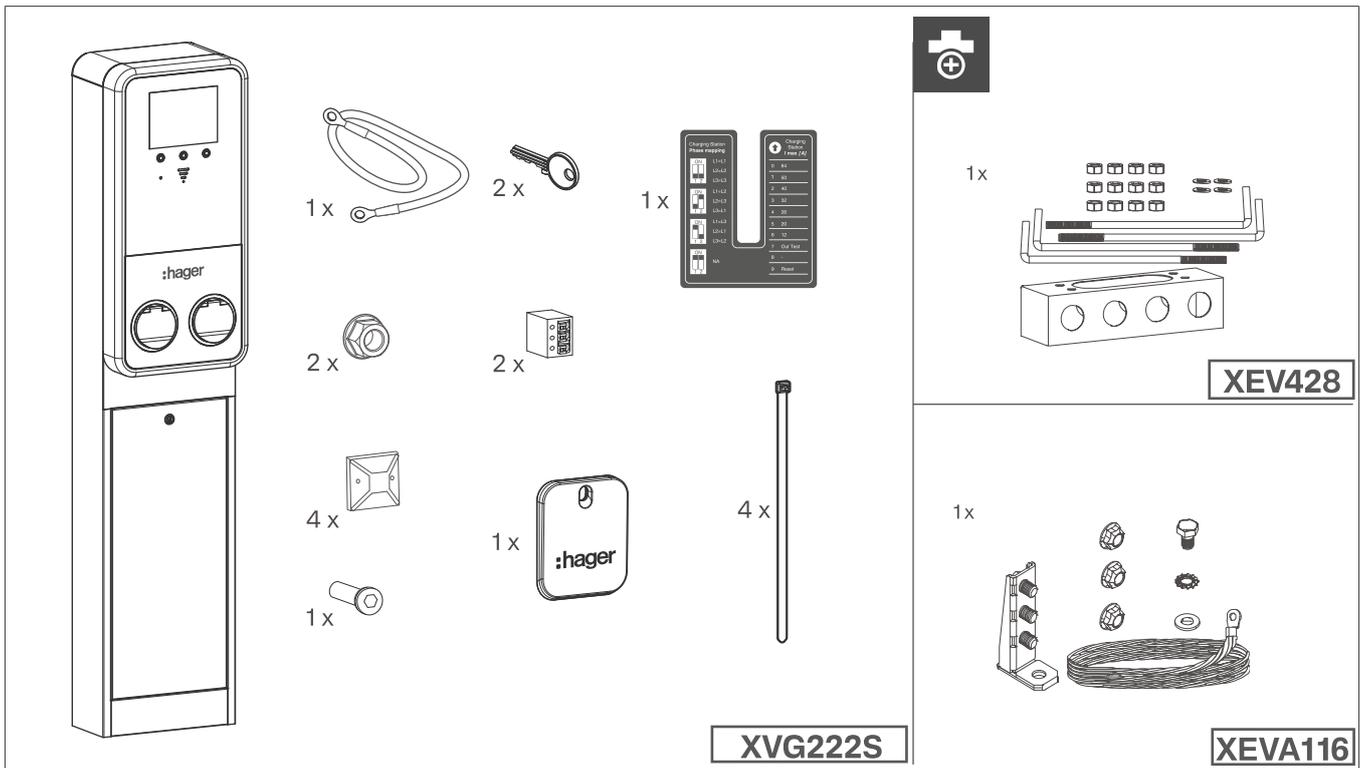


Fig. 2: Scope of delivery for charging station witty park 2 2x 22 kW T2S on ground

### 3.2 Dimensions and required tools

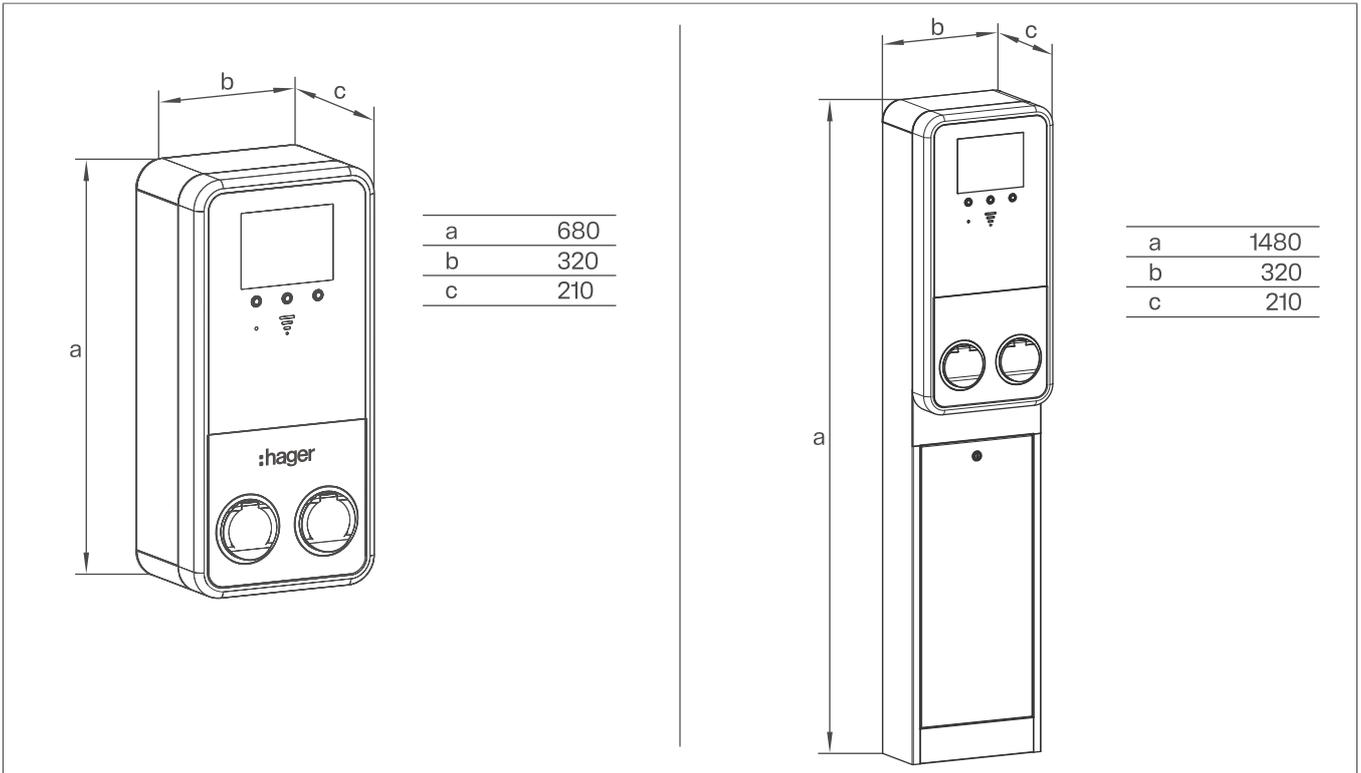


Fig. 3: Dimensions of charging station (wall mounting/on ground)

