

Operating- and Installation instructions

Webasto Next

Webasto Charging Solutions



English

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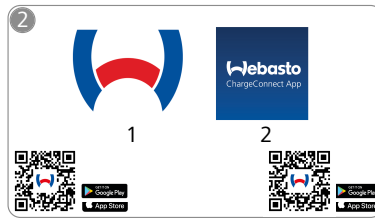
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1 Quick Start Guide for App Solutions

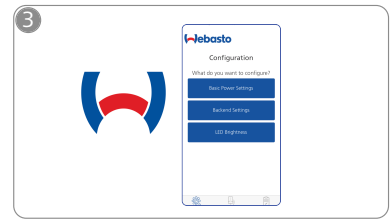


✓ Two QR codes are provided for the scan and charge functions; these are located under the protective film in the delivered state.

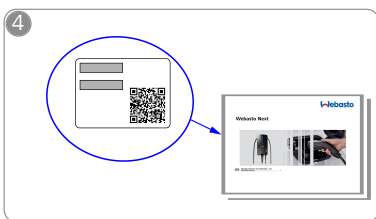
The Webasto Next must be installed by a qualified electrician.



↓ Download the required Apps:
 1) For installation: Webasto Charger Setup
 2) For operation: Webasto ChargeConnect



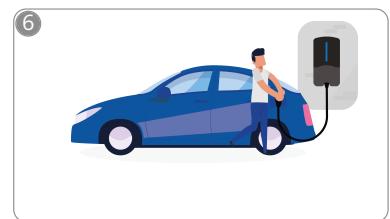
✎ Open the Webasto Charger Setup app and configure your charging station.



👁 Scan the QR code on the label in the Quick Start Guide or type in the Wi-Fi password manually.



✎ Open the ChargeConnect app and follow the steps to connect the charging station to the ChargeConnect Cloud.



⚡ Plug in and enjoy exploring your charging station's capabilities.

2 General information


2.1 Purpose of the document


These operating and installation instructions are part of the product and contain information for the user to ensure safe operation and for the electrician to carry out safe installation of the Webasto Next charging station. In addition to the "Important Information on Operating and Installation Instructions", a printed version of which is enclosed with your product, this document also contains detailed information about operating the product.

2.2 Using this document

- ▶ Read these operating and installation instructions for safe operation and installation of the Webasto Next.

Your "Important Information on Operating and Installation Instructions", a printed version of which is enclosed with your product, includes introductory information and information relevant to safety and installation. This document additionally includes further information on the operation of the charging station.

 **NOTE**
We would draw your attention to the fact that, as part of a professional installation, an installation log should be drawn up by the installer. We also request that you fill in our Check list for the installation of the Webasto charging station.

 **NOTE**
Individuals with deficiency in their colour vision require support in the allocation of all fault indicators.


2.3 Intended use


The Webasto Next charging station is designed for charging electric vehicles in accordance with IEC 61851-1, charge mode 3.


In this charge mode, the charging station ensures:


- The voltage is not applied before the vehicle has been connected correctly.
- The maximum power is calibrated.


2.4 Use of symbols and highlighting

 **DANGER**
This signal word denotes a hazard with a high degree of risk which, if not avoided, may lead to death or serious injury.

 **WARNING**
This signal word denotes a hazard with a moderate degree of risk which, if not avoided, may lead to minor or moderate injury.

 **CAUTION**
This signal word denotes a hazard with a low degree of risk which, if not avoided, will lead to minor or moderate injury.


 **NOTE**
This signal word denotes a Special Technical Feature or (if not observed) potential damage to the product.


 Refers to separate documents which are enclosed or can be requested from Webasto.

2.5 Warranty and liability

Webasto shall not assume liability for defects or damage that are the result of the installation and operating instructions being disregarded. This liability exclusion particularly applies for:

- Improper use.
- Repairs carried out by an electrician not contracted by Webasto.
- Use of non-original spare parts.
- Unauthorised conversion of the unit without permission from Webasto.
- Installation and commissioning by unqualified staff (not an electrician).
- Improper disposal after decommissioning.

 **WARNING**
Installation and connection of the charging station must only be carried out by a qualified electrician.

 The symbol of a bin with a line through it means that the instructions in the chapter on Disposal must be followed.

2.6 Software licences


This product contains open-source software. Further information relating to this (disclaimer, written offers, licence information) can be found via the integrated web server. The web server can be reached via the hotspot (<https://172.0.2.1/licensing.html>).

3 Safety

3.1 General information

The device must only be used in a technically faultless condition. Any malfunctions that adversely affect the safety of persons or of the device must be immediately rectified by a qualified electrician in accordance with nationally applicable regulations.

3.2 General safety information

 ● Hazardous voltages are present within the casing.

● The charging station does not have its own main ON/OFF switch. The protective devices installed in the power supply system are therefore also used to disconnect the power supply.

● Check charging station for visual damage before use. Do not use the charging station if damaged.

● Installation, electrical connection and initial operation of the charging station must only be carried out by an electrician.

● Do not remove the cover of the installation area whilst in operation.

● Do not remove markings, warning symbols and the type label from the charging station.

● The charging cable must only be replaced by an electrician in accordance with the installation instructions.

● It is strictly prohibited to connect other equipment/ devices to the charging station.

● Make sure that the charging cable and coupling cannot be driven over, trapped and are protected from any other hazards.

● Immediately notify Webasto Customer Service if the charging station, charging cable or the charging coupling are damaged. Do not continue using the charging station.

- Prevent the charging cable and coupling from coming in contact with external heat sources, water, dirt and chemicals.
- Do not attach extension cables or adapters to the charging cable.
- Remove the charging cable by pulling on the charging coupling only.
- Never clean the charging station with a high-pressure cleaner or similar device or using a garden hose.
- Switch off the power supply before cleaning the charging sockets.
- The charging cable must not be subjected to any strain during use.
- Ensure only persons who have read these operating instructions have access to the charging station.

WARNING

- When not in use, store the charging cable in the designated holder and lock the charging coupling in the remote dock. Loosely wind the charging cable around the remote dock making sure the cable does not touch the floor.
- You must make sure that the charging cable and coupling cannot be driven over, trapped and are protected from all other hazards.

3.3 Safety information for installation



- The instructions in this document must be followed for safe installation.
- Installation and connection of the charging station must only be carried out by a qualified electrician.
- You must comply with the locally applicable requirements regarding electrical installations, fire protection, safety regulations, and escape routes at the intended installation location.
- Only use the supplied installation material.
- When open, ESD (electrostatic discharge) precautions must be taken properly to avoid electrostatic discharge.
- When handling electrostatically sensitive boards, wear grounded antistatic wrist straps and properly observe ESD safety precautions. Wrist straps must only be used when mounting and connecting the loading unit. Wrist straps must never be worn on a live Webasto Next.
- Electricians must be properly grounded during installation of the Webasto Next.
- Do not install the Webasto Next in an explosion sensitive area (Ex Zone).
- Install the Webasto Next in such a way that the charging cable does not block any passageways.
- Do not install the Webasto Next in areas subject to ammonia or air containing ammonia.
- Do not install the Webasto Next in a location where falling objects may damage it.
- The Webasto Next is suitable for use indoors as well as outdoors.
- Do not install the Webasto Next in the vicinity of water jets, such as car-wash installations, high-pressure cleaners or garden hoses.

- Protect the Webasto Next against damage caused by sub-zero temperatures, hail or similar. We would like to refer you to our IP protection class at this juncture (IP54).
- The Webasto Next is suitable for use in areas without access restrictions.
- Protect the Webasto Next from direct sunlight. The charging current may be reduced at high temperatures, or charging may be disabled completely. The operating temperature of the 11 kW version is -30°C to +55°C. The operating temperature of the 22 kW version is -30°C to +45°C.
- The installation location of the Webasto Next should ensure that vehicles cannot inadvertently collide with it. Protective measures must be implemented if the possibility of damage cannot be ruled out.
- Do not put the Webasto Next into operation if it has been damaged during installation; a replacement will be required.

3.4 Safety information for electrical connection



WARNING

- Each charging station must be protected with its own line circuit breaker and residual current circuit breaker. See chapter 8.1, "Requirements installation space" on page 8.
- Make sure that the electrical connections are de-energised before connecting the charging station to the power supply.
- Make sure that the correct supply cable is used for the power connection.
- Do not leave the charging station unattended with the cover open.
- Change DIP-switch settings only with the power off.
- Register with the power supply company as required.

