

# OPERATING INSTRUCTIONS

**Evaporative humidifier** 



#### PLEASE READ THESE OPERATING INSTRUCTIONS CAREFULLY BEFORE STARTING ANY WORK!

## Information on the operating instructions

These instructions enable the safe and efficient use of the evaporative humidifier B 600 Professional. The instructions are part of the humidifier and must be kept in the immediate vicinity of the unit and accessible at all times.

The user must have carefully read and understood these instructions before starting any work. The basic prerequisite for safe working is compliance with all the safety instructions and instructions for action given in this manual.

In addition, the local accident prevention regulations and general safety regulations for the area of use of the humidifier apply.

Due to continuous further developments, illustrations, functional steps and technical data may deviate slightly. Original operating instructions.

## Copyright protection

The contents of this manual are protected by copyright. Their use is permitted within the scope of use of the unit. Any other use is not permitted without the written consent of BRUNE Luftbefeuchtung Proklima GmbH.

#### **Customer service**

Address BRUNE

Luftbefeuchtung Proklima GmbH Schwarzacher Straße 13 74858 Aglasterhausen

Germany

Phone +49 (0) 6262 / 54 54 Fax +49 (0) 6262 / 32 55

E-mail mail@brune.info Web www.brune.info

## Table of contents

1. The B 600 evaporative humidifier	6.3 Cleaning work	27
1.1 General overview4	6.3.1 Monthly Cleaning	27
1.2 Touchdisplay 5	6.3.2 Change filter	29
1.3 Radio humidity transmitter 5	6.3.2.1 Change evaporation	29
1.4 Functional description 5	6.3.2.2 Change cleaning filter	31
2. Security 6	6.3.2.3 Insert activated charcoal cleaning filter	32
2.1 Symbols in this manual Safety instructions	6.3.3 Cleaning the water	33
2.2 Intended Use	6.3.4 Descaling the appliance	34
2.3 Symbols on the device	7. Recognise faults and rectify them	37
2.4 Safety and Dangers	7.1 Safety instructions for Troubleshooting	37
2.5 Responsibility of the operator	7.2 Fault indication	37
2.6 Personnel requirements	7.3 Error table	39
2.7 Environmental protection	7.4 Correct error	40
3. Transport and Storage	7.4.1 Replace pump	40
3.1 Safety instructions for transport and storage	7.4.2 Replace blower	42
3.2 Symbols on the packaging	8. Accessories	44
3.3 Storage of the packages	8.1 UV disinfection and lime conversion cartridge	44
3.4 Transport inspection	8.1.1 UV disinfection and lime conversion cartridge cleaning	45
3.5 Storage when not in use	8.1.2 Replace UV lamp	47
3.6 Transport humidifier	8.2 Automatic Water supply	49
4. Commissioning	8.3 Automatic Flushing device	
4.1 Safety instructions for initial commissioning	8.4 Safety catch basin	51
4.2 Requirements for the site	8.5 Safety water sensor	51
4.3 Putting the humidifier into operation for the first time 14	8.6 External Water monitor	51
5. Operating the humidifier	8.7 Water Fresh	52
5.1 Displays on the unit	8.8 Wlan/Wifi	53
5.2 Switching on and off	8.8.1 Wlan/Wifi Setup	53
5.3 Filling the water tank	8.8.2 Brune Control App	55
5.4 Set the desired humidity	8.8.3 Activate Brune WLAN / reset network settings	56
5.5 Setting the blower level	9. Spare parts	57
5.6 Radio humidity transmitter	9.1 Filter overview	57
5.7 Change menu settings	10. Dispose of humidifier	57
5.8 Operating modes	11. Technical Data	57
5.8.1 Air purifier mode	11.1 Dimensions and Weight	57
5.8.2 Humidifier mode	11.2 Connection values	58
5.8.3 Operating modes fixed value & timer	11.3 Operating conditions	58
6. Clean humidifier and maintain	11.4 Nameplate	58
6.1 Safety instructions for cleaning and care	Appendix	58
6.2 Cleaning schedule	Spare parts list	59

# 1. The B 600 evaporative humidifier

## 1.1 General overview

- 1. Filling opening (under glass plate)
- 2. Air outlet
- 3. Touch display (under glass plate)
- 4. Air inlet opening
- 5. Water tank