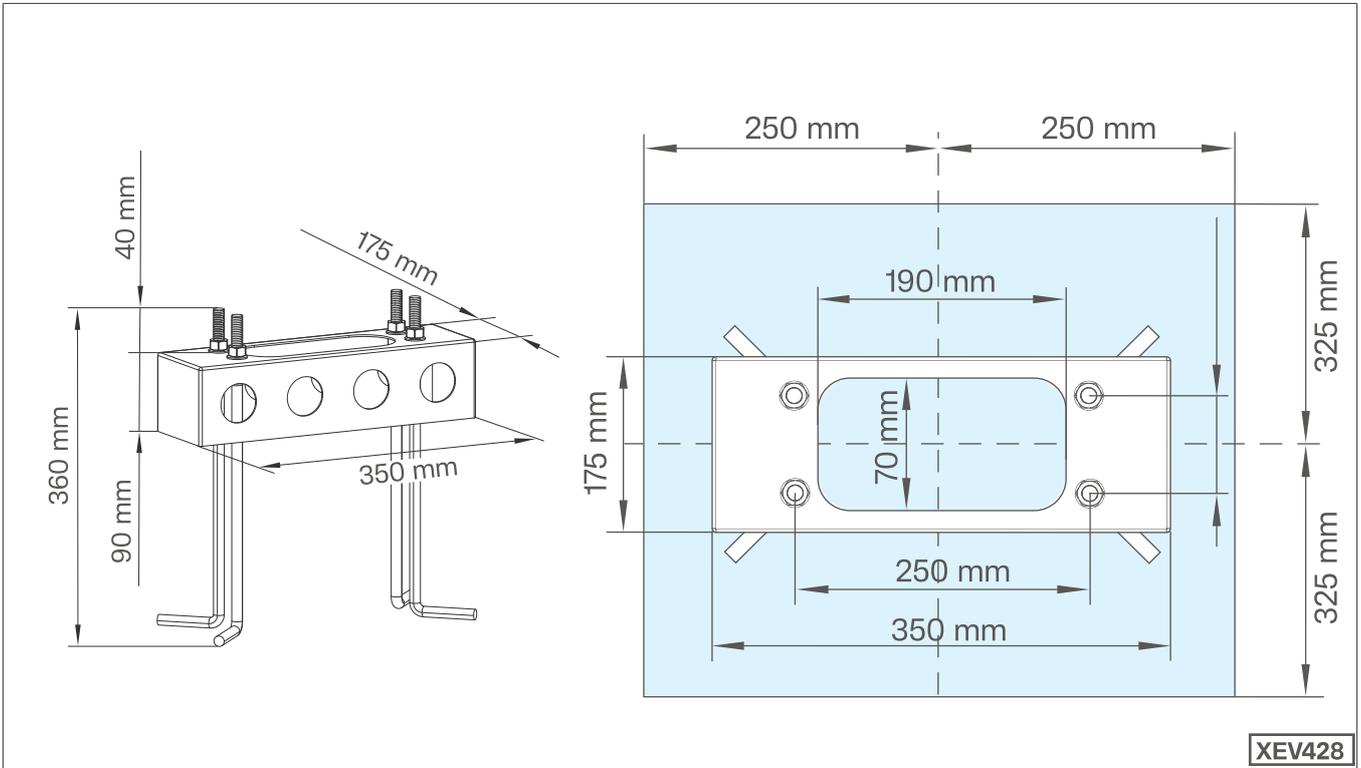


Fig. 4: Dimensions of ground anchor XEV428

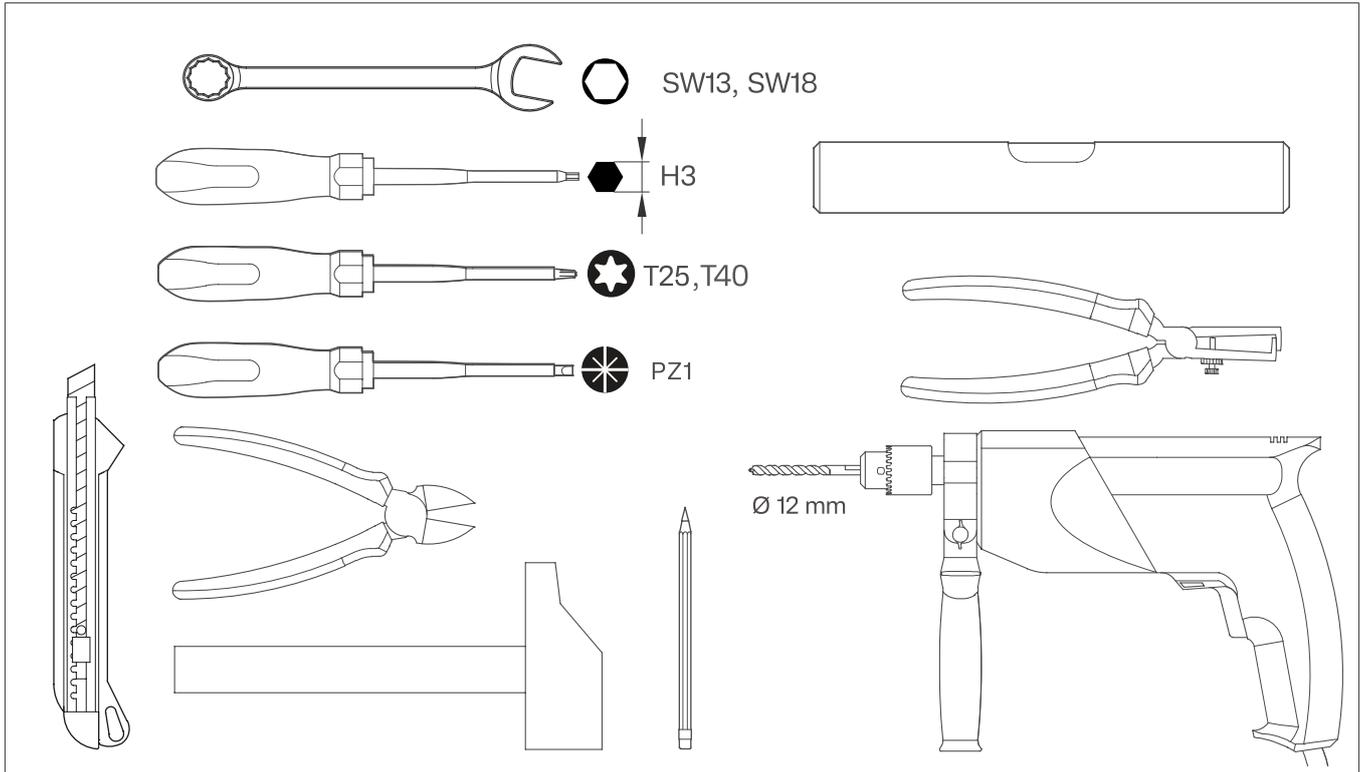


Fig. 5: Tool

## 4 Device overview

### 4.1 External device overview

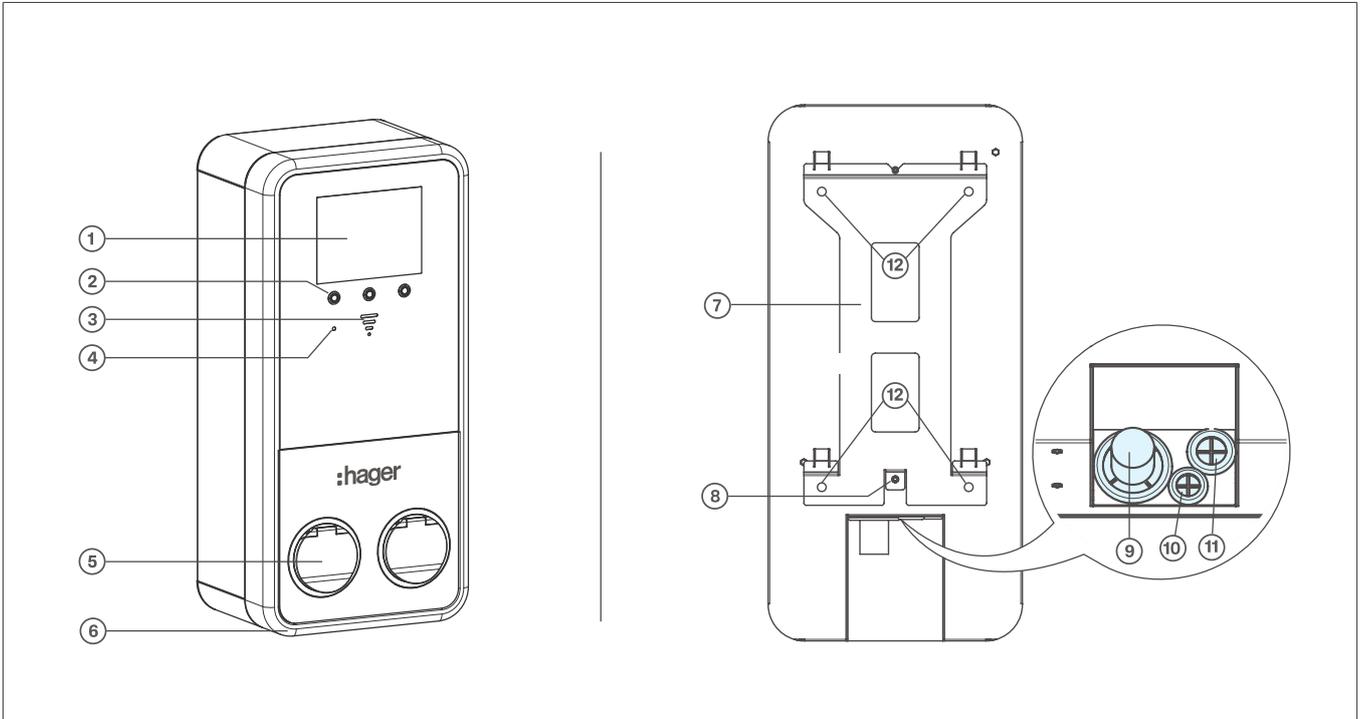


Fig. 6: External view

- 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 Internal device overview

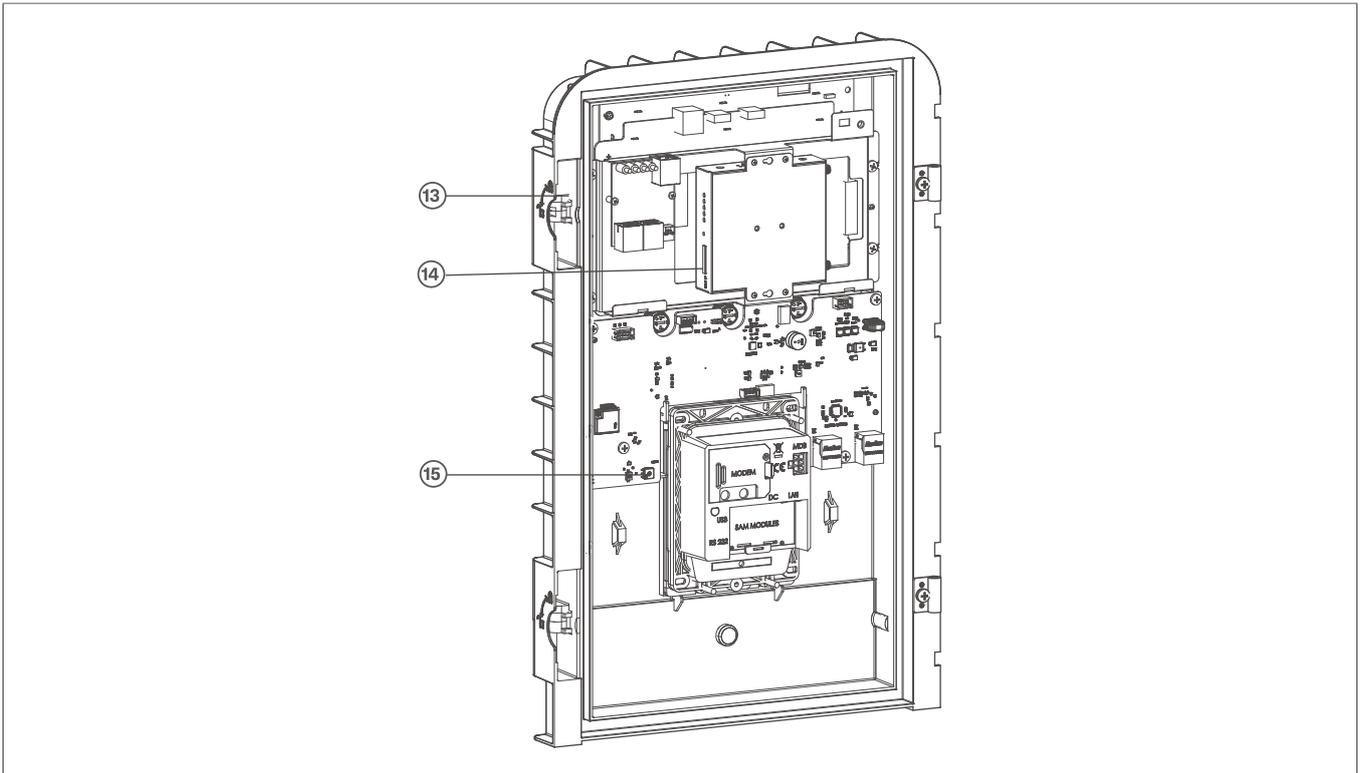


Fig. 7: Device cover

- ⑬ Lock cylinder
- ⑭ Plug-in interface for SIM card
- ⑮ Selection switch for selecting the maximum current

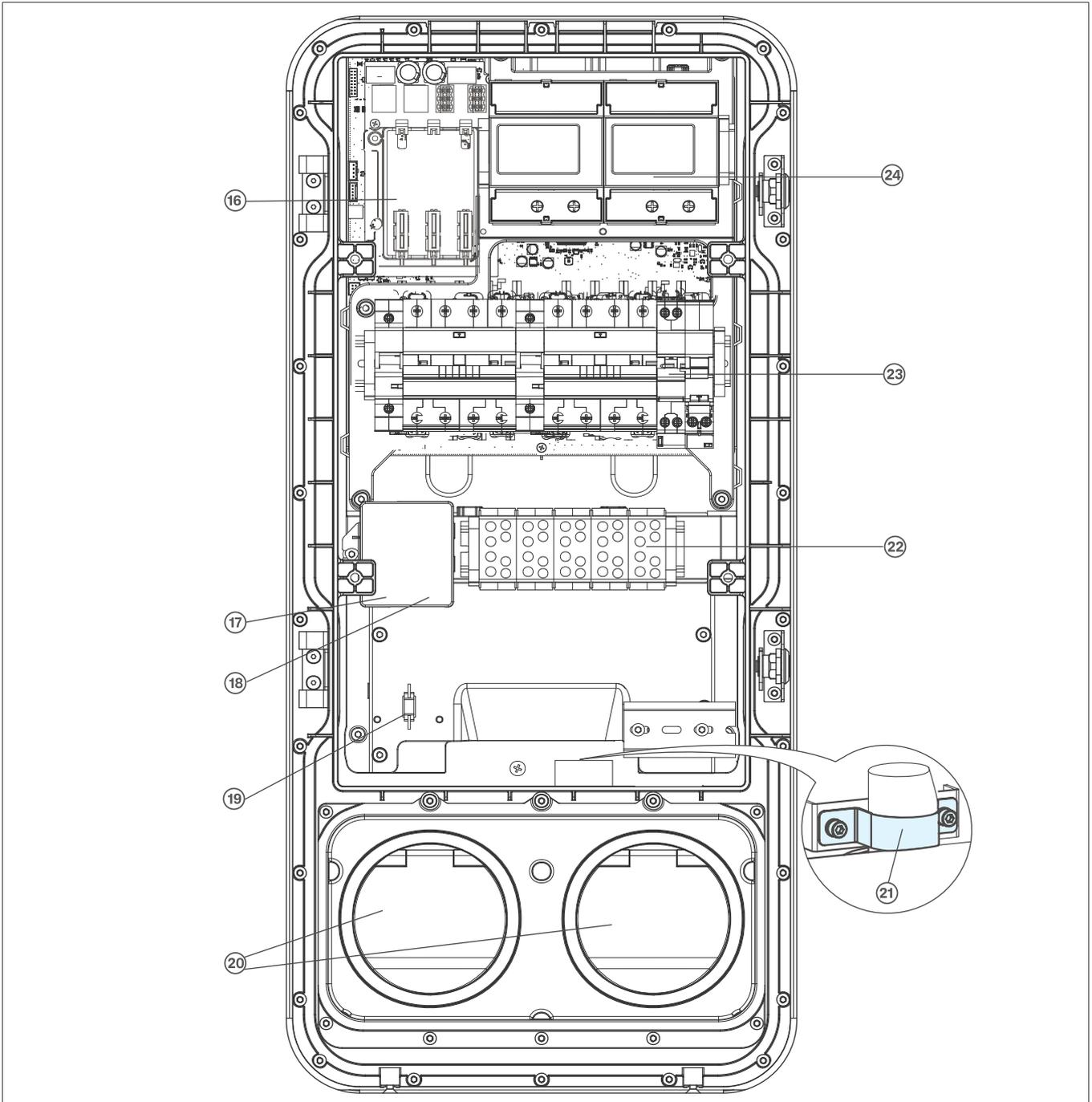


Fig. 8: Device plinth

- 16 Slots for optional cards
- 17 RJ45 socket: Ethernet for **IN**
- 18 RJ45 socket: Ethernet for **OUT**
- 19 Strain relief for LAN cables
- 20 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

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witty park 2

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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

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22/08/2025 

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

---

 MGB4  
-zUxvLQ  
-zEoV9F  
gtKmAAR

Made in China

Fig. 9: Type label - XVP222S

**: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

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22/08/2025 

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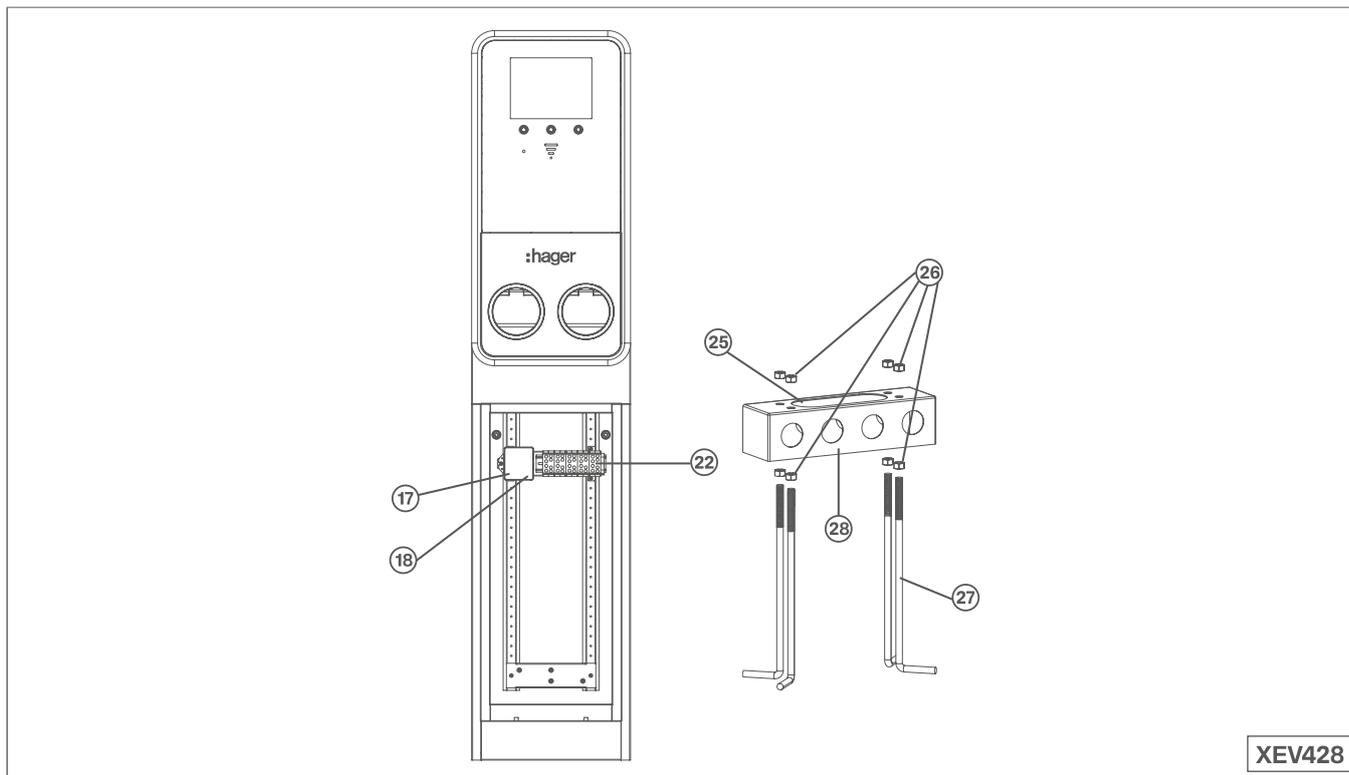
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 MhbJ  
-xH4wpw  
-ByoBdG  
XT1mJ9

Made in China

Fig. 10: Type label - XVG222S

### 4.3 Pedestal device overview



XEV428

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 protection devices between the house connection point and the charging station shall 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 upstream protection devices outside the charging station shall meet the following requirements:

- ☑ The charging station shall be protected in the main distribution board by a four-pole circuit breaker rated at 80 A to protect the supply line from damage.
- ☑ The protection device shall be able to switch off all phases—including the neutral conductor—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.
- ☑ A 4-pole, 6-kA, 63-A, 30-mA, type A residual-current circuit breaker was added as an upstream protection device.