3.5 Safety information for initial start-up



WARNING

- Initial start-up of the charging station must be carried out only by an electrician.
- Prior to initial start-up, the electrician must check that the charging station has been connected correctly.
- Do not connect a vehicle during initial start-up of the charging station.
- Before starting-up the charging station, check the charging cable, charging coupling and the charging station for visible damage. The charging station must not be started up if it is damaged or if the charging cable/charging coupling is damaged.

4 Unit description

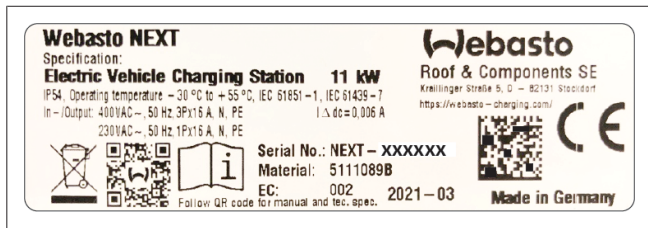


Fig. 1 Example type plate for Webasto Next (11 kW version)

These operating and installation instructions describe the Webasto Next charging station with rigidly connected cable. The exact unit description, corresponding to the material number which comprises a seven-digit number and one letter, is indicated on the type label of the charging station.

4.1 Printing additional "Scan & Charge" QR codes

If the current QR code for your charging station is no longer readable, you can generate a new copy using the product details and the serial number of your charging station.

1. Click on the following URL to add the QR code generator extension to your Chrome browser.

<https://chrome.google.com/webstore/detail/qrcode-generator/afpbjgbdimpioenaedcjkgaiggcdpp>

2. In your Chrome browser, click on the new icon at the top right.
3. Enter the details of your charger in the following format. This information can be found on the type plate on your charger, for example (cf. Fig. 1):
 - **PROD:**[Part number];**SERIAL:**[Serial number]
 - Example: *PROD:5111089C;SERIAL:NEXT-WS123456*
4. Click Download to download the generated PNG file.
5. You can optionally insert the PNG file into a Word document.
6. Print the downloaded PNG file or Word document.

4.2 Description of data interface connections

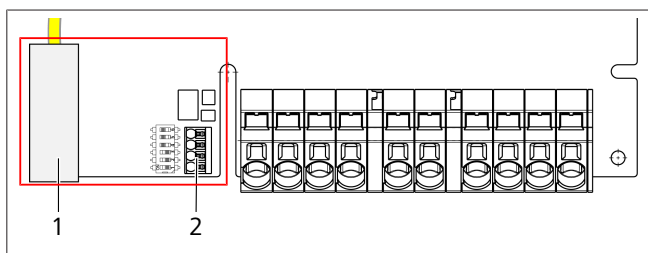


Fig. 2

Legend

1	RJ 45 (LAN)
2	Connector for CP and floating contacts.

With the cover open, the data interfaces can be found on the left-hand side in the connection area. This area is separated from the power supply area.

4.2.1 ModBus

The Webasto Next is set up for the use of an extended energy management system via a higher-level electricity meter. This function can be implemented through performing a software update*.

A current overview of the available documentation including compatible meters can be found at

<https://charging.webasto.com/int/products/documentation>

* The software update will be available from Q2, 2022

4.2.2 WebUI*

Browser access to the WebUI is available via a LAN connection at the following address:

<https://NEXT-WSXXXXXX.local>

(XXXXXX = Serial No.: see type plate).

It can be accessed with a WLAN connection at the following IP address:

<https://172.20.0.1>

Login data:

- **User name:** 'admin'
- **Password:** master password (see installation documentation)

* The WebUI will be available from Q2, 2022.

4.2.3 LAN

The Webasto Next can be connected to the network infrastructure at the installation location. The charging station can be configured and controlled using this connection. The control system requires connection to the back end or local energy management system. Webasto recommends a CAT7 network cable, although CAT5e is sufficient. If you want to implement multiple functions via the LAN interface (e.g. ModBus and internet connection), a DHCP network switch or router can be connected in the incoming circuit of the building wiring system.

4.2.4 WLAN

After completing the start process of the charging station, you can connect a WLAN-enabled computer or mobile device to the charging station hotspot (standard configuration via Webasto Charger Setup app). The WiFi hotspot can be used to configure the wall box (Webasto Charger Setup app). You can connect the Webasto Next to a WLAN router to establish an internet connection (configuration via Webasto Charger Setup app or WebUI).

4.2.5 Control cable (Control Pilot)

There also is a data line in the charging cable together with the power supply lines and is known as a CP (control pilot) line. This line (black-white) is inserted into the push-in terminal (contact 1) on the CP connection. This applies to installing the original charging cable and also to replacing the charging cable. See also chapter 8.3.1, "Connecting the charging cable" on page 9.

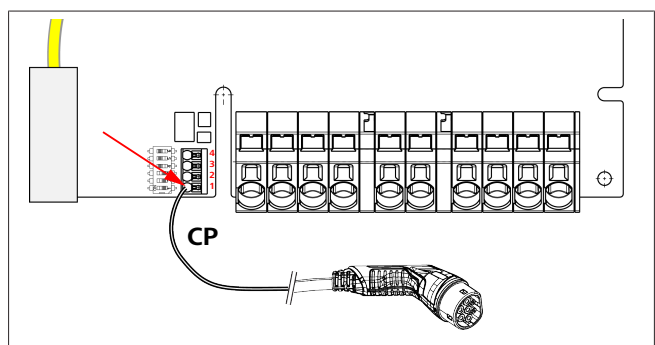


Fig. 3

4.3 Description of power supply interface connections

The connections of the mains cable are marked with "IN". The 5 terminals on the left have L3/L2/L1/N/PE printed on them.

The connections of the charging cable are marked with "OUT". The 5 terminals on the right have PE/N/L1/L2/L3 printed on them.



NOTE

To release the power supply connections, use an insulated flat-head screwdriver by inserting it into the opening for this purpose immediately above push-in terminal.

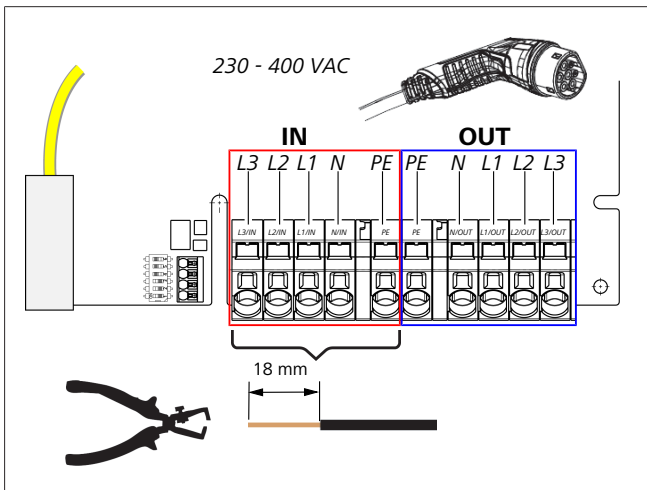


Fig. 4

IN	Power cable connections
OUT	Charging cable connections

5 Transportation and storage

Observe the ambient temperature for storage during transportation. See chapter 17, "Technical data" on page 18.

Transport the charging station only when suitably packaged.

6 Scope of delivery

Scope of delivery	Amount
Charging station	1
Charging cable with charging coupling	1
Installation kit for wall mounting	
● Wall plug (8 x 50 mm, Fischer UX R 8)	4
● Screw (6 x 70, T25)	2
● Screw (6 x 90, T25)	2
● Washer (12 x 6.4 mm, DIN 125-A2)	4
● Screw (3 x 20 mm, T10); (2 replacement screws)	2
● Mounting bracket	1
● Cable bushing, (one is custom-made)	2
Installation kit for charging cable:	
● Spiral antikink protection	1
● Cable tie	1
● Strain relief clamp	1
● Screw (6.5 x 25 mm, T25) for fastening the strain relief clamp	2
"Important Information on Operating and Installation Instructions"	1
"Scan & Charge" QR codes	2



NOTE

The Fischer universal wall plug UX R 8 supplied is a plastic wall plug made of high quality nylon. The universal wall plug splays out in solid building materials and catches in wooden and board materials for excellent retention.