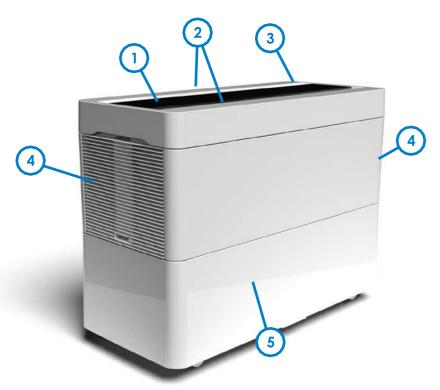
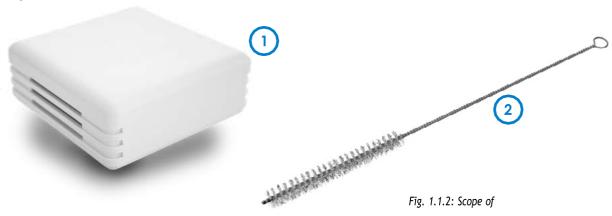


Fig. 1.1.1: Evaporative humidifier B 600

# Scope of delivery



Pos.	Number	Designation
Fig. 1.1.1	1	Evaporative Humidifier B 600
Fig. 1.1.2 (1)	1	Radio humidity transmitter
Fig. 1.1.2 (2)	1	Cleaning brush
	1	Operating instructions



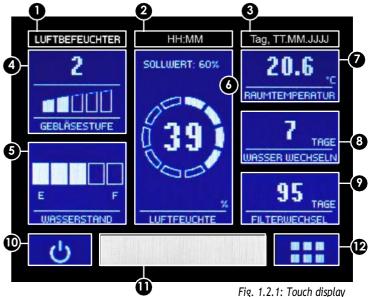
The batteries required for the radio humidity transmitter are not part of the scope of delivery! Two AA batteries are required.

## 1.2 Touchdisplay

The touch display provides information about the status of the unit. Among other things, it provides information about the current water level, the current actual and target humidity values and any faults in the unit.

All settings on the unit can be managed via the touch display. A smartphone connection via app is also possible.

Pos.	Explanation
1	Operating mode (humidifier/air purifier)
2	Time HH:MM
3	Date (Day, DD.MM.YYYY)
4	Current fan speed ☞ speed menu setting
5	Water level indicator
6	Setpoint & actual humidity in $\%$ ${}^{\smile}$ Setpoint humidity menu
7	Room temperature
8	Display next water change/ next cleaning
9	Display next filter change
10	Off and on switch: ♥ Submenu:  • Switch off  • System settings  • Lock touch display
11	Display Notes & Error Messages
12	∽ Menu



## 1.3 Radio humidity transmitter

The radio humidity transmitter controls the humidifier automatically. It measures the current air humidity and sends the value to the humidifier at three-minute intervals or if the humidity changes by more than  $2\,\%$ . In automatic mode, the fan speed is regulated according to the set humidity value.



Fig. 1.3.1: Radio humidity transmitter

## 1.4 Functional description

The B 600 humidifier works according to the natural principle of evaporation. A water pump continuously conveys water from the water tank (3) into the oval water channel (2). The water seeps through the drain holes inside the trough and moistens the evaporation filter (4). A fan (1) inside the humidifier draws in the air. This flows through the evaporation filter and is cleaned and humidified in the process. The humidified air is then released back into the room through the air outlet opening on the top (arrow).

The humidifier is filled manually via the filling opening under the glass plate. Optionally, the unit can also be connected to the local water supply. In this case, the humidifier is filled automatically and manual filling is not necessary (%chapter, 8. Accessories" on page 44). You have the option of operating the unit either as an air humidifier or air purifier. The units are delivered from the factory in humidifier mode. In air purifier mode, the unit is operated without water. The fan always runs and the water pump is deactivated (% chapter 5.8 "Operating modes").



Abb. 1.4.1: Operating principle

## 2. Security

This section provides an overview of all important safety aspects for the protection of persons and for safe and trouble-free operation. Further task-related safety instructions are contained in the sections on the individual life phases.

## 2.1 Symbols in this manual

#### Safety instructions

Safety instructions in this manual are marked by symbols. The safety instructions are introduced by signal words, expressing the extent of the hazard.



#### DANGER!

This combination of symbol and signal word indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



#### WARNING!

This combination of symbol and signal word indicates a possibly dangerous situation which can lead to death or serious injury if not avoided.



#### **CAUTION!**

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, may result in minor or slight injury.



#### NOTE!

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, may result in environmental and property damage.

## Safety instructions in handling instructions

Safety instructions can refer to specific, individual instructions for action. Such safety instructions are embedded in the handling instructions so that they do not interrupt the flow of reading when performing the action. The signal words described above are used.

#### Example:

- Loosen the screw.
- 2.