#### Selectivity of the protection devices

The maximum charging current at the rotary switch ([Fig. 13: Rotary and selection switch settings](#)) shall 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

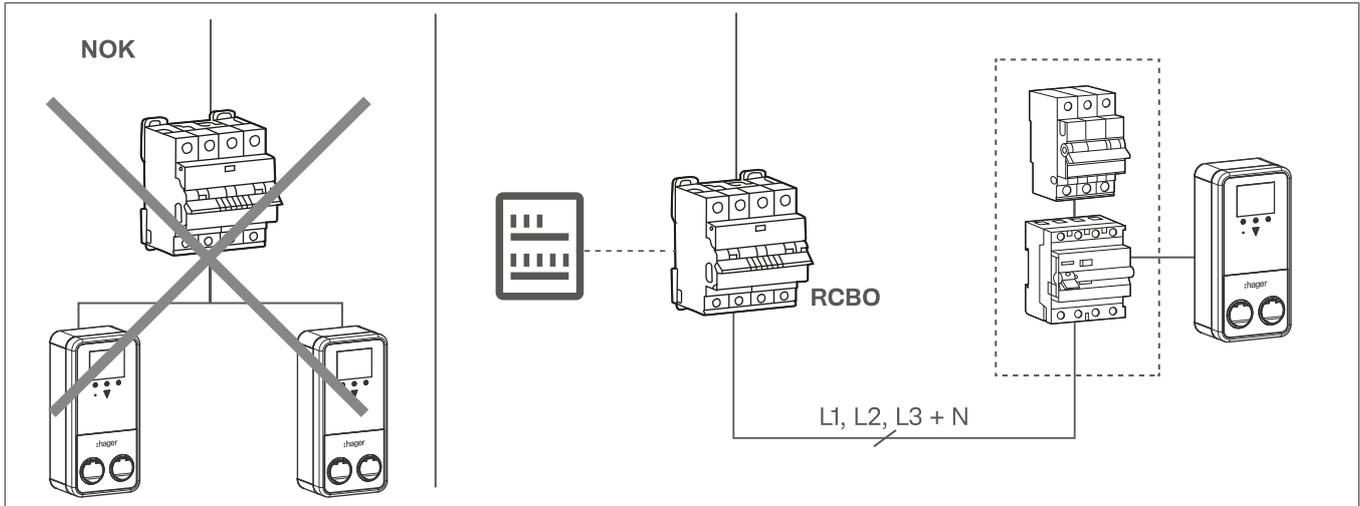


Fig. 12: Connection 3-phase



**Caution**

In compliance with EN IEC 61851-1, this charging station integrates a DC-CDC unit (Direct Current to Direct Current Converter) that meets the requirements of IEC 62955.

If more than 6 mA DC is detected in the rated 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 install a type B residual-current circuit breaker in combination with this device, which is designed to detect 6 mA DC leakage.
- Install all building electrical circuits within a single, unified structure from an electrical standpoint.



**Operation of multiple charging stations**

The number of charging stations that can be operated via 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 to 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 function 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 overvoltage protection units upstream of the electronic house service meter. The design should take conditions at the location into consideration when designing.

Charging stations in public and semi-public areas must be fitted with surge-protection devices in accordance with the applicable standards of the relevant 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.

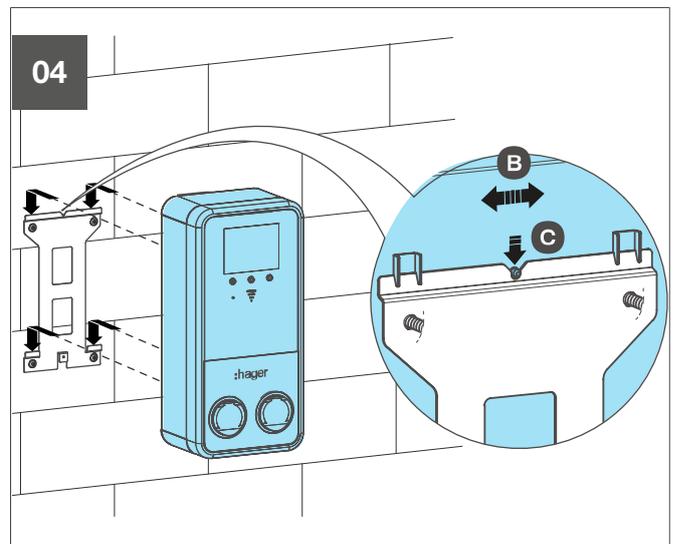
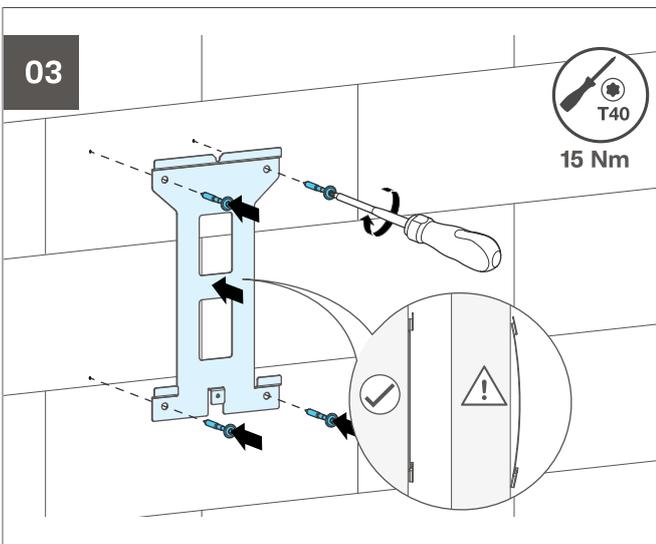
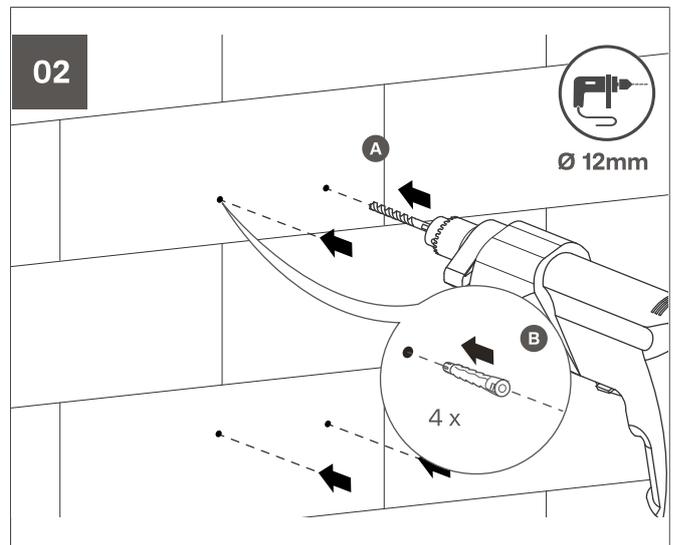
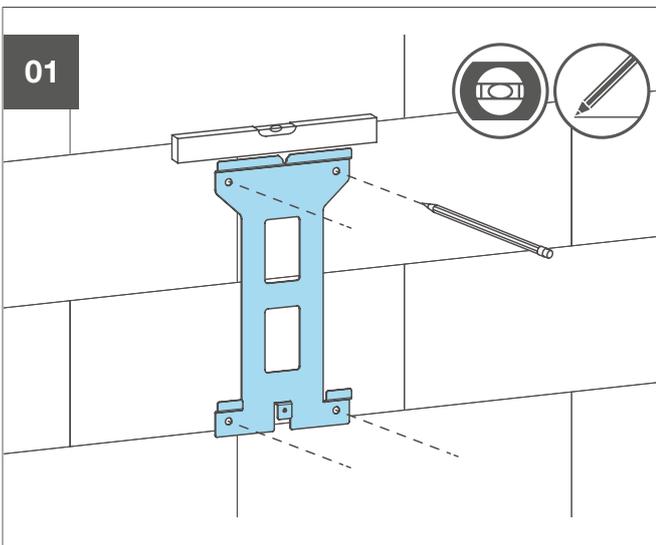
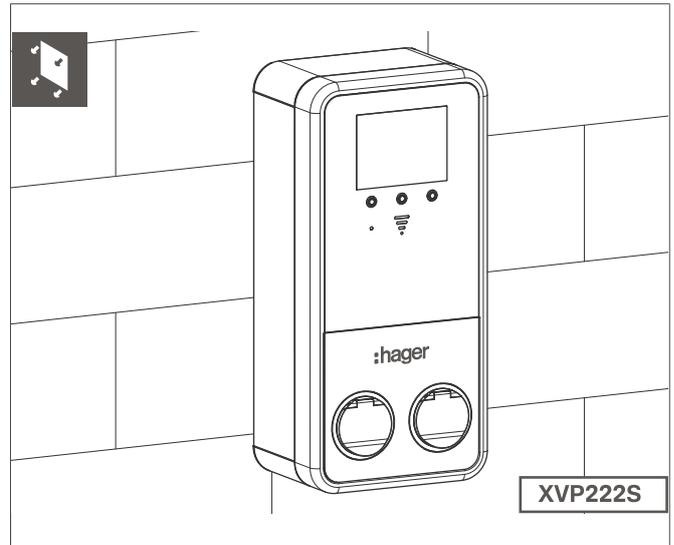
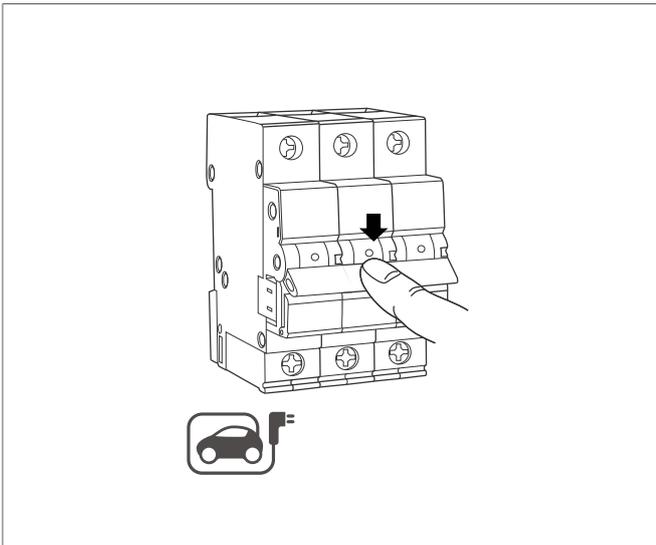
#### Requirements

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 mm<sup>2</sup> for multi-wire and single-stranded conductors.

## 6.2 Wall installation



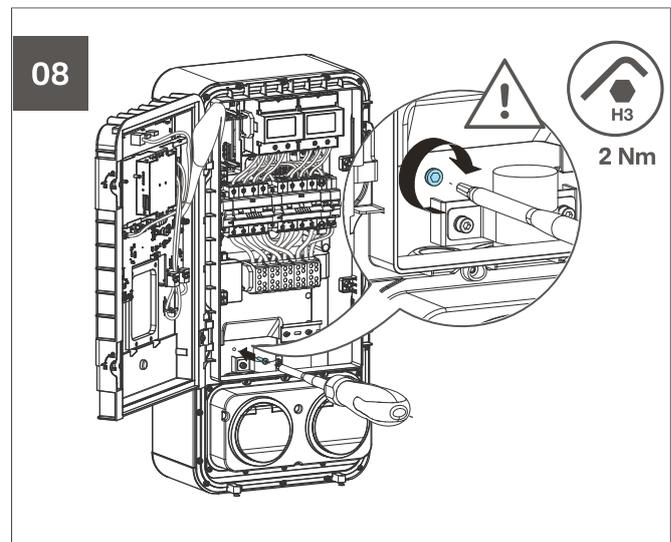
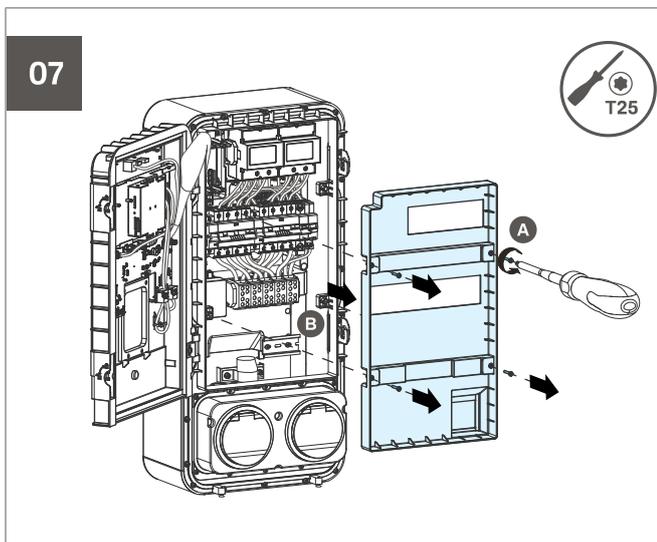
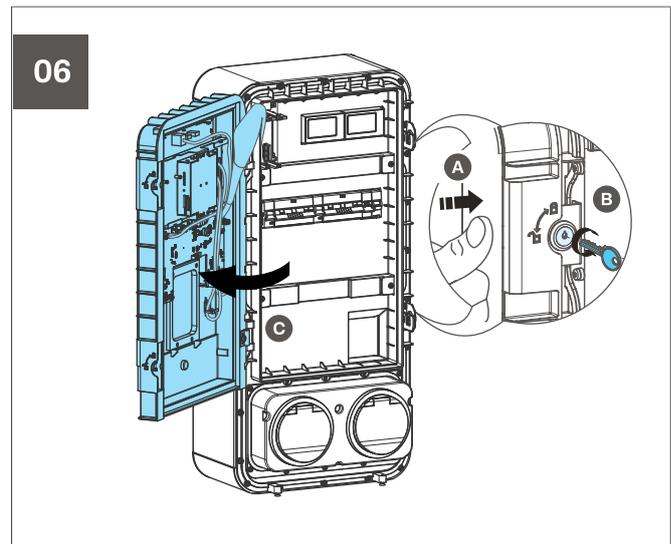
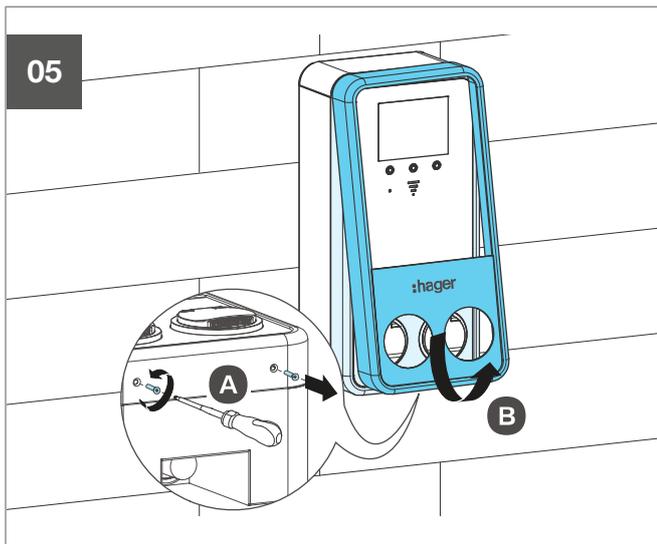