7 Required tools

Tool description	Amount
Slot-head screwdriver 0.5x3.5 mm	1
Torx screwdriver Tx25	1
Torx screwdriver Tx10	1
Torque wrench (range covers 5-6 Nm, for Tx25)	1
Torque wrench (range covers 4-5 Nm, for open-ended spanner size 29)	1
Drilling machine with 8 mm drill	1
Hammer	1
Measuring tape	1
Spirit level	1
Wire stripping tool	1
Installation tester	1
EV simulator with rotary field display	1
Round file	1
Combination pliers	1



NOTE

A drill template, which likewise forms part of the scope of delivery, is also available to print out. It must be printed on a 1:1 scale. Check the dimensions after printing.

8 Installation and electrical connection



DANGER

Observe the safety information provided here chapter 3, "Safety" on page 4.

To access further documents use one of the following options:

Webasto Service app (for installation)

To download this app:

- ▶ scan the QR code below or



- ▶ go to:

<https://apps.apple.com/> (Apple App Store) or

<https://play.google.com/> (Google Play Store) as appropriate.

To use the Webasto Service App and access online Webasto technical documentation, please scan the QR code or the bar-code on your Webasto product box.

You can find our operating instructions on the Webasto website at:

<https://charging.webasto.com/int/products/documentation>

All languages can be found in the download portal on our website.



NOTE

The Webasto Next safety concept is based on a power supply system that is earthed at all times, which must always be ensured by an electrician during installation.

Webasto Charger Setup app (for installation)

To download this app:

- ▶ scan the QR code below or



- ▶ go to:

<https://apps.apple.com/> (Apple App Store) or

<https://play.google.com/> (Google Play Store) as appropriate.

Webasto ChargeConnect app (for operation)

To download this app:

- ▶ scan the QR code below or



- ▶ go to:

<https://apps.apple.com/> (Apple App Store) or

<https://play.google.com/> (Google Play Store) as appropriate.

8.1 Requirements installation space

The following points must be taken into account when selecting the installation location for the Webasto Next:

- The lower edge of the enclosed mounting template must be at a minimum distance of 90 cm above the ground during installation. See Fig. 13.
- If several charging stations are installed next to each other, a spacing of at least 200 mm must be maintained between each station.
- The mounting surface must be solid and strong.
- The mounting surface must be completely flat (max. 1 mm difference between the individual mounting points).
- The mounting surface must not contain any flammable substances.
- A cable run from the charging station to the vehicle as short as possible.
- No risk of driving over the charging cable.
- Possible electrical connections from infrastructure.
- Pavements and escape routes must not be obstructed.
- An installation location that is protected against direct sunlight is required for optimum and fault-free operation.
- The usual parked position of the vehicle, taking account of the position of the charging plug on the vehicle.
- Consideration of local building and fire protection regulations.



NOTE

The mounting distance between the bottom edge of the charging station and the floor must be at least 0.9 m.

8.2 Criteria for the electrical connection

The maximum charging current is factory set and is indicated on the type label of the charging station. The maximum charging current can be adapted to the value of the circuit breaker fitted during installation using DIP switches.



NOTE

The current value of the selected protective device must not fall below the current value specified on the type label for the charging station or the value set using the DIP switch.

See chapter 8.7, "DIP switch settings" on page 12.

The installation requirements for the charging station should be checked by a qualified electrician before starting connection works.

Comply with the nationally applicable regulations of the authorities and power supply companies, e.g. registration of installation of a charging station.



NOTE

In some countries, single-phase charging is limited to a defined current. The local connection requirements must be observed.

All protective devices specified below must be designed such that the charging station is disconnected from the grid in the case of a fault. You must meet national installation regulations and standards when selecting the protective device.

The maximum charging current is factory set and is indicated on the type label of the charging station. The maximum charging current can be adapted to the value of the circuit breaker fitted during installation using DIP switches.

8.2.1 Dimensioning of the Residual Current Circuit Breaker (RCCB)

The national installation regulations generally apply. Unless otherwise specified therein, each charging station must be protected by an appropriate residual current device (RCD type A) with a trip current of ≤ 30 mA.

8.2.2 Dimensioning of the circuit breaker

The circuit breaker must conform to IEC 60898. The let-through energy (I^2t) must not exceed a maximum 80,000 A²s.

Alternatively, a residual current circuit breaker combination (RCBO) according to EN 61009-1 can be used. The aforementioned parameters apply for this circuit breaker combination.

8.2.3 Mains isolation device

The charging station does not have its own main ON/OFF switch. The protective devices installed in the power supply system are therefore also used to disconnect the power supply.

8.3 Installation

See also chapter 9, "Installation" on page 13.

The supplied installation material is intended for mounting the charging station on a masonry or concrete wall. For installation on a stand, the mounting material is included in the scope of delivery of the stand.

1. Take into account the mounting position at the installation location. See Fig. 13
2. Remove the drill template from the packaging at the perforation.
3. Mark the four positions of the drill holes at the installation location using the drill template. See Fig. 12 and Fig. 13.
4. Drill 4 holes of $\varnothing 8$ mm in the marked positions.



NOTE

The central hole (1) should be used for the building wiring system. The hole (2) shown on the left must be used if the LAN cable is used. See also Fig. 13.

5. Position the bracket over the upper holes and mount using 2 wall plugs and 2 screws, 6 x 70 mm, T25.
6. Remove the lower cover from the connection area of the charging station.

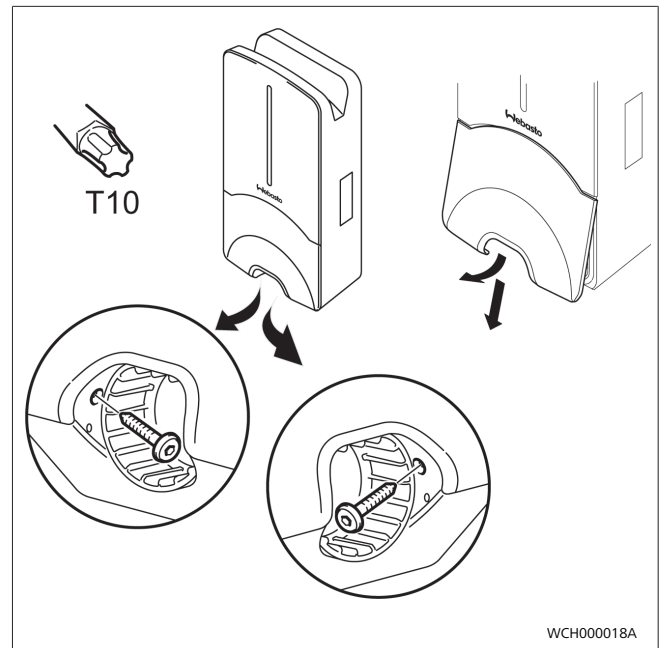


Fig. 5

1. Remove the spiral antikink protection from the connection area of the charging station and place it with the other supplied material.
2. For surface mounting, make a recess for routing the lead on the back of the charging station using the designated lateral predetermined breaking points (if necessary deburr the edge of the break using a round file).
3. Insert the lead through the designated lead-through and fit the charging station on the previously mounted bracket.
4. Mount the charging station using 2 screws, 6 x 90 mm, T25 using the mounting holes in the lower connection area. Do not exceed the max. torque of 6 Nm (Newton metres).

8.3.1 Connecting the charging cable

1. Push the spiral antikink protection with the threadless opening forward over the supplied charging cable.
2. Guide the charging cables through the previously pre-assembled sealing clip.



NOTE

Ensure correct fit of the previously pre-assembled rubber seals in the sealing clip.

3. Push the charging cable at least 10 mm beyond the upper edge of the clamping area of the strain relief clamp.
4. Turn the antikink protection spiral several turns onto the sealing clip.



NOTE

Do not tighten yet.

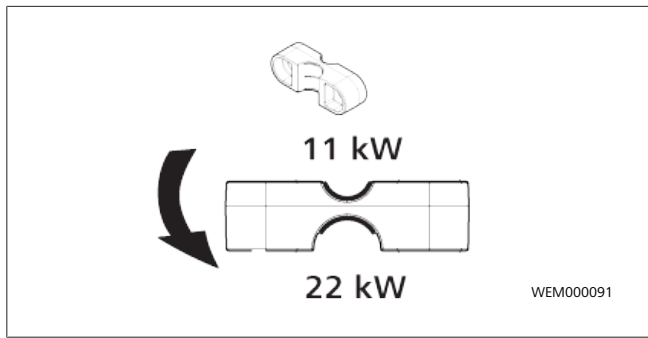


Fig. 6

- Screw in the supplied strain relief clamp in the correct position on the charging cable.