Carefully close the lid.

3. Tighten the screw.

#### Tips and recommendations



This symbol highlights useful tips and recommendations as well as information for efficient and trouble-free operation.

## Other markings

The following labels are used in this manual to highlight instructions, results, listings, references and other elements:

Labelling	Explanation
⇨	Step-by-step action instructions
₿	References to sections of this manual and to applicable documents
•	Listings without a fixed order

#### 2.2 Intended Use

The B 600 Professional evaporative humidifier is intended exclusively for humidifying room air in private and professional environments. Not intended for use in medical facilities!

Intended use also includes compliance with all the information in these instructions. Any use beyond the intended use or any other use is considered misuse.



#### **WARNING!**

#### Danger in case of misuse!

- Misuse of the evaporative humidifier B 600 Professional can lead to dangerous situations.
- Operate humidifier only with fresh, cold ordinary tap water (max. 150 CFU/ml).
- Only use additives approved by BRUNE Luftbefeuchtung Proklima GmbH.
- Never operate the unit in humidifier mode with an empty water tank.
- Never operate the appliance near open water sources.
- Only operate the unit on a stable and horizontal surface.
- Never expose the appliance to strong heat sources.
- Never cover the appliance.
- Never place objects on the humidifier. This applies in particular to electrical appliances or containers filled with liquid.
- Never place the appliance near furnishings that absorb water (e.g. curtains, wallpaper or carpets).
- Never operate the unit in an explosive environment.



#### **WARNING!**

#### Hygienic operation

When operated with clean fresh drinking water and according to this manual, the unit is safe to use for humidification. However, drinking water contains bacteria and microorganisms. To ensure hygienic and proper operation of the humidifier, regular water replacement and cleaning is essential. If this is not observed, it may cause health problems under certain circumstances. Therefore, always follow the cleaning instructions and keep your appliance clean and fresh.

## 2.3 Symbols on the device

The following symbols and information signs are attached to the unit. They refer to the immediate environment in which they are applied.



#### **WARNING!**

#### Danger if signage is illegible!

Over time, stickers and signs can become dirty or otherwise unrecognisable, so that hazards cannot be recognised and necessary operating instructions cannot be followed.

This creates a risk of injury.

- Keep all safety, warning and operating instructions in a legible condition at all times.
- Replace damaged signs or stickers immediately.



#### Sign "electrical voltage

Warning of dangerous electrical voltage.



#### Pull out mains plug" sign

Always unplug the appliance from the mains before cleaning or troubleshooting.



#### Fill here" sign

This plate marks the filling opening of the water tank. Only use this opening for filling the water tank.

## 2.4 Safety and Dangers

The humidifier is designed according to the state of the art and current safety requirements. Nevertheless, there are residual dangers that require prudent action. The residual dangers and the resulting behaviour and measures are listed below.

#### **Electric current**



#### **DANGER!**

## Danger to life due to electric current!

In case of contact with live parts, there is an immediate danger to life due to electric shock. Damage to the insulation or individual components can be life-threatening.

- Only allow work on the electronics to be carried out by qualified electricians.
- If the mains cable is damaged, switch off the humidifier immediately and arrange for repair.
- Damaged mains connection cables may only be replaced by the manufacturer or its customer service or a similarly qualified person.
- Keep moisture away from live parts. This can lead to a short circuit.
- Never immerse the unit in water.
- Never point the outlet at electrical appliances or sockets.
- Always lay the mains cable so that it cannot come into contact with sources of heat, moisture, oil, sharp objects, sharp edges, etc.
- Always disconnect the mains plug before cleaning and troubleshooting.
- Never touch the mains plug with wet hands.
- When pulling the mains plug, always pull on the plug, never on the cable.
- Never pull the unit by the cable.

#### Children



#### **WARNING!**

#### Risk of injury for children!

Children cannot assess the dangers when handling the humidifier. This can lead to serious injuries.

- Batteries and other small parts can be swallowed. Insert batteries immediately after receiving the humidifier or keep them out of reach of children.
- Packaging materials must not be used for play. There is an acute risk of suffocation. Dispose of packaging materials immediately or keep them out of reach of children.
- Always supervise children to ensure that they do not play with the appliance or use it as a climbing aid.

## **Poor cleaning**



#### **WARNING!**

#### Health hazard due to inadequate cleaning!

Poor cleaning can release bacteria and germs.

- Replace the evaporation filter after four months at the latest. If the ambient air is heavily contaminated, shorten the time interval accordingly.
- Always follow the cleaning intervals described in  $\$  "6.2 Cleaning schedule" on page 27.
- Empty the water tank completely at least once a week and refill the water tank.