### Caution

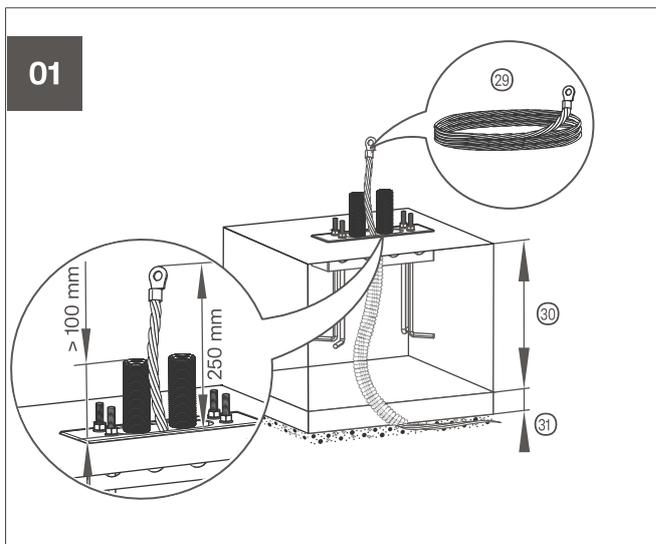
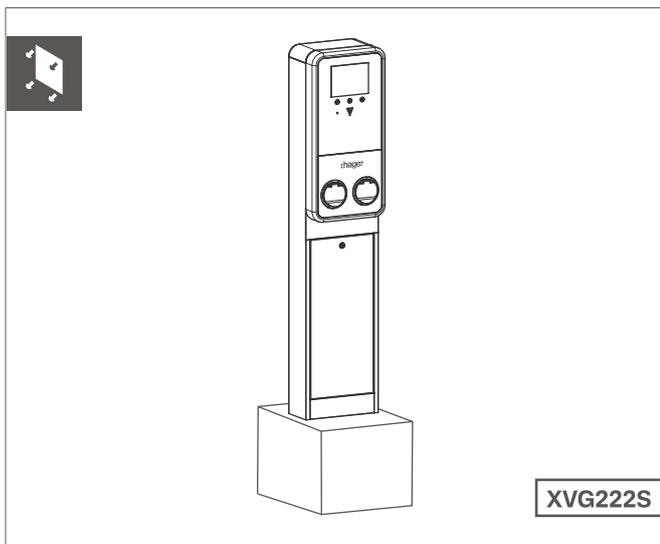
Risk of personal injury due to the charging station falling.

The charging station can fall and cause injuries.

- The charging station shall be installed by at least two people.
- It is imperative that step 8 is adhered to, so that the charging station is secured and that dismantling protection is provided.



### 6.3 Pedestal mounting



- (29) Grounding cable with braided shield (50 mm<sup>2</sup>), wound up to be buried in the ground before sealing
- (30) Fundament C20/25, X0 Depth: 80 cm
- (31) Binding layer: C8/10 Depth: 5 cm

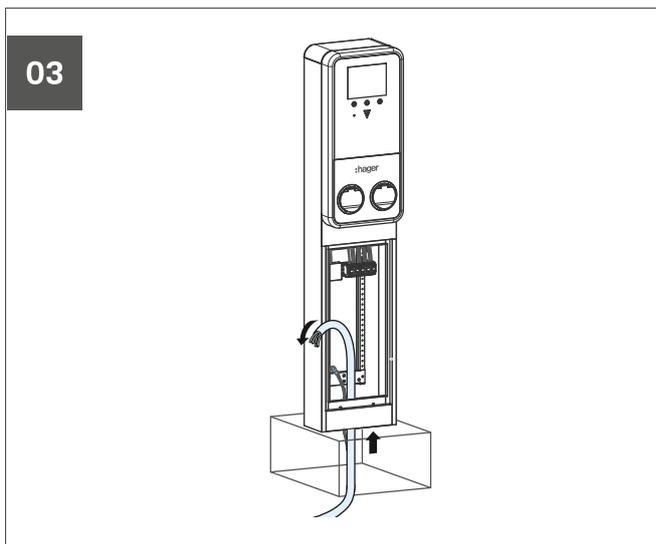
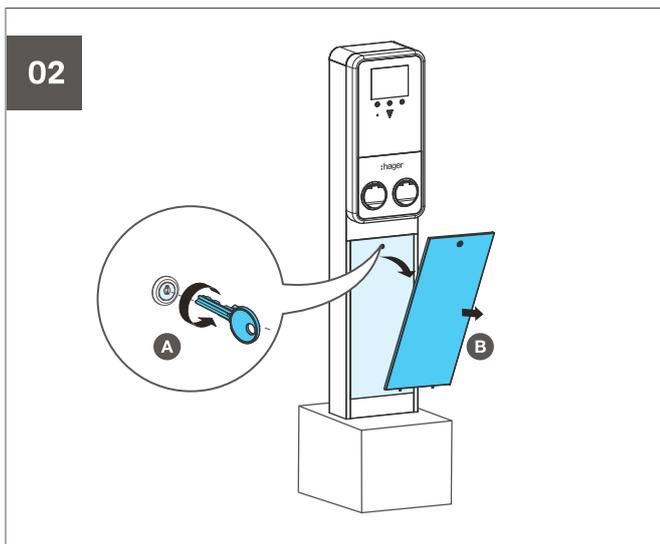


**Caution**

Risk of personal injury due to the charging station falling.

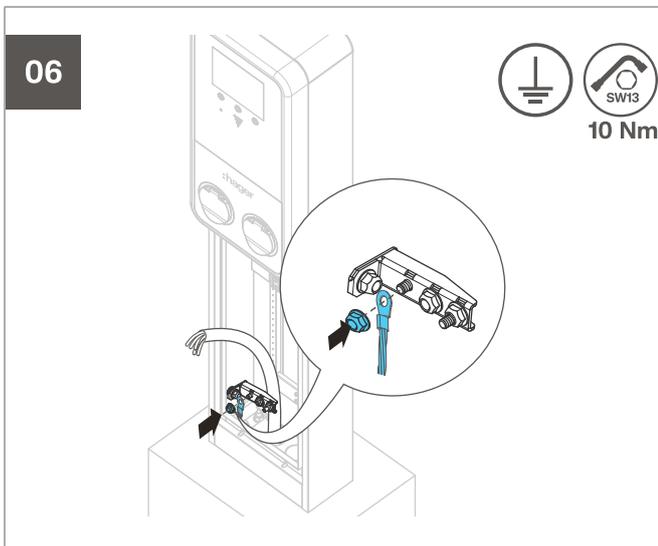
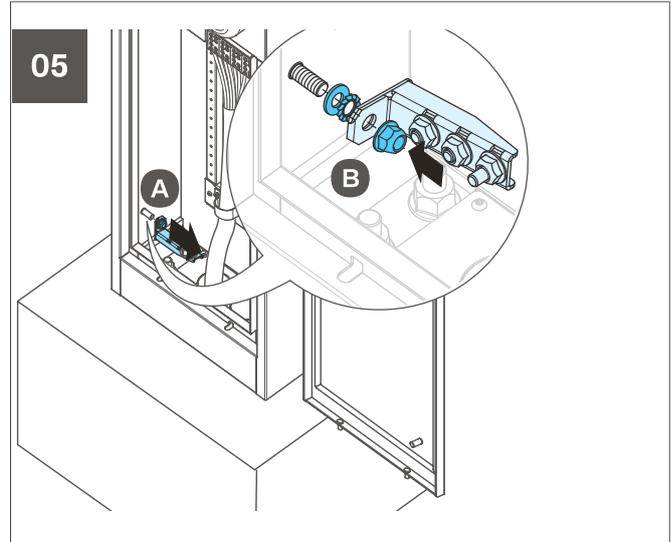
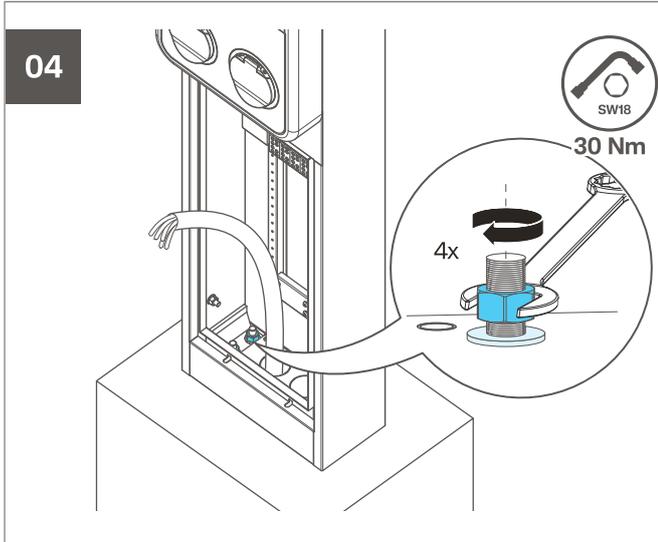
The charging station can fall and injure people.

- The charging station must be installed by at least two people.



# Installing the charging station

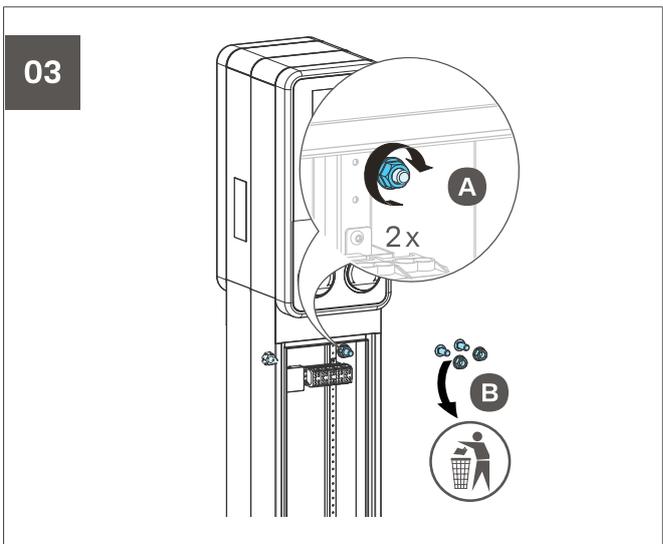
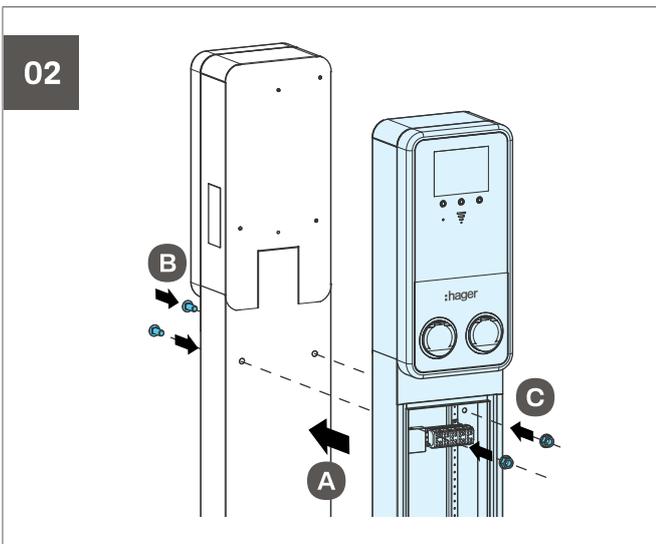
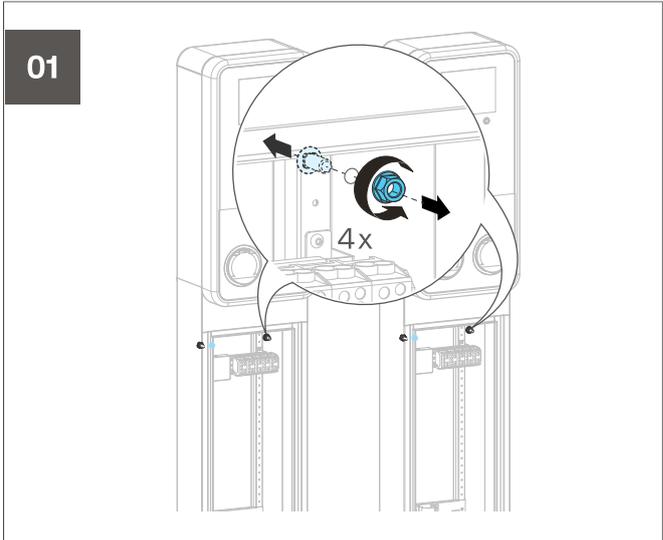
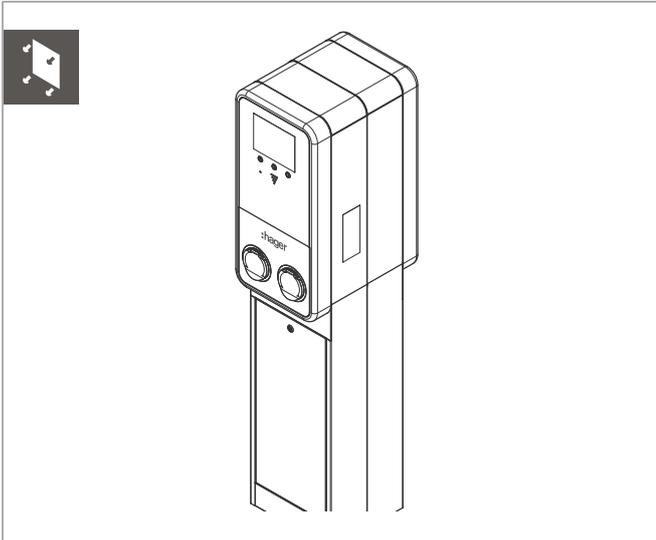
## Pedestal mounting



**Dual installation of the pedestal (optional)**

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

- ☑ Sufficient space has been provided for the installation of a second pedestal.
- ☑ The pedestal 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.