NOTE

The strain relief clamp has two position options for charging cable versions 11 kW and 22 kW. Ensure that the "11 kW installed" label for an 11 kW charging cable is visible.

- Fit the strain relief clamp in the correct mounting position using the supplied self-tapping Torx screws (6.5 x 25 mm) and tighten to 5.5 Nm. (Attention: Do not overtighten screws).
- The strain relief clamp must be flush when securely screwed in.

NOTE

Perform a tension test on the charging cable to make sure that the cable cannot move.

- Screw the antikink protection spiral onto the sealing clip with a torque of 4 Nm.
- Using the slot-head screwdriver (3.5 mm), connect the individual cable ends according to the specification in the illustration (Fig. 8) on the right terminal block with the "OUT" label.
- To do this, insert the screwdriver in the designated upper opening of the spring relief for the terminal block and open the clamping spring.
- Now insert the individual wire into the designated connection opening of the terminal block (lower opening).
- Then pull the screwdriver out again and perform a tension test to make sure that the individual wires are clamped properly and fully.

Charging cable	Description
Blue	N
Brown	L1
Black	L2
Grey	L3
Yellow-green	PE
Black-white	Control cable (CP)

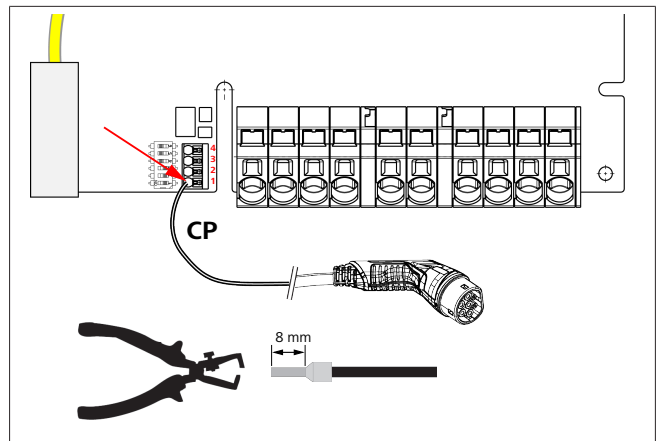


Fig. 7

- Connect the black/white control cable (CP) with a wire end ferrule to the terminal (contact 1).

NOTE

Push the white spring contact of the connection on the right down while inserting the control cable fully.

- Perform a tension test to make sure that the cable is clamped properly and fully.

8.3.2 Replace the charging cable

Charging cables are subject to wear and can be damaged, e.g. by being driven over; in this case, replacement is necessary.



WARNING

The charging cable must only be replaced by a qualified electrician.



DANGER

Danger of fatal electric shock.

- Switch off and secure the power supply to the charging station.



NOTE

Only use genuine Webasto parts.



NOTE

The charging cable may be replaced a **maximum of four times** during the service lifetime of the Webasto Next.



NOTE

If spare parts are required, please contact your installation engineer or get in touch with the Webasto hotline.

Procedure for replacing the charging cable:

- Disconnect the power supply and vehicle charging line.
- Remove the cover of the connection area in the wall box.
- Disconnect the terminals and threaded cable connections of the charging cable.
- Remove the strain relief clamp and guide the damaged charging cable downwards out of the wall box.
- Install the new charging cable as described in chapter 8.3.1, "Connecting the charging cable" on page 9 (use only original Webasto replacement part).
- Close the cover of the connection area in the wall box.
- Carry out a new start-up as described in chapter 8.8, "Initial start-up" on page 12.

8.4 The electrical connection

1. Check and make sure that the lead is tension-free and measures have been taken to secure against being switched on.
2. Check and comply with all the requirements necessary for the connection and mentioned previously in these instructions.
3. Take the cable gland grommets from the supplied material.
4. Slide the cable bushing over the lead.

NOTE
Ensure that the insertion aid for the grommet is on the back of the charging station when in the final installed state, however, do not position it in the housing lead-through yet.

5. If a data line is also to be connected, use the second supplied cable gland grommet and repeat the above-mentioned step.
6. Remove the sheathing of the lead.
7. If a rigid lead is used, bend the individual wires paying attention to the minimum bend radiuses so that it is possible to connect them to the terminals without significant mechanical stress.
8. If a rigid lead is used, bend the individual wires paying attention to the minimum bend radiuses so that it is possible to connect them to the terminals without significant mechanical stress.

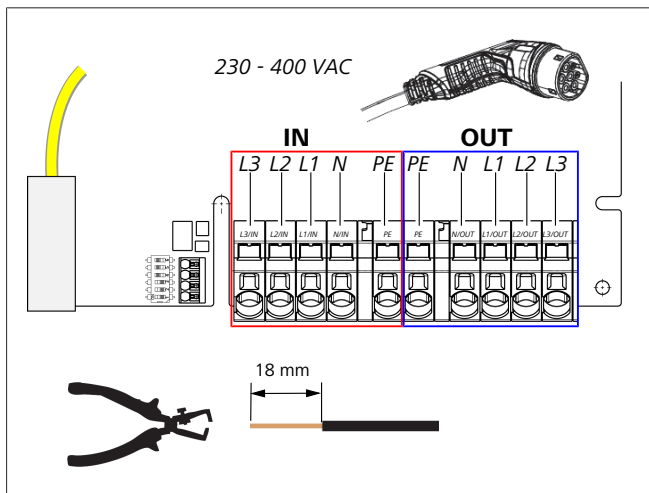


Fig. 8

IN	Power cable connections
OUT	Charging cable connections

1. Using the slot-head screwdriver (3.5 mm), connect the individual cable ends according to the specification in the illustration (Fig. 8) on the left terminal block with the "IN" label.

NOTE
Make sure to connect them using the correct connection sequence for a right rotating field.

2. To do this, insert the screwdriver in the designated upper opening of the spring relief for the terminal block and open the clamping spring.
3. Now insert the individual wire into the designated connection opening of the terminal block (lower opening).

4. Then remove the screwdriver again and perform a tension test to ensure that the individual wires are clamped properly and fully and no exposed copper areas are visible.

NOTE
If multiple charging stations are connected to a common main power supply point, there is a risk of overload.
► A phase rotation must be provided and adapted to the connection configuration of the charging stations. See online configuration instructions:
<https://charging.webasto.com/int/products/documentation>

5. Insert the data line into the designated connection in the connection area. See chapter 4.2.5, "Control cable (Control Pilot)" on page 6 and Fig. 3.
6. Remove any soiling such as insulation trimmings out of the connection area.
7. Check again for firm attachment of all wires in the corresponding terminal.
8. Next position the cable bushing in the housing lead-through.

NOTE
Make sure there are no air gaps between the housing and the cable bushing.

8.4.1 The electrical connection in split-phase systems

Terminal configuration:

Supply lead	Terminal block
L1	L1
L2	Neutral

DIP switch configuration: D6 = 0 (OFF)

NOTE
This terminal configuration does not define the unbalance load limit.

NOTE
Supply lead: a maximum of 230 V rated voltage is permitted between L1 and L2.

8.5 LAN cable

For connecting the charging station to the network infrastructure at the installation location. The charging station can be configured and controlled using this connection (prerequisite: connection to the back end or to the local energy management system). A CAT 7 network cable is recommended. The LAN cable must be passed through the left-hand opening in the wall box in order to connect it to the LAN socket.

8.6 Active power increase

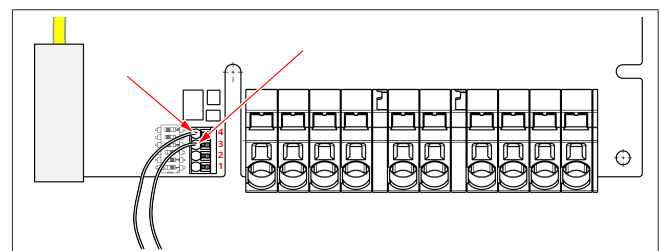


Fig. 9

The active power control as per the rules of VDE AR-4100 should be connected as follows:

The two cables from the ripple control receiver or the floating contact must be inserted into this connector in positions 3 and 4 (see Fig. 9). The two cables can be assigned to pos. 3 and 4 in any order. (max. cable cross section 1.5 mm²).