## **Humidity too high**



#### **WARNING!**

#### Health hazard due to excessive humidity!

Air that is too humid promotes the formation of mould and harmful germs.

- In living rooms, do not exceed the recommended value of 50 60 % humidity.
  - To prevent damage to health, persons with asthma, respiratory diseases or lung complaints should consult a doctor before using the humidifier.
  - In case of respiratory problems possibly related to the use of the humidifier, stop using the humidifier immediately and consult a doctor.

#### Puddles of water



#### **CAUTION!**

#### Risk of injury from slipping in puddles of water!

Slipping in puddles of water in the floor area can lead to a fall. This can lead to injuries.

- Place the humidifier on a horizontal surface.
- Wipe up puddles of water immediately with a cloth.
- Regularly check the safety drip tray (optional accessory) and empty it if necessary.

#### Stumble



#### CAUTION

#### Risk of injury from tripping over the mains cable!

Careless laying of the mains cable can cause tripping hazards. These can lead to falls and injuries.

Lay the mains cable in such a way that there are no trip hazards.

## Wrong choice of location

## NOTE!

#### Risk of material damage due to incorrect placement of the humidifier!

If the humidifier is operated on floors that are not moisture-resistant, there is a risk of damaging them.

- Only place the humidifier on moisture-resistant floors.
- A safety drip tray to protect against leaking water (♥ "8.4 Safety drip tray" on page 51).
- Never place the appliance near furnishings that absorb water (e.g. curtains, wallpaper or carpets).

## 2.5 Responsibility of the operator

#### Operator

The operator is the person who operates the humidifier for commercial or economic purposes himself or who makes it available to a third party for use/application and who bears the legal product responsibility for the protection of the user, the personnel or third parties during operation. If the humidifier is used for commercial or economic purposes, the following operator obligations must be observed.

#### Operator duties

If the unit is used in the commercial sector, the operator is subject to the legal obligations for occupational safety.

In addition to the safety instructions in this manual, the safety, occupational health and safety and environmental protection regulations applicable to the area of use of the humidifier must be observed.

The following applies in particular:

- The operator must clearly regulate and define the responsibilities for installation, operation, troubleshooting and cleaning.
- The operator must ensure that all persons handling the unit have read and understood these instructions.
- The operator must provide the personnel with the required protective equipment and issue binding instructions for the wearing of the required protective equipment.
- The operator must ensure that the cleaning intervals described in these instructions are observed.

#### 2.6 Personnel requirements



#### **WARNING!**

#### Risk of injury if staff are not sufficiently qualified!

If unqualified persons carry out work on the humidifier, hazards arise which can cause serious injuries and considerable damage to property.

- All activities must only be carried out by qualified persons.
- Always keep unauthorised persons, especially children, away from the appliance.

This guidance identifies the staff qualifications listed below for the different areas of activity:

#### Operator

The operator uses and operates the unit within the scope of its intended use.

If the humidifier is used in a commercial or industrial environment, the operator must be instructed by the owner about the tasks assigned to him and possible dangers in case of improper behaviour. The operator may only perform tasks that go beyond operation during normal operation if this is specified in these instructions and the operator has expressly entrusted him with them.

#### Manufacturer

Certain work may only be carried out by specialist personnel of the manufacturer. Other personnel are not authorised to carry out this work. Contact our customer service department to carry out any work that may be required.

## Licensed electrician

Due to his many years of knowledge and experience as well as his knowledge of the relevant standards and regulations, the licensed electrician is able to carry out work on electrical systems and to independently recognise and avoid possible dangers. In addition, he must provide proof of his professional qualification, which certifies his ability to carry out work on electrical systems.

The licensed electrician must comply with the provisions of the applicable statutory accident prevention regulations.

#### Sanitation specialist

The sanitation specialist is trained and certified for the specific task area in which he/she works and knows the applicable standards and regulations.

Due to their professional training and experience, sanitary specialists are able to carry out work on all sanitary installations and to independently recognise and avoid possible hazards.

It must also provide evidence of its professional qualifications, certifying its ability to carry out work on sanitary installations.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance must not be carried out by children without supervision.

#### 2.7 Environmental protection



#### NOTE!

Danger to the environment due to incorrect handling of environmentally hazardous substances!
Incorrect handling of environmentally hazardous

Incorrect handling of environmentally hazardous substances, especially incorrect disposal, can cause considerable damage to the environment.