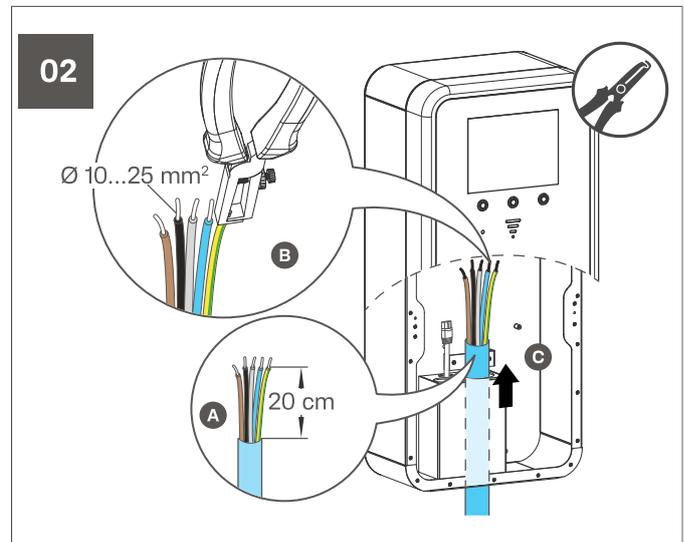
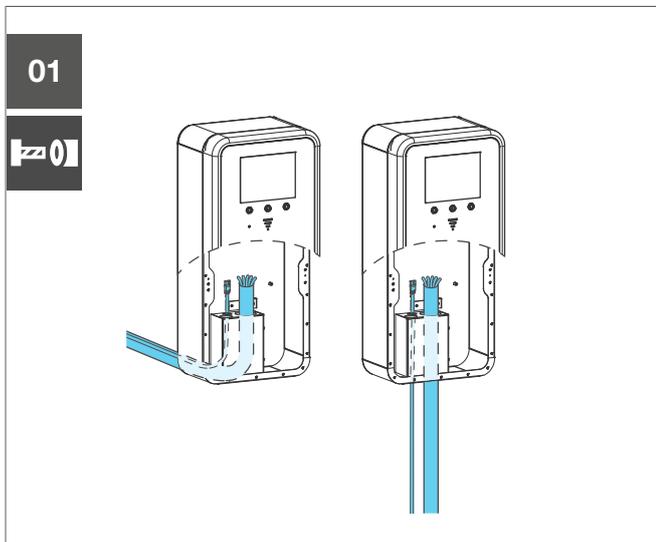


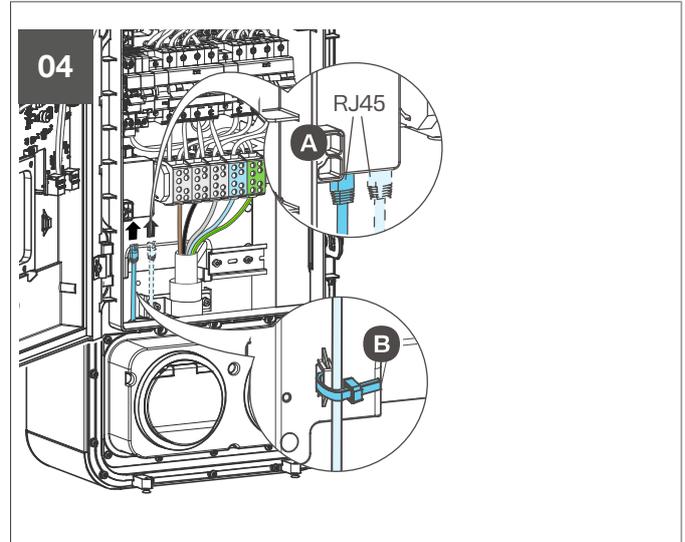
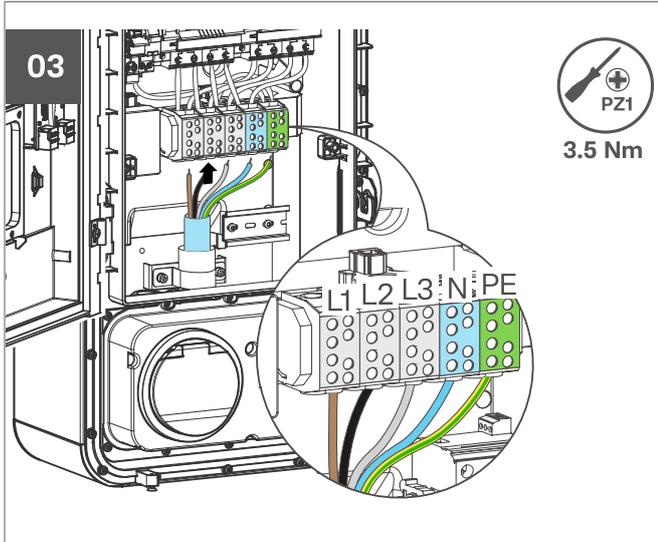
### Notice

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.

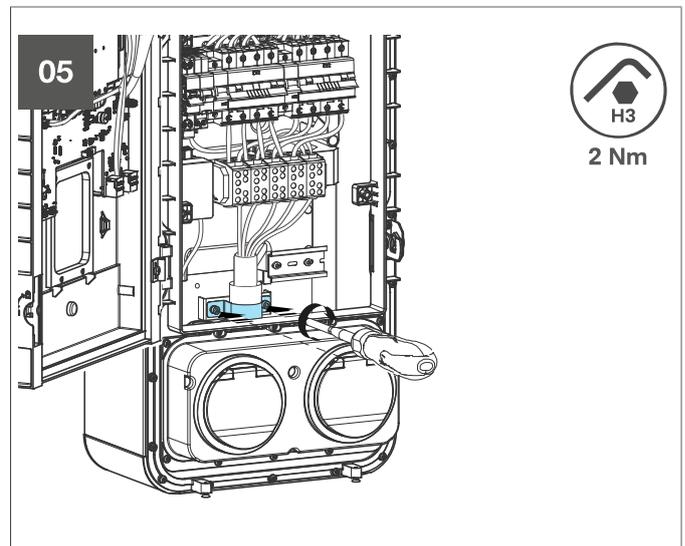
### 7.1 Wiring the device



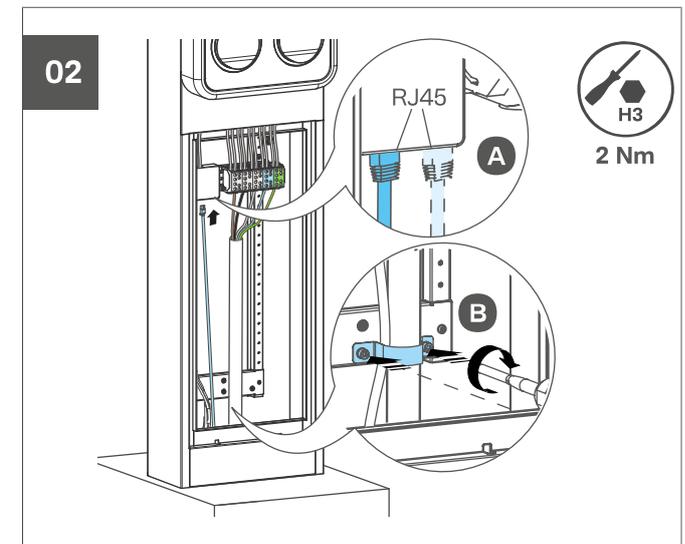
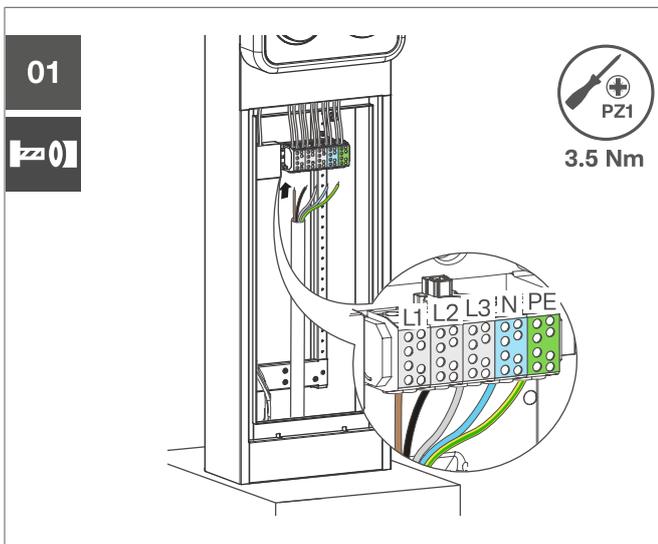


**i** **Daisy chain**

When the witty park 2 is daisy-chained, 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.



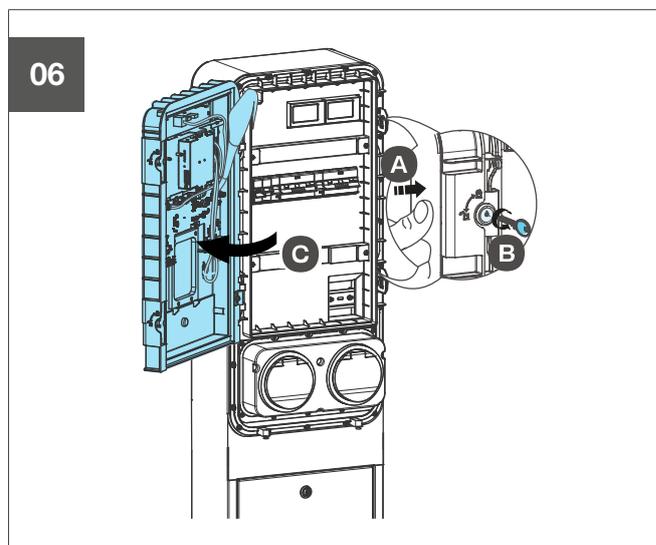
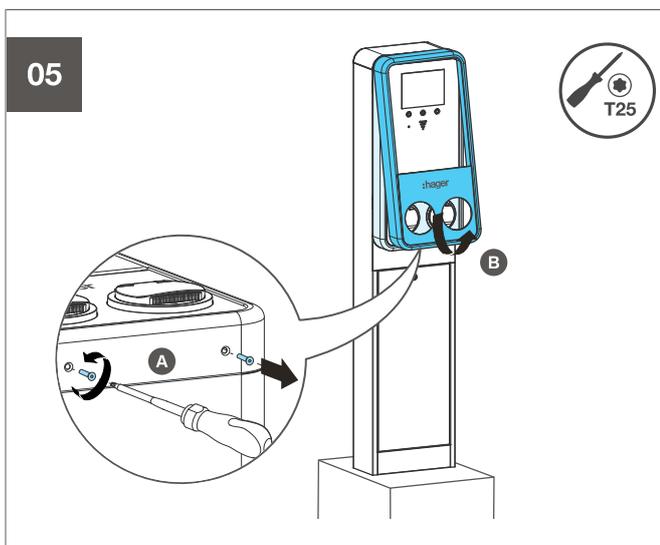
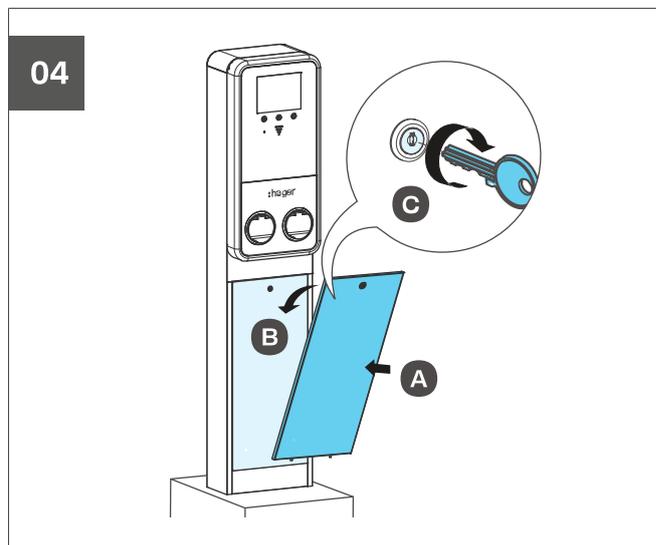
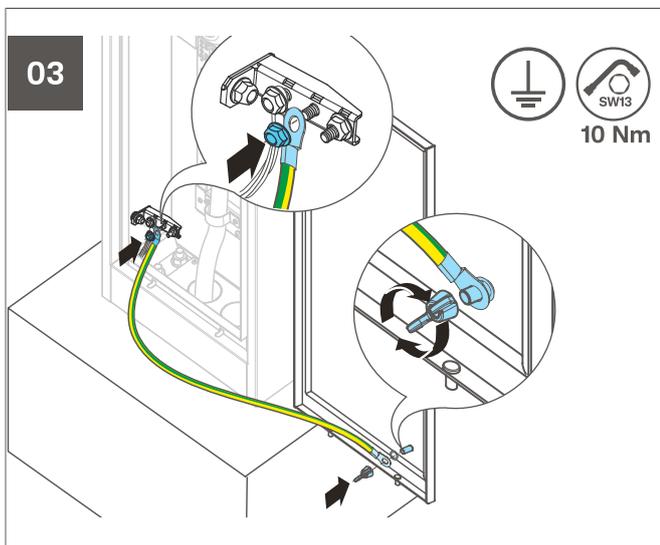
## 7.2 Wiring the pedestal





### Daisy chain

When the witty park 2 is daisy-chained, 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

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.