WARNING
 No voltage should be applied between terminals 3 and 4.

8.7 DIP switch settings

DANGER
High voltages.
 ► Danger of fatal electric shock.

► Ensure safe isolation from the power supply.

DIP switches determine the maximum current. The current can be adjusted in 1 A increments using the Charger Setup app up to the maximum value that is configured by the DIP switches.

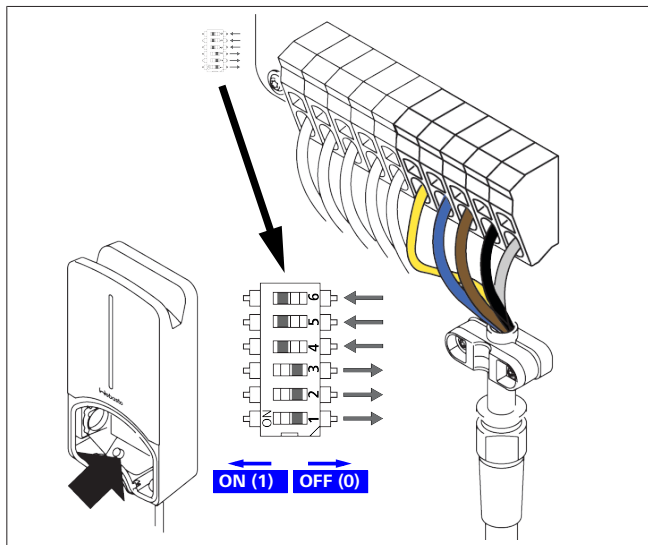


Fig. 10

DIP switch left/ON = 1

DIP switch right/OFF = 0

DIP-switch factory setting:

D1	D2	D3	D4	D5	D6
Off	Off	Off	On	On	On

NOTE
 Changes to the DIP switch settings become active after restarting the charging station.

D1	D2	D3	[A]	Description
0	0	0	32	Factory settings
0	0	1	10	
0	1	0	13	
0	1	1	16	
1	0	0	20	
1	0	1	25	
1	1	0	8	
1	1	1	0	Demo mode: charging not possible

WARNING
 The DIP switches must be adapted to the upstream installation by a qualified electrician.

D4	0=	no unbalance load limit for single-phase charging.
	1=	unbalance load limit at 16 A and D1-D3 > 20 A (for CH and AT).
D5	0=	no unbalance load limit for single-phase charging.
	1=	unbalance load limit at 20 A and D1-D3 > 25 A (for D).
D6	1=	TN/TT system.
	0=	IT system (only single-phase connection possible).

8.8 Initial start-up

8.8.1 Safety check

Document the results of the checks and measurements carried out during initial start-up corresponding to the applicable installation requirements and standards.

The Webasto Charger Setup app supports you with checks during initial start-up.

The local regulations relating to operation, installation and environmental protection also apply.

8.8.2 Start-up procedure

1. Remove material residues from the connection area.
2. Check that every screw is correctly tightened and every clamp is correctly engaged.
3. Fit the lower cover.
4. Secure the bottom cover with the mounting screws; carefully tighten the mounting screws to the stop. See Fig. 5.
5. Switch on power supply.
 - Start sequence is activated (duration up to 60 seconds).
 - White chase light running up and down. See Fig. 11, operating status N2.

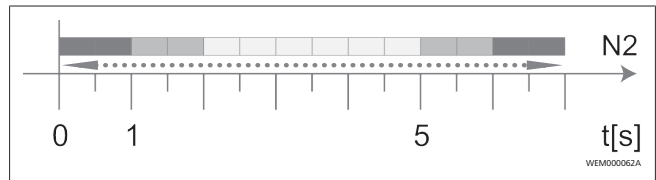


Fig. 11

1. Check initial start-up and record the measured values in the test log. The Webasto Charger Setup app can support you in carrying out and documenting this. An EV simulator is used for the measurement at the charging coupling.
2. Simulate and test the individual operating and protection functions with the EV simulator.
3. Connect the charging cable to the vehicle.
 - The LED changes from green (N3) to pulsing blue (N4). See Fig. 15.