- Always observe the instructions below on handling and disposing of environmentally hazardous substances.
- If environmentally hazardous substances are accidentally released into the environment, take appropriate measures immediately. In case of doubt, inform the responsible local authority about the damage and ask for suitable measures

The following environmentally hazardous substances are used:

#### **Batteries**

Batteries contain toxic heavy metals. They are subject to hazardous waste treatment and must be handed in at municipal collection points or disposed of by a specialist

## 3. Transport and Storage

## 3.1 Safety instructions for transport and storage

## Improper transport



#### NOTE!

#### Material damage due to improper transport!

In case of improper transport, transport pieces can fall or topple over. This can cause considerable damage to property.

- When unloading the transport pieces on delivery, proceed carefully and observe the symbols and instructions on the packaging.
- Always transport parcels upright and never throw them.
- Do not remove the packaging until shortly before commissioning.
- Never transport the humidifier when it is full. Water may leak out and cause damage to the unit or to furnishings.

## 3.2 Symbols on the packaging

The following symbols are affixed to the transport packaging:



#### Fragile

Marks packages with fragile or sensitive contents.

Handle the package with care, do not drop it and do not subject it to shocks.



#### Protect from moisture

Protect packages from moisture and keep them dry.



#### Top

The arrowheads of the mark indicate the top of the package. They must always point upwards, otherwise the contents could be damaged.

## 3.3 Storage of the packages

Store packages under the following conditions:

- Do not store outdoors.
- Store in a dry and dust-free place.
- Do not expose to aggressive media.
- Protect from sunlight.
- Avoid mechanical shocks.
- Storage temperature: 5 to 40 °C (41 to 104 °F).
- Relative humidity: max. 55 %.
- If stored for longer than 3 months, regularly check the general condition of all parts and the packaging.

# 3.4 Transport inspection

Check the delivery for completeness and transport damage immediately upon receipt.

In case of externally visible transport damage, proceed as follows:

- not accept delivery or accept it only with reservations.
- Note the extent of damage on the transport documents or
- on the carrier's delivery note.
- Initiate a complaint.



Under certain circumstances, there may be instructions for storage on the packages that go beyond the requirements mentioned here. Observe these accordingly.



Complain about any defect as soon as it is detected. Claims for damages can only be asserted within the applicable complaint periods.

## 3.5 Storage when not in use

If the humidifier is taken out of operation for a longer period of time, proceed as follows:

Personnel:

- Operator
- ⇒ 1. Empty and clean the water tank (\$ ,,6.3.3 Cleaning the water tank" on page 33).
- ⇒ 2. Remove the evaporation filter (\$, "6.3.2.1 Changing the evaporation filter" on page 29).
- ⇒ 3. Clean the humidifier (\$,,6.3.4 Descale the unit" on page 34).
- ⇒ 4. Store the humidifier according to the instructions (♥ ,,3.3 Storage of packages" on page 12).

## 3.6 Transport humidifier

The humidifier has 4 castors on the underside. This allows the unit to be moved by pulling or pushing it. Observe the following points when moving the humidifier:

 Whenever possible, move the humidifier along the longitudinal axis. To do this, grasp the humidifier at the point marked in blue.



Fig. 3.6.1: Move humidifier



#### NOTE!

# Danger of material damage due to tipping of the humidifier!

If the humidifier is pushed backwards and forwards, there is a risk that the unit will tip over. This can cause damage to the unit or the floor.

- Move the humidifier along the longitudinal axis whenever possible.
- Always empty the water tank before changing location.

 If the humidifier is pushed backwards and forwards, grip the underside additionally.

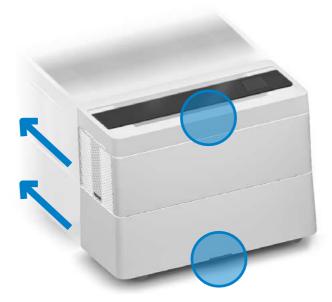


Fig. 3.6.2: Moving the humidifier forwards and

## 4. Commissioning

## 4.1 Safety instructions for initial commissioning



#### **DANGER!**

#### Danger to life due to commissioning of a defective unit!

Starting up a defective unit can lead to life-threatening situations and cause considerable damage to property.

- Never operate a defective unit.
- Always check the mains cable for damage.

## 4.2 Requirements for the site

In order for the humidifier to function properly, observe the following points when selecting a location:

- Place the humidifier on a flat, horizontal surface.
- Ensure that the circulation of the air is guaranteed. The air inlet opening and air outlet opening must not be covered.
- Do not place the humidifier in traffic routes or in the swing area of doors.
- The distance to other objects in the environment must be at least 10 cm (4 inches) to the side and at least 10 cm (4 inches) above.
- For optimal function, the unit can be placed near a heat source. However, direct temperature exposure should not exceed 70 °C (158 °F).