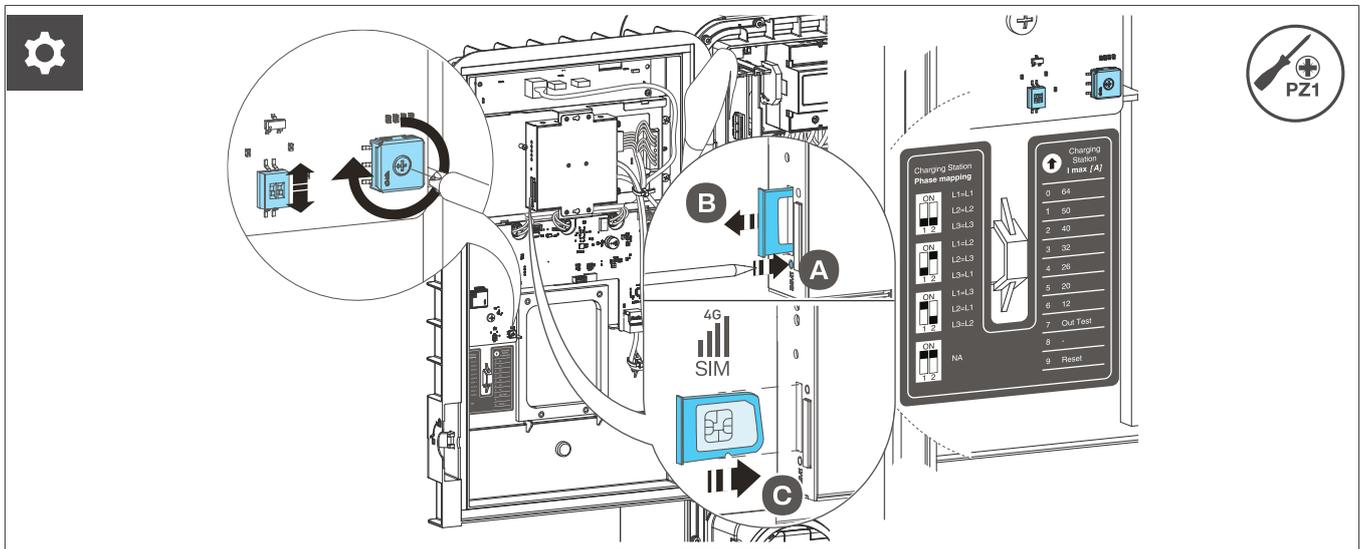
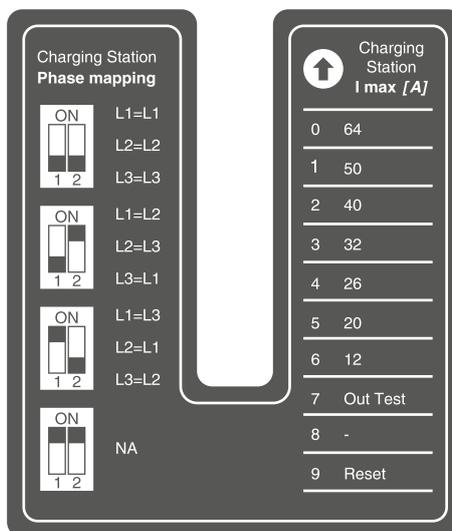


Fig. 13: Rotary and selection switch settings



## 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.

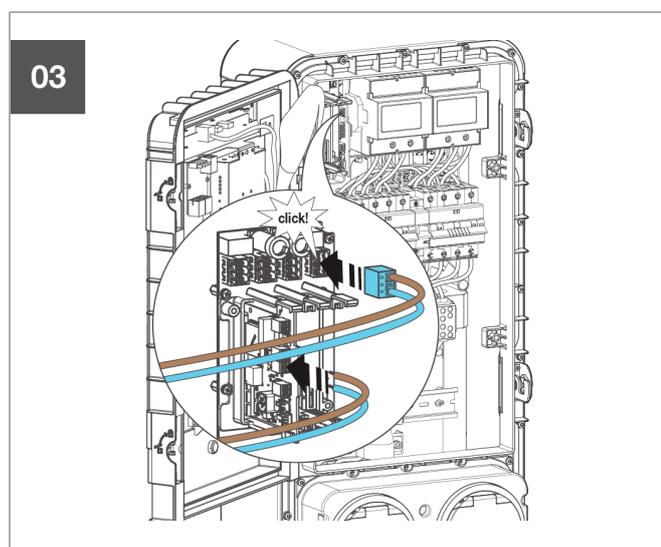
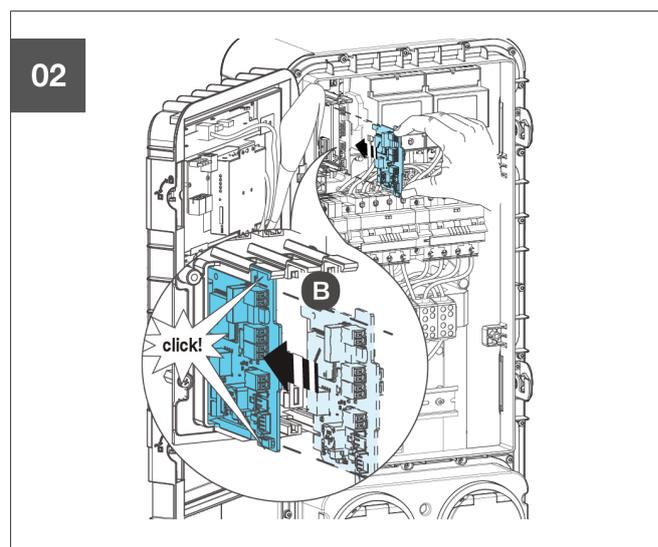
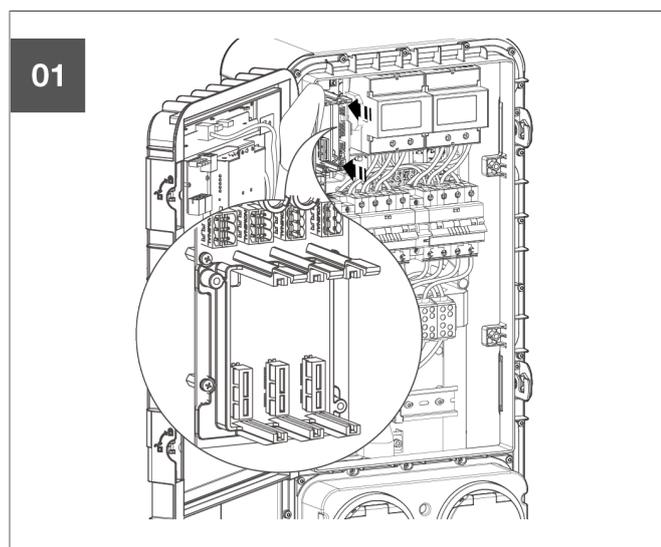
## 8.3 Install the optional load balancing card

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

Circuit board

XVA200

► [www.hgr.io/r/XVA200](http://www.hgr.io/r/XVA200)



## 9 Final installation

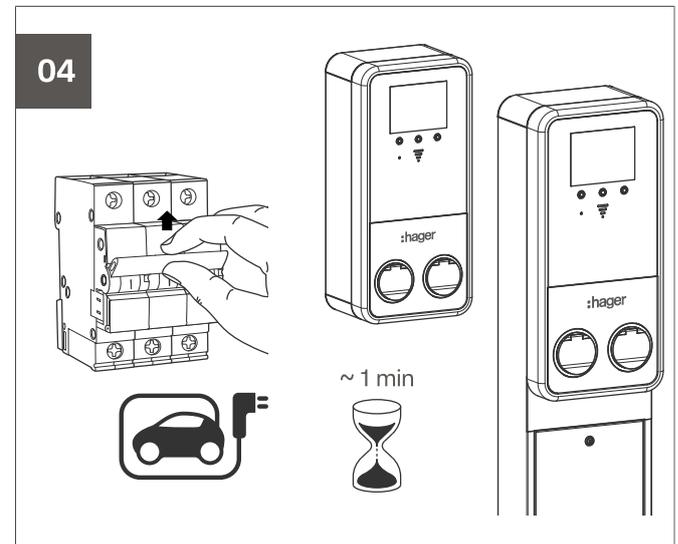
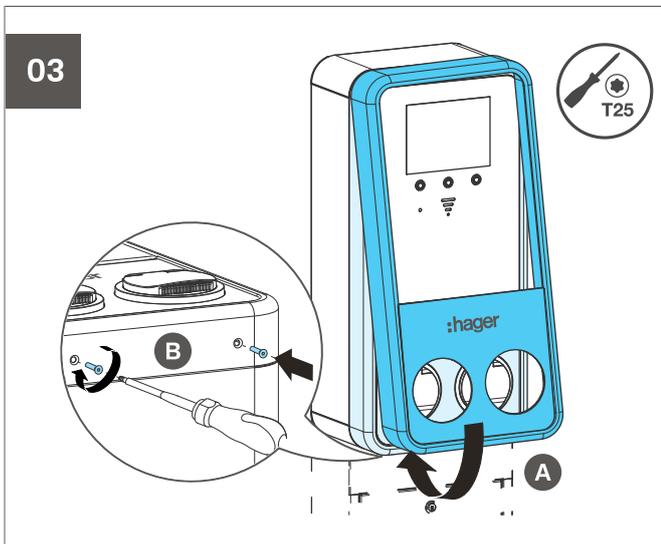
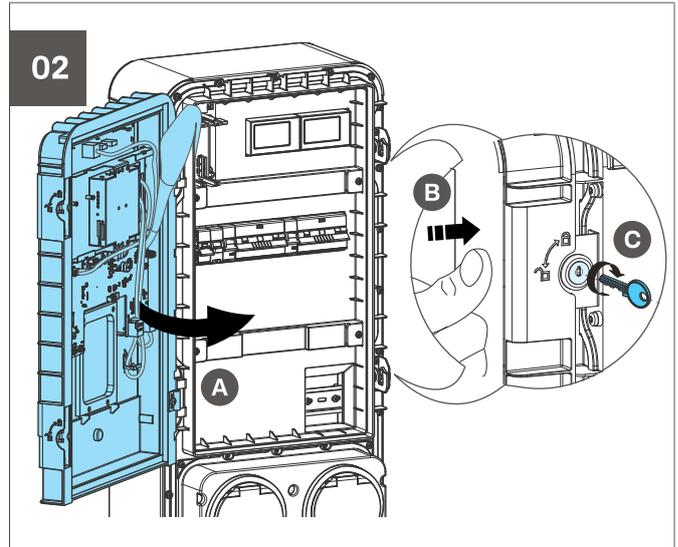
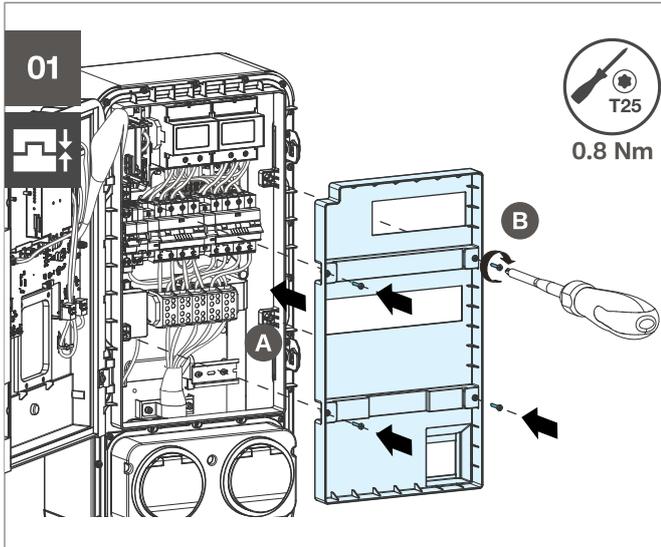


### Danger

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 in three ways:

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

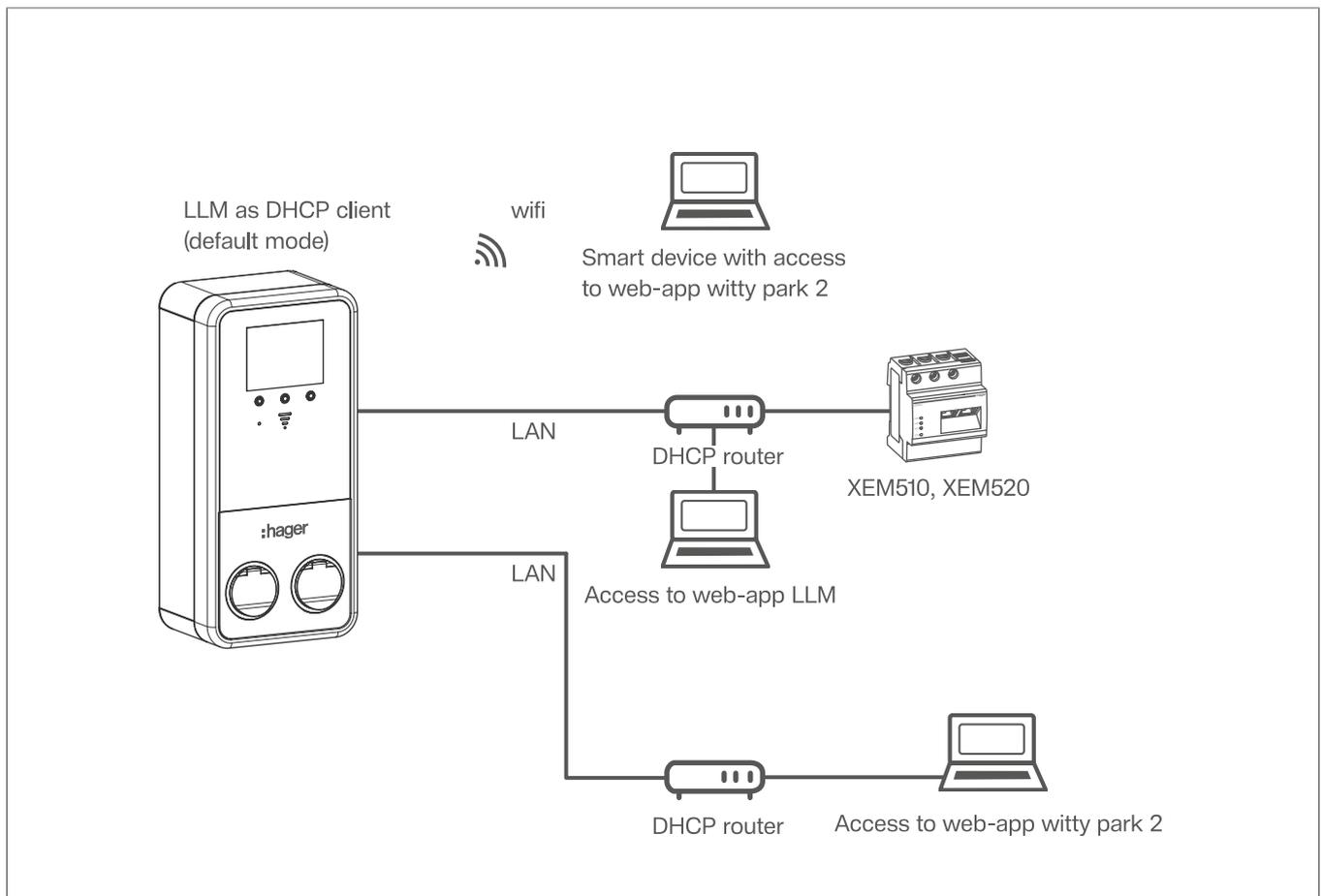


Fig. 14: Connection options



### 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 WiFi

### Connect to the network using a WiFi hotspot

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

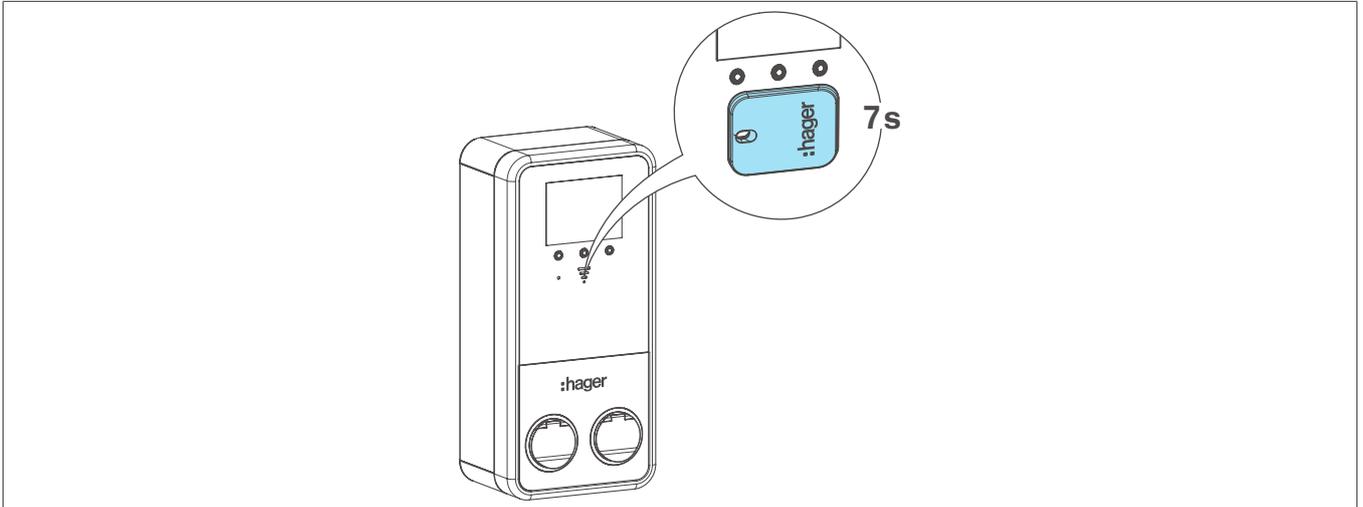


Fig. 15: Activate the WiFi hotspot using the RFID tag

The access point is created when the RFID tag is approved.

The LED lights up in blue when approval is successful.



#### Note

Each charging station has its own SUID, which can be found on the type 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 SUID)**  
No password is required.

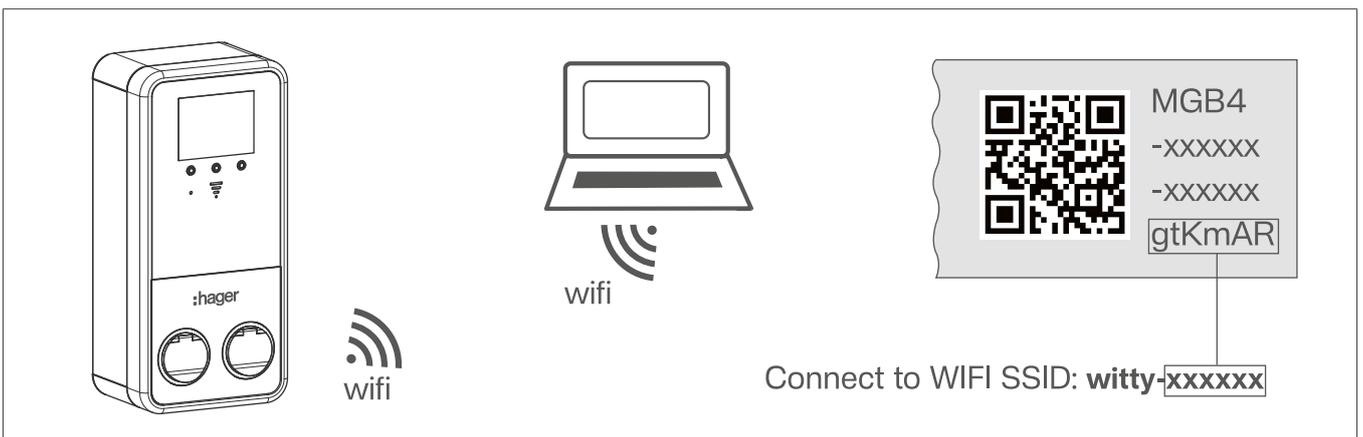


Fig. 16: Connect via WiFi



#### Note

If no activity is detected after 30 minutes, the connection is automatically deactivated.

### 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 your preferred web browser.
- Enter the IP address of the charging station or the computer name (HostName) in the browser's URL bar.  
IP address: **192.168.3.5**  
Computer name: **Hager.local**  
The configuration tool will open.

## 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).

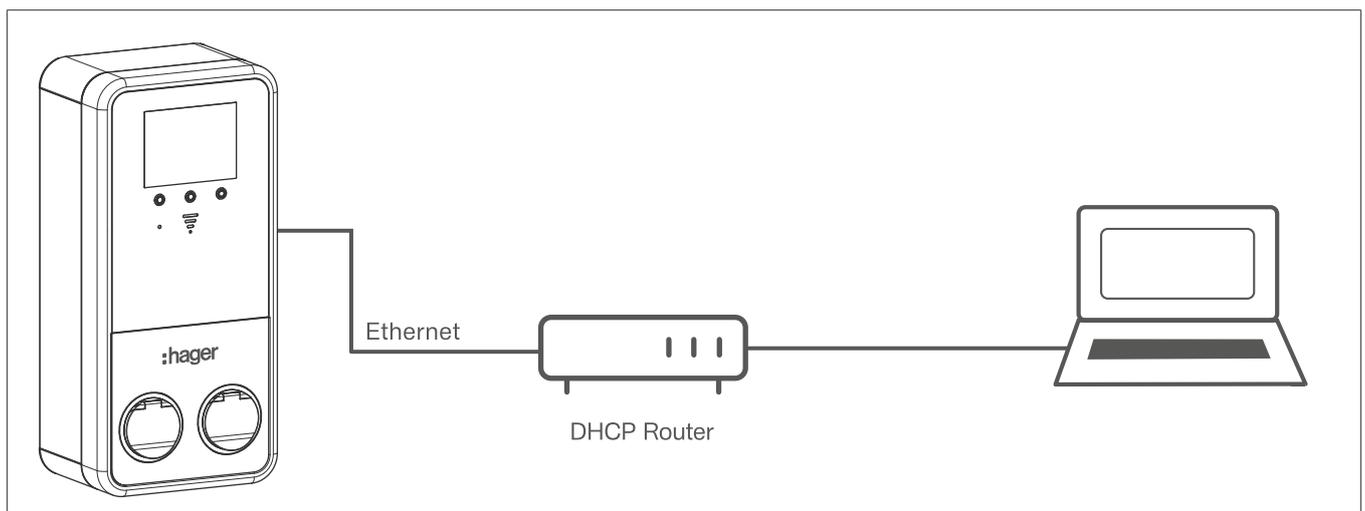


Fig. 17: Connection via Ethernet

### Connection to the configuration application



**Note**

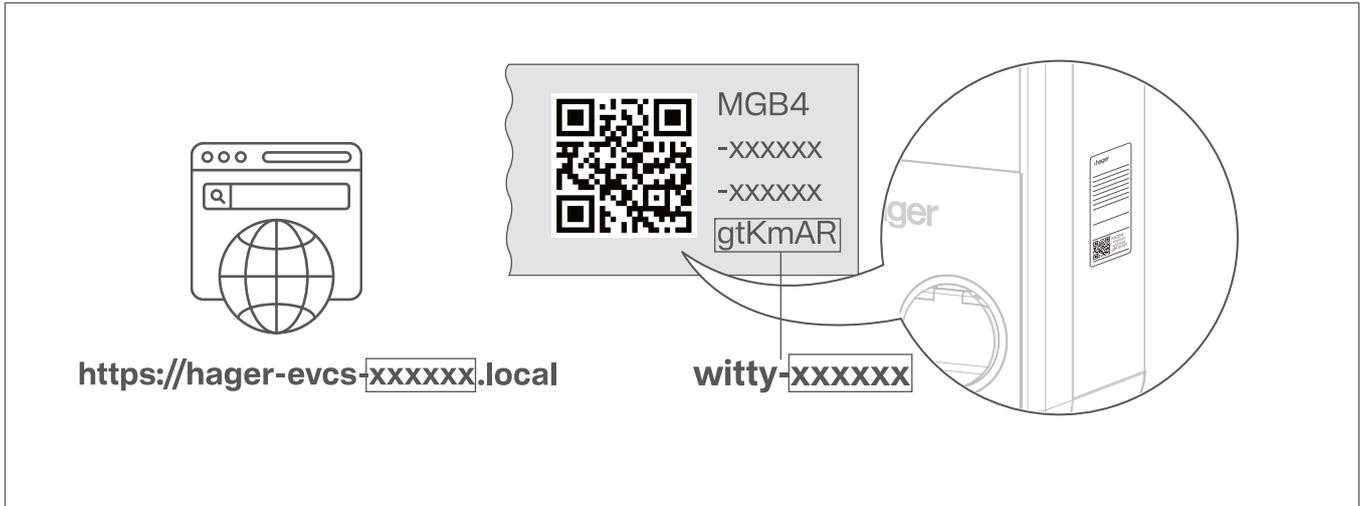
The configuration application can be accessed directly by entering the computer name (HostName) or the IP address of the charging station.



**Note**

Each charging station has its own SUID, which can be found on the type label.

- Open your preferred 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 SUID)  
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)

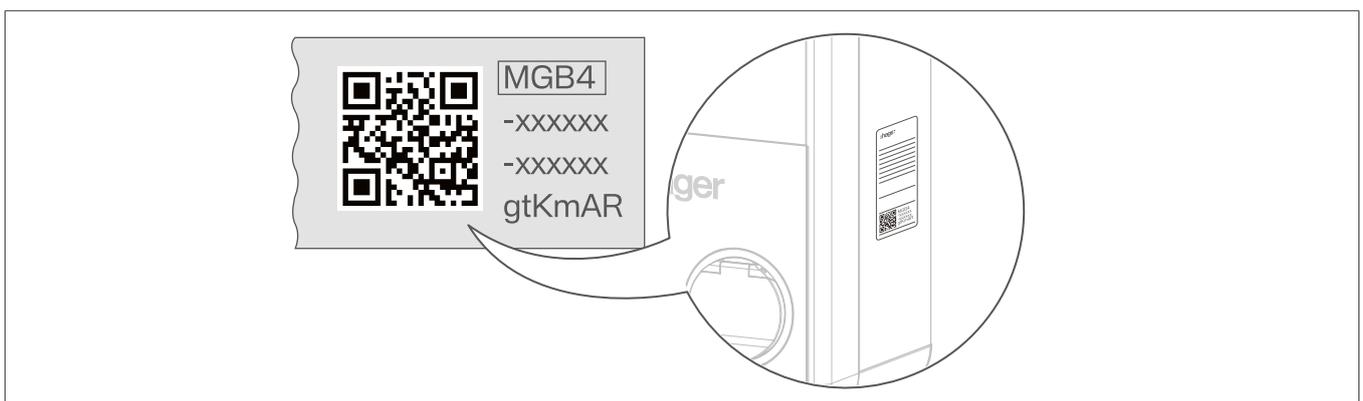
XEM510, XEM520

► [hager.com/de](https://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 you 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](#)).