9 Assembly

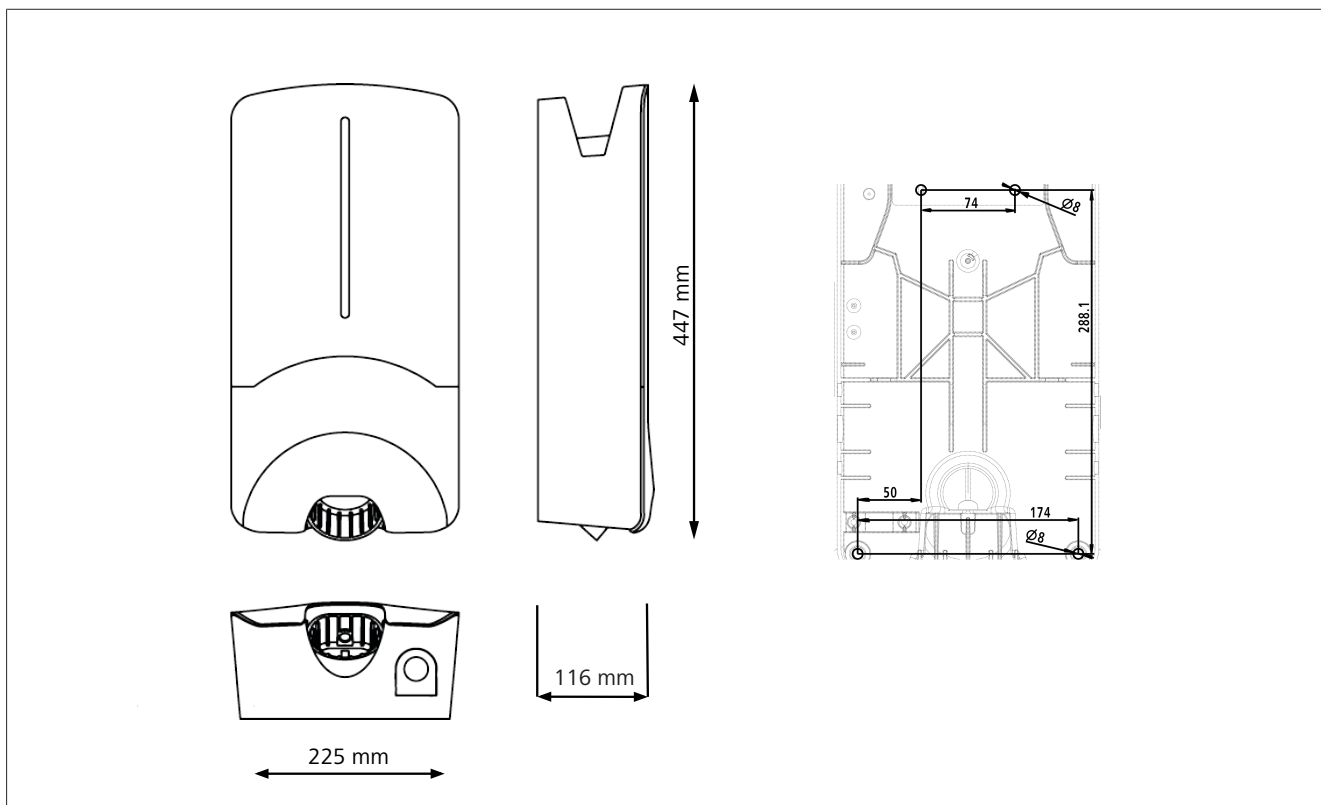


Fig. 12

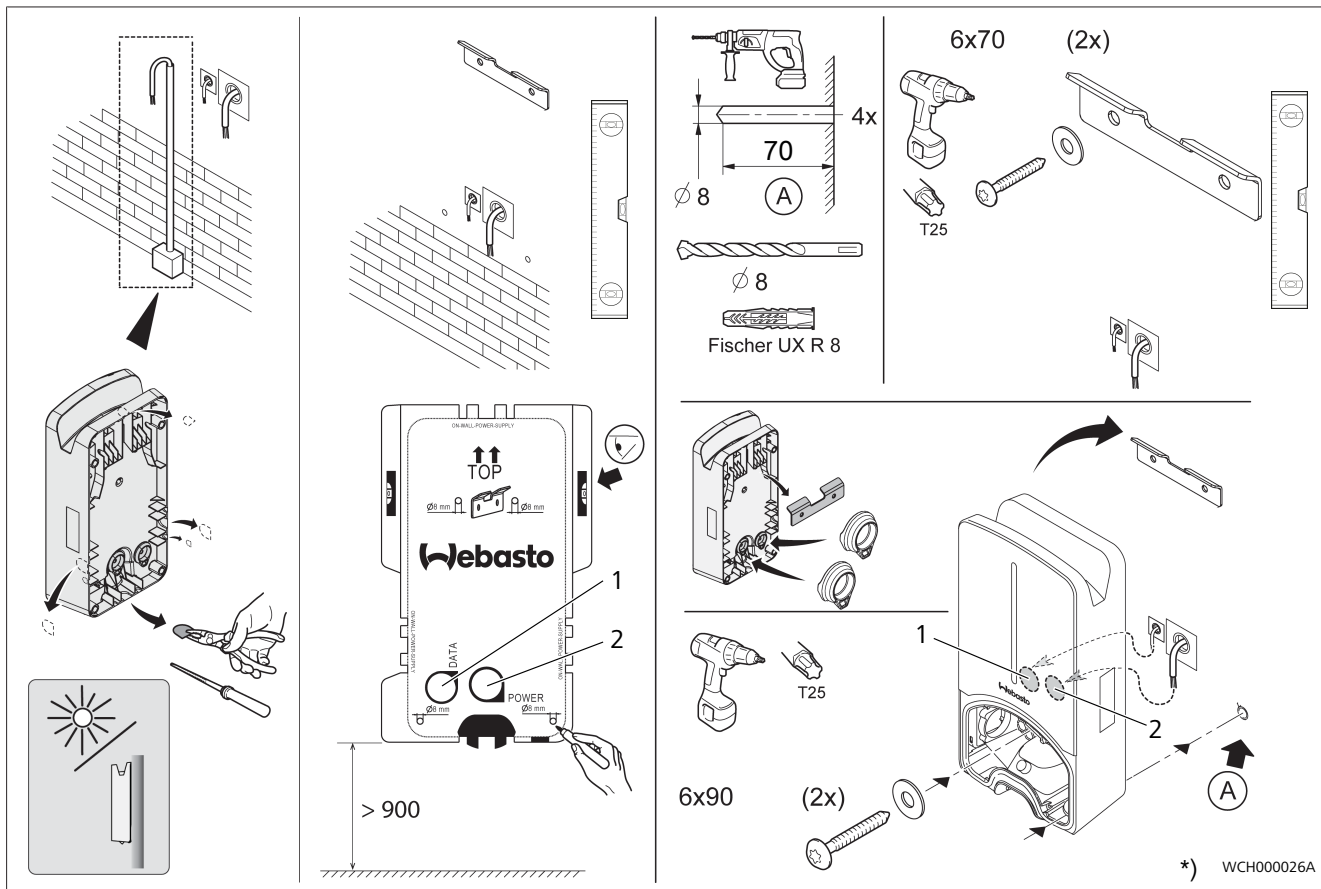


Fig. 13

1	Hole for cable to building wiring system	*) The tools shown are not included in the scope of delivery of the wall box.
2	Hole for LAN cable	

10 Settings

NOTE

Setting the Webasto Next

You can adjust the settings of your Webasto Next using the following options:

For installation:

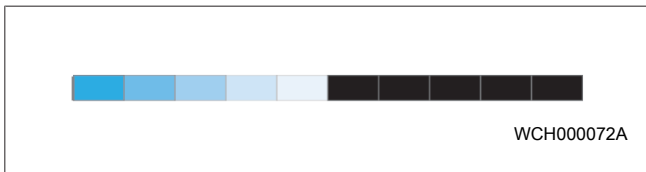
- Webasto Charger Setup app

For operation and setting by the end customer:

- Webasto ChargeConnect portal
- Webasto ChargeConnect app
- Integrated WebUI (configuration interface, see chapter 4.2.2, "WebUI*" on page 6)

* From Q2, 2022

10.1 Dim LED indicator



To dim the LED display of your Webasto Next, using the Webasto ChargeConnect Portal (WCC) (<https://webastochargeconnect.com/>) and follow the instructions. Available from Q2, 2022.

11 Operation

11.1 overview

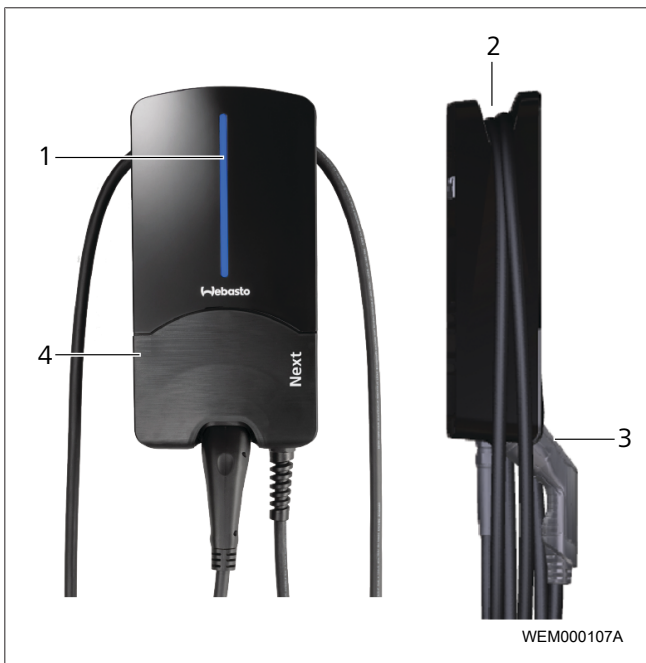


Fig. 14

1	LED indicator
2	Charging cable holder
3	Charging coupling holder
4	Installation cover

11.2 LED indicators

11.2.1 LED operating indicator

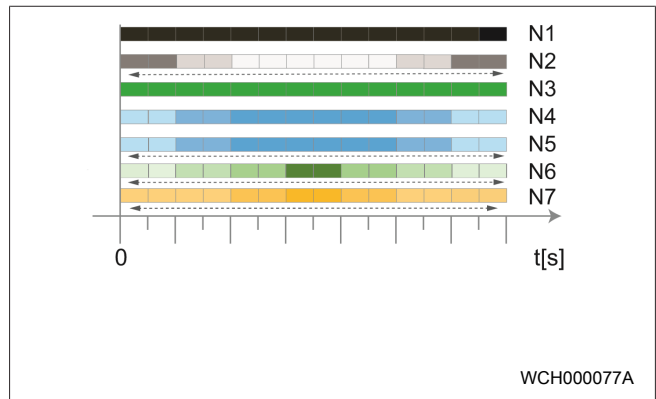


Fig. 15

Operating indicator	Description
N1	LED not lit: Charging station is off.
N2	White chase light running up and down: Charging station is starting up.
N3	LED is green: Charging station is on standby.
N4	LED pulsing blue: Charging station being used; charging vehicle.
N5	Blue chase light running up and down: Charging coupling connected to the vehicle, charging interrupted.
N6	Green chase light running up and down: The charging station is in operation but the "Scan & Charge" function is locked.
N7	Orange chase light running up and down: Charging process interrupted by power supply company.