Additional safety measures must be taken for water-sensitive floors.

## 4.3 Putting the humidifier into operation for the first time

To put the humidifier into operation, proceed as follows:

## **Preparation**



Fig. 4.3.1: Removing the upper part of



Fig. 4.3.2: Removing the upper part of

Staff:

- Operator
- ⇒ 1. Lift the upper part of the humidifier housing upwards and put it aside.
- ⇒ 2. Visually inspect the unit for defects and correct seating of the filter.



#### NOTE

Make sure that the filter is positioned along the entire length of the water distribution inside the U-shaped rail. If individual fibres of the filter stick out, water could leak out of the appliance.

- ⇒ Remove the side cover.
- ⇒ Remove the radio transmitter and cleaning brush from the unit.
- $\,\Rightarrow\,\,$  Open the cable gland (1) and pass the mains cable through the opening.
- ⇒ Close the side panel again.
- $\Rightarrow$  Replace the upper part of the housing.

## NOTE!

There is a small notch in the cover of the cable guide. This is where the mains cable is inserted.



# Putting the radio humidity transmitter into operation



Fig. 4.3.3: Opening the cover

Staff: • Operator

⇒ 1. Carefully lift the cover of the radio humidity transmitter with a small screwdriver and remove it.



Fig. 4.3.4: Insert batteries

⇒ 2. Insert the appropriate batteries as shown in the illustration (1). The plus and minus poles are marked on both the circuit board and the batteries. The batteries are inserted correctly if these markings match.



The batteries required for the radio humidity transmitter are not part of the scope of delivery! Two AA batteries are required.

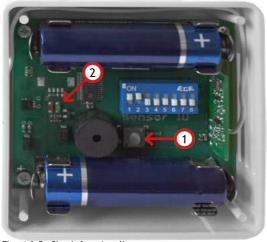


Fig. 4.3.5: Check functionality

- $\Rightarrow$  3. Check the radio humidity transmitter for proper functioning. To do this, press the black button (1).
  - → The diode (2) lights up briefly, the radio humidity transmitter is ready for operation. If a warning tone sounds, the batteries must be replaced.



#### NOTE!

The radio humidity transmitter is delivered precoded from the factory. If you want a different coding, you can change it at any time (\$\infty\$ chapter "5.6 Coding the radio humidity transmitter" on page 21).

## Putting the humidifier into operation



Fig. 4.3.6: Switching on the humidifier



Fig. 4.3.7: B 600 Start menu

## Staff: • Operator

- ⇒ 1. Connect the mains plug of the humidifier to the mains.
- ⇒ 2. Switch the humidifier on via on the touch display.
- ⇒ 3. Fill the water tank of the humidifier with tap water.
- $\Rightarrow$  Proceed according to the instructions (\$ ,5.3 Filling the water tank" on page 20).
- ⇒ 4. Enter the desired value for the air humidity via the "AIR HUMIDITY" menu item.
- ⇒ 5. Then adjust the fan speed using the fan menu\*.

## \*Open the fan menu:

- 1. Select the "Fan speed" button in the start menu
- 2. Open the main menu and select the menu item "FAN" on page 2

#### NOTE

entry of new values (fan speed, target humidity, etc.)

must always be confirmed with

#### 5. Operating the humidifier



This chapter only describes the operation of the standard version of the humidifier. For the operation of accessories, see chapter  $\mbox{\ensuremath{\lozenge}}$  "8. Accessories" on page 44.

## 5.1 Displays on the unit

## Display of the fan speed



Abb. 5.1.1: Fan speed display

The speed of the fan can be adjusted in eight steps. In addition, the unit has an automatic function. The fan speed is shown on the touch display. With the automatic function, the unit regulates the fan power automatically, depending on the required power. This means that the change in humidity is measured via the radio humidity transmitter and the fan power is increased or reduced accordingly.

\$ For more information, see chapter "5.5 Setting the fan speed" on page 21.

## Water level display



Fig. 5.1.2: Water level display

The water level is measured by a water level sensor in the water tank and shown on the touch display.

When the water supply has been used up and the lower level indicator is reached, the appliance switches off automatically. Due to its function, approx. 10 litres (2.5 gallons) of residual water remain in the appliance.

The message "WATER TANK EMPTY" appears on the display.