 **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**.

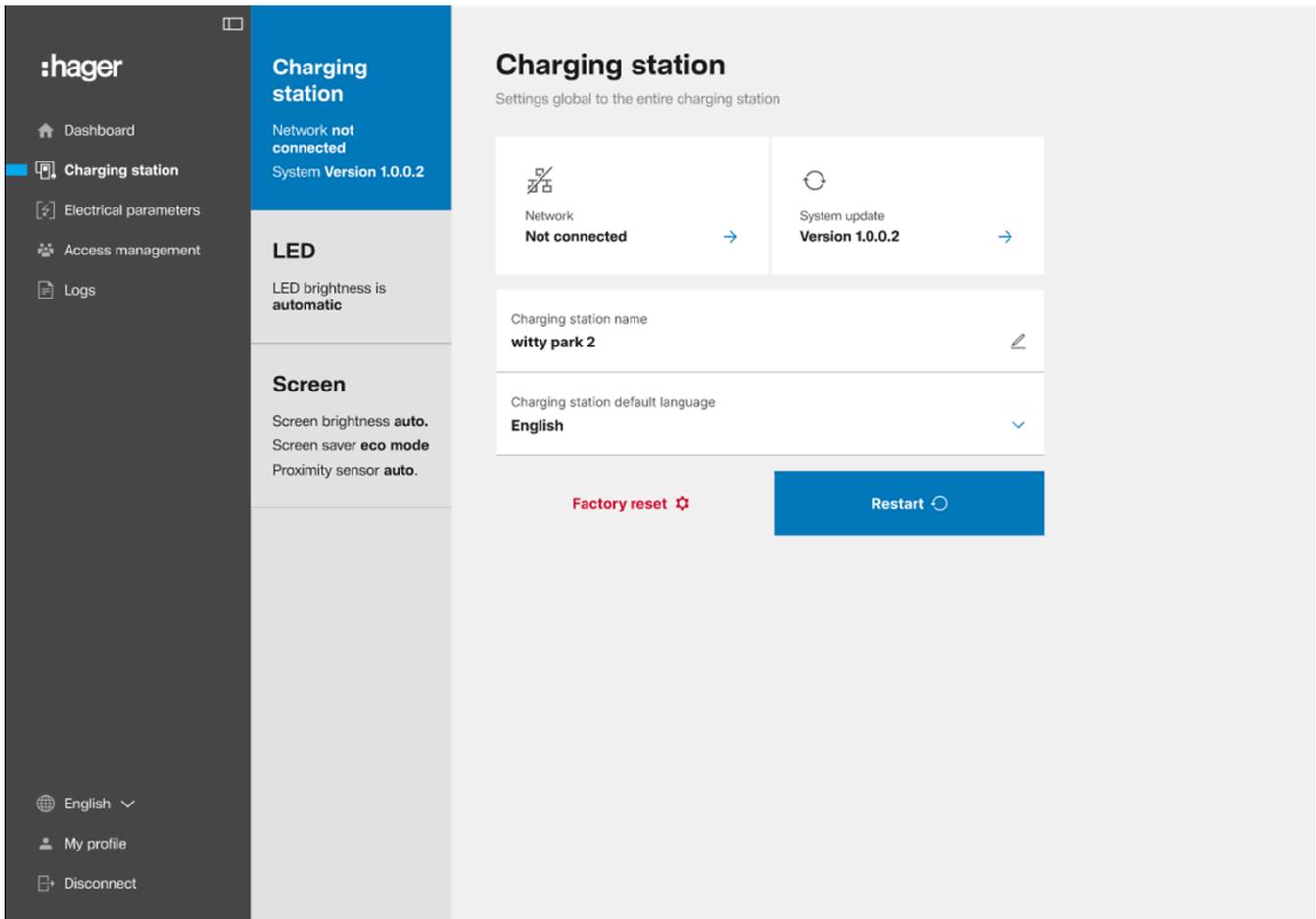


Fig. 19: Connect the charging station to the network

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.

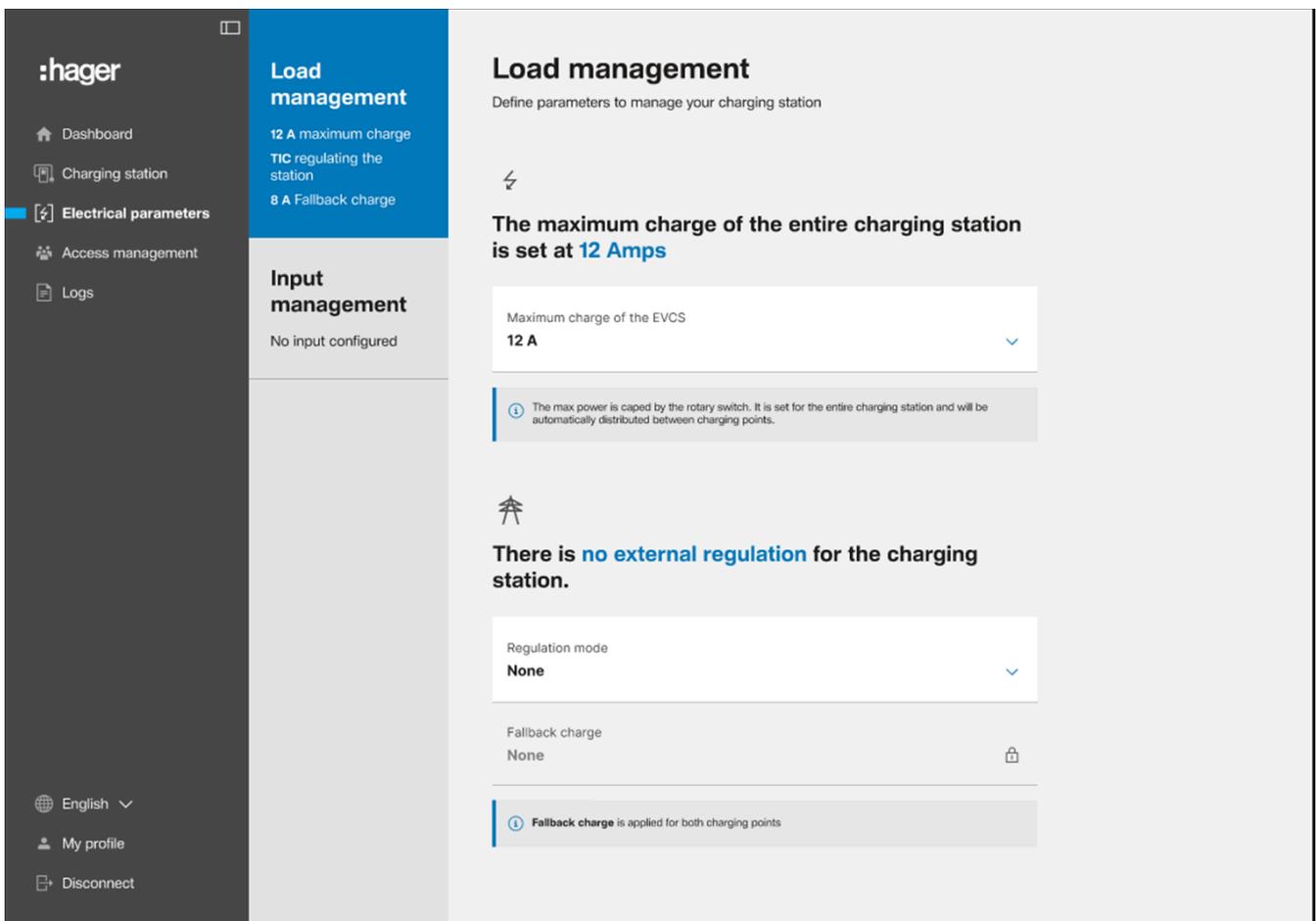


Fig. 20: Set electrical parameters

- 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.

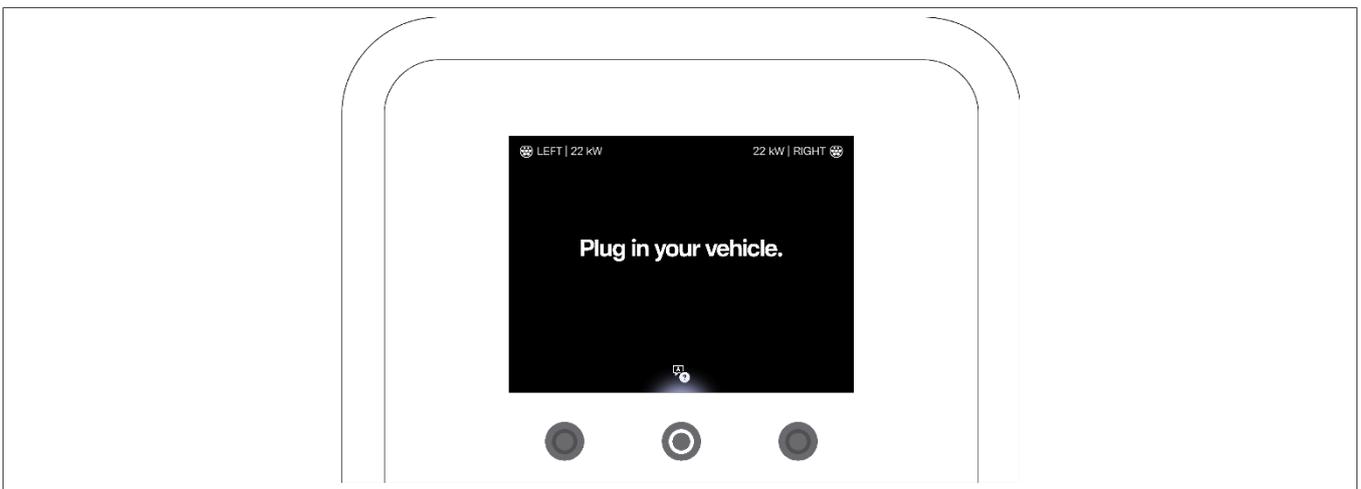


Fig. 21: Make the device ready for charging

### 11.2 Starting the charging operation

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

• Hold the RFID tag in front of the charging station below the screen.

Tag accepted: the RFID reader lights up green.

Tag 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.



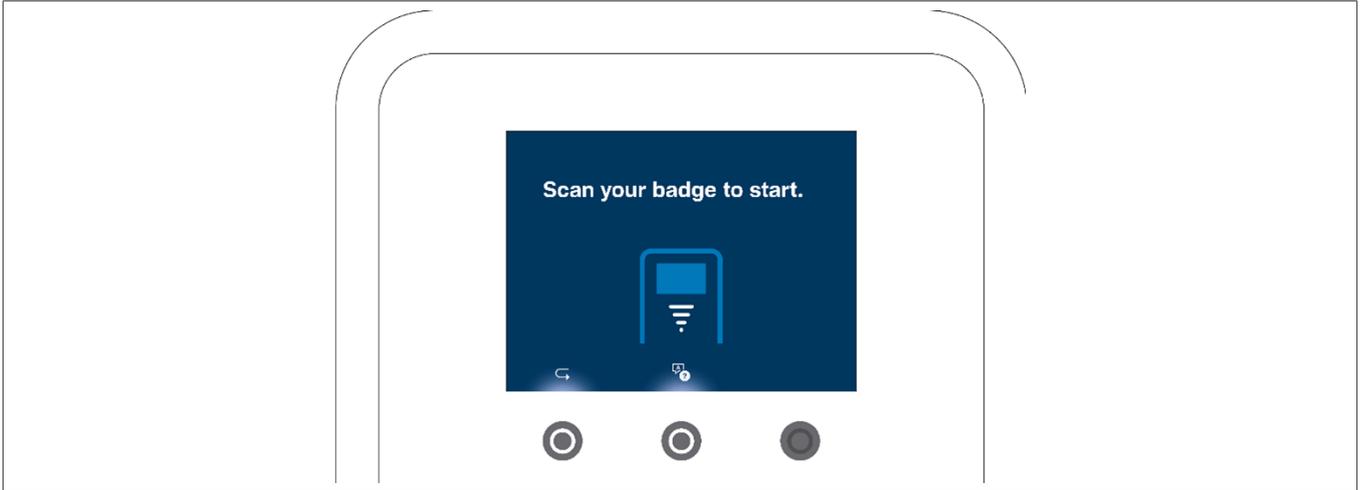


Fig. 22: Starting the charging operation



Fig. 23: During the charging operation

### 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.

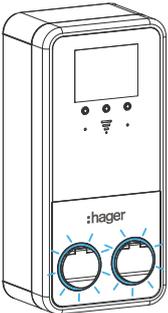
## **11.5 Payment options**

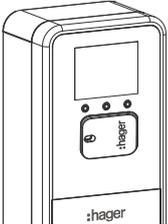
The cost of the energy varies and depends on the provider and operator of the charging station. Information on payment options can be obtained from the operator of the charging station or the corresponding provider.

## 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.

An error message can relate, for example, to 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

<b>Environmental conditions</b>	
Operating temperature	-25°C to +50°C
Storage temperature	-35 °C to +70 °C
Relative humidity	5 % to 95 %
Protection class IP - impact resistance rating IK	IP 55 – IK 10
Screen protection IK	IK 08
Maximum operating altitude	2000 m
Pollution degree	3
Pulse voltage Uimp	4 kV
<b>Electrical properties</b>	
Rated voltage Ue	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 meter)	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 mm <sup>2</sup> ... 25 mm <sup>2</sup> , use only copper conductors
Conductor cross-section, multi-wire	10 mm <sup>2</sup> ... 25 mm <sup>2</sup> , 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
<b>Upstream protection</b>	
Circuit breakers	80 A
Power supply limitation (under short circuit conditions)	max. 6 kA
<b>Mechanical properties</b>	
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
<b>Classification</b>	
Classification of the charging station	Closed mount, ACSEV (Assemblies for Electric Vehicle Charging Stations), 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 Pedestal 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).
<b>RFID reader</b>	
Frequency range	13.553 to 13.567 MHz
Maximum radiated power	42 dBµA/m (for 13.56 MHz)
<b>Wi-Fi</b>	

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

Hager Controls hereby declares that the radio equipment type electric vehicle charging stations XVP222S, XVG222S comply with Directive 2014/53/EU. The complete text of the EU declaration of conformity is available at the following Internet address: [hager.com](http://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.



**Hager Controls**

BP10140

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