11.2.2 LED fault list

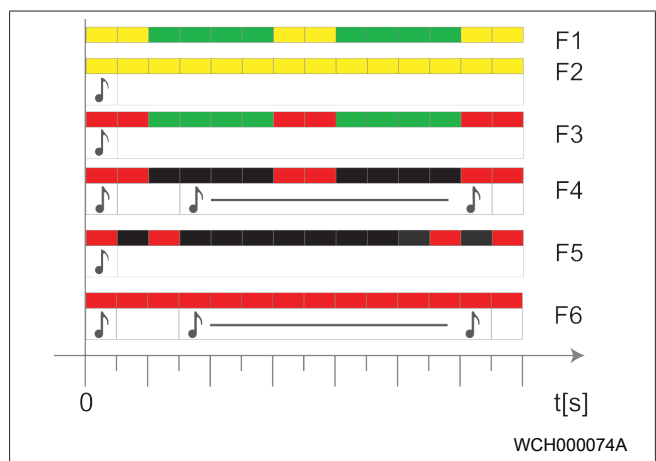



Fig. 16

Fault list	Description
F1	LED lights up green, there is additionally a yellow pulse: The charging station has become hot and charges the vehicle with reduced power. After a cool-down phase the charging station continues the normal charging cycle.
F2	LED is yellow and an acoustic signal sounds for 0.5 s: Overtemperature. The charging function has been interrupted and after a cool-down phase the charging station continues the normal charging cycle.
F3	LED lights up green, there is additionally a red pulse and an acoustic signal sounds for 0.5 s: There is a fault in the power connection to the charging station, phase monitoring is active, the power supply is outside the valid range of 200 V to 260 V. ▶ A qualified electrician should check the phase sequence (clockwise phase sequence required), network frequency, DIP switch setting and protective conductor resistance.
F4	LED pulses red for 1 s at 2 s intervals and an acoustic signal sounds for 0.5 s, and then for 5 s following a pause of 1 s: There is a fault in the vehicle. ▶ Re-connect the vehicle.
F5	LED pulses red for 0.5 s at 0.5 s and 3 s intervals. An acoustic signal sounds for 0.5 s: There is an internal fault with an extra-low voltage (e.g. 12 V). ▶ Checking by an authorised electrician.
F6	LED is red and an acoustic signal sounds for 0.5 s. Then, after a pause of 1 s, the acoustic signal sounds for 5 s: There is a problem in the voltage or system monitoring.  Danger of fatal electric shock. Switch off and secure the power supply to the charging station. Only then unplug the cable from the vehicle.

11.3 Start charging

In what follows, "Free charging enabled" describes the behaviour specified during installation. For "Free charging disabled", see the information from chapter 11.5, "Scan & Charge locking function" on page 16.

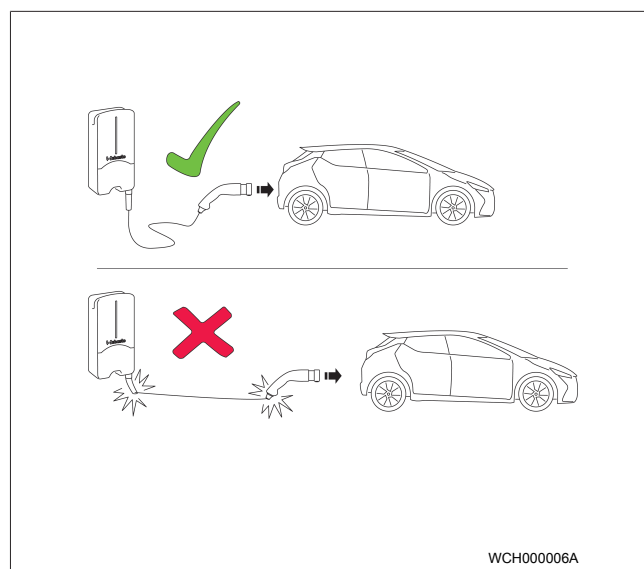




Fig. 17

-  **NOTE**
Always take into account the vehicle requirements before charging a vehicle.
-  **NOTE**
Park the vehicle for charging such as to avoid strain in the charging cable. See Fig. 17

Action	Description
▶ Connect the charging coupling to the vehicle.	Charging station performs system and connection tests. At the start of charging, the LED strip which was initially green starts to pulse blue. If the vehicle is not ready for charging (e.g. the battery is full), a blue chase light runs up and down.

11.4 Stop charging

The vehicle has stopped the charging cycle automatically:

Action	Description
▶ Unlock the car if necessary.	LED: Blue chase light running up and down. Vehicle is connected, not charging.
▶ Unplug the charging coupling from the vehicle.	
▶ Lock charging coupling in the holder of the charging station.	

If the vehicle does not automatically stop the charging cycle:

Action	Description
▶ Stop charging cycle at vehicle.	Charging cycle is stopped. The LED changes to a blue chase light running up and down. Operating status N5.

11.5 Scan & Charge locking function

You can activate and deactivate the wall-box locking function in the Webasto Setup app. If you want to restrict access to the wall box for other users, deactivate "free charging" in the Webasto Setup app.

The Webasto ChargeConnect app then offers the option of enabling individual charging processes via the two Scan & Charge QR codes supplied, which are located under the protective film on your charging station when it is delivered.

Instructions for charging in the locked state:

1. Connect the Webasto Next charging cable to the socket on your vehicle. In the locked state, a charging process will not yet take place. The charging station shows a green chase light (N6).
2. Scan one of the supplied Scan & Charge QR codes using the corresponding function in the Webasto ChargeConnect app. The charging process will be enabled and will start. The charging station shows a pulsing blue light (N4).
3. After unplugging the charging cable at the end of the charging process, free use is locked once more. For a further charging process, repeat the steps.



NOTE

Green chase light running up and down

A green chase light on your charging station, which runs up and down, signals locked status.



NOTE

Printing out additional Scan & Charge QR codes

If you need additional Scan & Charge QR codes, you can print these out as described in chapter 4.1, "Printing additional "Scan & Charge" QR codes" on page 6.



NOTE

Storing QR codes

You can keep your QR codes in your wallet or in the entrance area of your home to enable charging processes in the locked state.

For more details see the Webasto ChargeConnect app (see chapter 8, "Installation and electrical connection" on page 8).

12 Decommissioning the product

Decommissioning shall be carried out only by a qualified electrician.

1. Disconnect the power supply and vehicle charging line.
2. Remove the cover of the connection area in the wall box.
3. Disconnect the terminals and threaded cable connections.
4. Remove all connection lines and communication lines.
5. Remove the retaining screw on the underside of the wall box.
6. Close the cover of the connection area in the wall box.
7. Lift the wall box of the mounting bracket.

Disposal: see chapter 15, "Disposal" on page 17.

13 Maintenance, cleaning, repair

13.1 Maintenance

Maintenance must be carried out by an electrician only, and in accordance with local requirements.

13.2 Cleaning



DANGER

High voltages.

Danger of fatal electric shock. Do not clean the charging station with running water.

- Clean the installation only with a dry cloth. Do not use aggressive cleaning agents, wax or solvents.

13.3 Repair

Unauthorised repair of the charging station is not permitted.

Webasto reserves the exclusive right to perform repairs to the charging station. It is only permitted for repairs to be carried out by an electrician using original spare parts sold by Webasto.

14 To replace the charging cable



DANGER

Danger of fatal electric shock.

- ▶ Switch off and secure the power supply to the charging station.



NOTE

Only use genuine Webasto parts.



NOTE

The charging cable may be replaced a **maximum of four times** during the service lifetime of the Webasto Next.



NOTE

If spare parts are required, please contact your installation engineer or get in touch with the Webasto hotline.

See chapter 8.3.2, "Replace the charging cable" on page 10.

15 Disposal



The symbol of the crossed-out waste bin indicates that this electrical/electronic device must not be disposed of in household waste at the end of its service life. Dispose of the device free of charge at a local collection point for electrical/electronic devices. Addressed can be obtained from your city or local authority. Separate collection of electrical and electronic devices enables re-use, material recycling or other forms of re-utilisation of waste equipment while also avoiding the negative effects of hazardous substances which may be contained in the devices on the environment and for human health.

- Dispose of packaging in corresponding recycling container in accordance with national regulations.

Austria:

The EAG-VO ordinance in Austria incorporated EU law on waste electronic and electrical equipment into national legislation. This ordinance ensures that private households have the opportunity to return waste electronic and electrical equipment (WEEE) to public collection points free of charge. It is no longer permitted to dispose of WEEE in mixed municipal waste; instead, these must be handed in at the designated collection points. This allows functioning equipment to be reused, or valuable constituent parts of broken equipment to be recycled. The aim of this is to contribute to more efficient use of resources and more sustainable development. Moreover, it is only through separate collection that hazardous elements of the equipment (such as CFCs or mercury) can undergo sufficient treatment, thereby avoiding negative impacts on the environment and human health. There are municipal and manufacturer systems available for return and collection of your waste household equipment free of charge. An overview of available collection points can be found on the following website: <https://secure.umweltbundesamt.at/eras/registerabfrageEAGSammelstelleSearch.do>. All household electronic and electrical equipment is marked with the symbol of a crossed-out wheeled bin. This equipment may be handed in at any collection point listed under the above link, and should not be disposed of with household waste.