## Display setpoint/actual value humidity

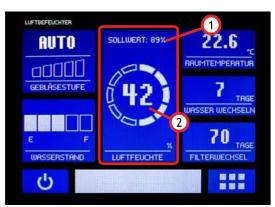


Fig. 5.1.3: Display setpoint & actual air

The setpoint value (1) corresponds to your preset humidity. This can be read in the centre field of your touch display.

The current actual value (2) is displayed directly below.

## Display current room temperature



Fig. 5.1.4: Display room temperature

The unit has a display of the current room temperature.

## Display water change



Fig. 5.1.5: Display next recommended water change

# (j)

interval of seven days.

#### NOTE:

The "CHANGE WATER" and "CLEAN UNIT" display always appear alternately for about 7 seconds.

The unit has a water change interval display. The interval can be individually adjus-

ted to the conditions on site in the main menu under the menu item "SER-

VICE" The units are delivered from the factory with a preset water change

## Device cleaning display



Fig. 5.1.6: Next recommended cleaning display

The unit has a display of the cleaning interval. The interval can be set individually to the conditions on site in the main menu under the menu item "SERVICE" . The units are delivered from the factory with a preset cleaning interval of 98 days.

## Filter change indicator



Fig. 5.1.7: Display next recommended filter change

The unit has a filter change indicator that shows when a filter change is necessary depending on the running time of the pump, the water hardness and the fan. In the best case, the filter needs to be changed after 98 days, in the worst case after 56 days. This is only a recommendation, which can be influenced positively or negatively by external influences (air pollution). Despite this indication, the evaporation and cleaning filters must be checked visually for signs of wear. To change the filter, see chapter  $\[ \]$  "6.3.2.1 Changing the evaporative filter" on page 29.

## Display notes and error messages



Fig. 5.1.8: Display notes & error messages

In the lower area of the touch display you will find a white field. Possible warning messages or notes are displayed here.

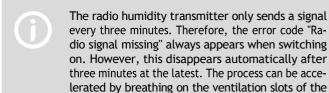
For an overview of the various messages, see chapter  $\mbox{\@mbox{$$^{$}$}}$  "7.2 Fault indication" on page 37.

## 5.2 Switching on and off

## Switching on



Fig. 5.2.1: Switching on the unit



Staff:

Operator

radio humidity transmitter.

- ⇒ 1. Make sure that the humidifier is properly connected to the mains.
- ⇒ 2. Fold the glass cover upwards.
- ⇒ 3. Press the [ON/OFF] button on the touch display.
  - → The humidifier is switched on.

#### Switch off



Fig. 5.2.2: Switching off the unit

## Staff: • Operator

- ⇒ 1. Press the [ON/OFF] button on the touch display (bottom left corner). A small selection menu opens.
- $\; \Rightarrow \;$  2. Select "POWER OFF" to switch the unit to standby mode.



#### DANGER!

#### Danger to life due to electric current!

The humidifier is not switched off, but is in standby mode. The unit is always supplied with power.

 Always unplug the appliance from the mains before cleaning or troubleshooting.

## 5.3 Filling the water tank

## Improper filling



#### DANGER!

# Danger of electric shock if filled improperly!

Improper filling can result in serious or fatal injury from electric shock.

· Carefully pour in the water.



Filling the water tank is not necessary for appliances with automatic water supply \$ Chapter "8.2 Automatic water supply" on page 49.

#### NOTE!

#### Risk of material damage if filled incorrectly!

Incorrect filling of the water tank can lead to faults in the water level indicator or to defects in the appliance. In addition, water may leak from the appliance and cause damage to property.

- Fill the water tank only with fresh, cold, ordinary tap water(max. 150 KBE/ml, 150 CFU/ml). Fill the water tank on aliquid-resistant surface.
- · Do not use flavourings.
- Make sure that no water is spilled and enters the unit.
- Completely empty and refill the water tank at least once a week.



Fig. 5.3.1: Opening the filler flap

## Staff: • Operator

- 1. Connect the mains plug of the humidifier to the mains supply and switch on the humidifier.
- $\Rightarrow$  2. Fold the glass cover upwards (1).
- ⇒ 3. Use a watering can to carefully fill the water tank (maximum 50 litres / 13.2 gallons).
- ⇒ 4. Close the glass lid again.



→ The water level display shows the current fill level (max. 5 bars).