16 Declaration of Conformity

The Webasto Next was developed, manufactured, tested and supplied in accordance with the relevant directives, regulations and standards for safety, EMC and environmental compatibility. Webasto Roof & Components SE hereby declares that the radio equipment type "Charging Station Webasto Next" conforms to Directive 2014/53/EU.

The full text of the EU declaration of conformity can be found at the following web address:

<https://charging.webasto.com/int/products/documentation>

17 Technical data


NOTE

The wall box is not suitable for 3-phase IT networks.

Description	Data
Rated current (A) (configurable connected load values)	16 or 32 Single-phase or 3-phase The charging station can be configured in 1 A increments
Mains voltage (V AC)	230 / 400 (Europe)
Grid frequency (Hz)	50
Network types	TN / TT (single- and 3-phase) IT (single-phase only) Split phase (L1+L2, no N)
EMC class	Emitted interference: class B (residential, business, commercial areas) Immunity: residential, business, commercial and industrial areas
Overvoltage category	III as per EN 60664
Protection class	I
Required protective devices	A residual current circuit breaker RCD of type A and line circuit breaker must be provided on the installation side as appropriate to the country
Integrated protective device	DC residual current protection 6 mA
Phase rotation	Automatic detection of faulty phase sequence
Fixation type	Wall and base mounting (permanently connected)
Cable feed	Mounted on-wall or in-wall
Power supply conductor cross section	Cross section of the connection cable (Cu) taking into account the local requirements and standards: <ul style="list-style-type: none"> ● rigid (min.-max.) 2.5-10 mm² ● flexible (min.-max.) 2.5-10 mm² ● flexible (min.-max.) with wire end ferrule: 2.5-10 mm²
Charging cable	Type 2 charging cable: up to 32 A / 400 V AC as per EN 62196-1 and EN 62196-2 Length: 4.5 m / 7 m
Output voltage (V AC)	230 / 400
Max. charging capacity (kW)	In 3-phase operation: 11 or 22 kW In 1-phase operation: 3.7 or 7.4 kW

Description	Data									
Authentication	<ul style="list-style-type: none"> ● "Scan & Charge" via QR code ● Webasto ChargeConnect Portal ● Webasto ChargeConnect App 									
Display	RGB-LED, buzzer									
Network interfaces	<ul style="list-style-type: none"> ● LAN (RJ45) – 10/100 Base-TX ● WLAN 802.11 b/g/n - 54 Mbit/s Client: 2.4 GHz and 5 GHz Access Point: 2.4 GHz ● WLAN Hotspot <table border="1"> <thead> <tr> <th>Transmission function</th> <th>Transmission frequency (GHz)</th> <th>Max. transmission line (max. EIRP) [dBm]</th> </tr> </thead> <tbody> <tr> <td>Wi-Fi (2.4 GHz)</td> <td>2.402 ... 2.480</td> <td>16</td> </tr> <tr> <td>Wi-Fi (5 GHz)</td> <td>5.180 ... 5.320 5.500 ... 5.700</td> <td>18</td> </tr> </tbody> </table> <p>EIRP = Effective Isotropic Radiated Power dBm = decibel-milliwatts</p>	Transmission function	Transmission frequency (GHz)	Max. transmission line (max. EIRP) [dBm]	Wi-Fi (2.4 GHz)	2.402 ... 2.480	16	Wi-Fi (5 GHz)	5.180 ... 5.320 5.500 ... 5.700	18
Transmission function	Transmission frequency (GHz)	Max. transmission line (max. EIRP) [dBm]								
Wi-Fi (2.4 GHz)	2.402 ... 2.480	16								
Wi-Fi (5 GHz)	5.180 ... 5.320 5.500 ... 5.700	18								
Communication protocols	OCPP 1.6 J (OCPP 2.0 ready), ModBus TCP									
External interfaces	<ul style="list-style-type: none"> ● Ripple control receiver via floating contact ● Energy management system (EMS) connection 									
Local load management	Dynamic (stand-alone) via incorporation of an external smart meter ^{*)}									

Description	Data	
Dimensions (W x H x D) (mm)	225 x 447 x 116	
Weight (kg)	11 kW	4.6 (inc. 4.5 m cable) 5.3 (inc. 7 m cable)
	22 kW	5.7 (inc. 4.5 m cable) 6.8 (inc. 7 m cable)
IP protection class, device	IP54	
Protection against mechanical impact	IK08	

Description	Data	
Installation location	No exposure to direct sunlight	
Operating temperature range (°C)	11 kW: -30 to +55 22 kW: -30 to +45	
Temperature behaviour	The charging current may be reduced or the charging station may be shut down to prevent it from overheating.	
Storage temperature range (°C)	-30 to +80	
Permissible relative humidity (%)	5 up to 95 Non-condensing	
Altitude (m)	max. 3,000 above sea level	
Standards and guidelines	<ul style="list-style-type: none"> ● CE conformity ● 2014/53/EU Radio Equipment Directive ● 2011/65/EU RoHS Directive ● 2001/95/EG Product Safety Directive ● 2012/19/EU Waste Electrical and Electronic Equipment Directive ● 1907/2006 REACH regulation 	
Back end integration	Webasto ChargeConnect; connection of third-party back ends via Webasto ChargeConnect in development	
Tested compatible energy management systems (EMS*)	Integration into various energy management systems (EMS*) in development	

* Automatically available via an online update from Q2 2022

18 Checklist for the installation of the Webasto charging station

Charging station	Webasto Next		
Charging power	11 kW <input type="checkbox"/>	22 kW <input type="checkbox"/>	
Serial number			
Material number			
System type	TN/TT <input type="checkbox"/>	IT <input type="checkbox"/>	Split phase <input type="checkbox"/>
General :			Applicable/ completed
Installation, electrical connection and initial operation of the charging station must be carried out by an electrician.			<input type="checkbox"/>
Local conditions:			
The charging station has not been installed in an explosion sensitive area (EX zone).			<input type="checkbox"/>
The charging station has been installed in a location where falling objects cannot damage the charging station.			<input type="checkbox"/>
The charging station has been installed in an area protected from direct sunlight.			<input type="checkbox"/>
Please underline the weather conditions on the installation date: sun, rain, overcast, snow or other _____.			<input type="checkbox"/>
The location of the charging station should be selected such that vehicles cannot inadvertently collide with it.			<input type="checkbox"/>
The legal requirements for electrical installations, fire protection, safety regulations and escape routes have been met.			<input type="checkbox"/>
The charging cable and coupling has been protected against coming into contact with external heat sources, water, dirt and chemicals.			<input type="checkbox"/>
The charging cable and coupling has been protected against being driven over, trapped, or any other mechanical hazards.			<input type="checkbox"/>
The customer/user was informed how the Webasto Next voltage is switched off with the installation-side protective devices.			<input type="checkbox"/>
Charging station requirements:			
The cable bushing for the mains lead and signal cable has been installed during installation.			<input type="checkbox"/>
The kink protection for the charging cable has been screwed onto the charging station and the rubber seal has been fitted correctly into the kink protection.			<input type="checkbox"/>
The appropriate charging cable (11 kW or 22 kW) has been connected to the charging station (as per type label) during installation. The strain relief clamp that ensures the charging cable has strain relief has been fitted. The specified torques have been observed. The charging cable has been connected as per the instructions.			<input type="checkbox"/>
Tools and installation remnants have been removed from the charging station before closing the cover.			<input type="checkbox"/>
The CP line is installed correctly.			<input type="checkbox"/>
The prerequisite of a clockwise phase sequence is met during installation.			<input type="checkbox"/>
The locally applicable test logs should be drawn up during initial start-up and a copy should be given to the customer.			<input type="checkbox"/>
Customer/client:			
Place:	Signature:		
Date:			
Electrician/contractor:			
Place:	Signature:		
Date:			

To request this Installation Documentation in another language, please locate and contact your local Webasto dealer. You can find your nearest dealer at: <https://dealerlocator.webasto.com/en-int>. To provide feedback (in English or German) on this document, please email the Tech Doc and Translation team: feedback2tdt@webasto.com

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