#### 5.4 Set the desired humidity

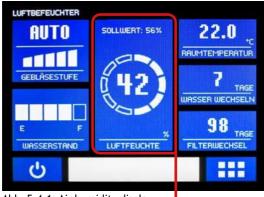


Abb. 5.4.1: Air humidity display



Fig. 5.4.2: Set target humidity

## Staff: • Operator

- ⇒ 1. Select the menu item "AIR HUMIDITY".
- $\Rightarrow$  2. Set the desired target humidity value with the buttons  $\checkmark$  and  $\checkmark$  .
- ⇒ 3. Confirm your entry with



## WARNING!

## Danger to health if the air is overhumidified!

Over humidification of the air promotes the formation of germs and mould.

It is recommended not to exceed 50 - 60 % humidity in living rooms.



The maximum adjustable humidity value is 90 %.

## 5.5 Setting the blower level

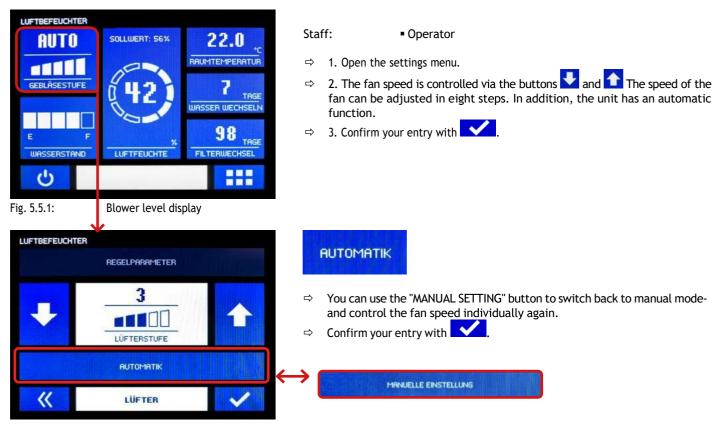


Fig. 5.5.2: Setting the fan speed

## 5.6 Radio humidity transmitter

The humidifier and the radio humidity transmitter are matched to each other via a code. The units are delivered from the factory already coded. However, when using two or more units that are in close proximity to each other (0-20 metres, 0-65 feet), different coding may be necessary. If several units are operated in one room, the following possibilities exist:

- Several units are operated with one sensor. For this purpose, all units must have the same coding.
- Each unit is controlled via a separate sensor. For this purpose, all units must be coded differently.



Fig. 5.6.1: Interior view of radio humidity transmitter



## DANGER!

#### Danger to life due to electric current!

There is an immediate danger to life from electric shock if live parts are touched.

• Pull out the mains plug before opening the appliance.

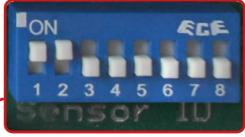


Fig. 5.6.2: Slider for coding

The sliders for the coding are located on the respective circuit boards of the units. For each slider there is only the position "ON = up" and "OFF = down". Accordingly, there are 256 different coding variants.



The coding of the humidifier and the corresponding radio humidity transmitter must match exactly. Otherwise the function is not guaranteed.

## **Encode radio humidity transmitter**



Fig. 5.6.3: Opening the cover

Staff: • Operator

⇒ 1. Carefully lift the cover of the radio humidity transmitter with a small screwdriver and remove it.



The electronics of the radio humidity transmitter are very sensitive. Take care not to touch the electronics or damage any components.

⇒ 2. code the radio humidity transmitter by adjusting the sliders (1) with a suitable non-metallic object.



3. Close the cover of the radio humidity transmitter



Fig. 5.6.4: Coding the radio humidity transmitter

#### Code humidifier



Fig. 5.6.5: Touch display



Fig. 5.6.6: Menu item "RADIO TRANSMITTER"

Staff: • Operator

- $\Rightarrow$  1. open the menu  $\blacksquare$ .
- $\Rightarrow$  2. select the radio humidity transmitter menu item  $\bigcirc$
- $\Rightarrow$  3. set the coding of the radio humidity transmitter in the humidifier.
- ⇒ 4. confirm your entry with
- $\Rightarrow$  5. Use the buttons  $\bigcirc$  and  $\bigcirc$  to return to the main menu.
- 6. Check the function of the system: To do this, carefully breathe into the housing of the radio humidity transmitter. The actual value displayed on the control panel changes. The radio humidity transmitter is ready for operation.

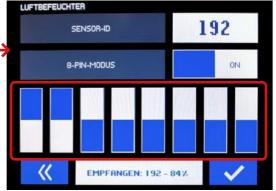




Fig. 5.6.7: Coding radio humidity transmitter

## 5.7 Change menu settings

The unit offers the possibility of making various settings according to one's own wishes, deviating from the factory settings. The visual representation of the menu is done via the touch display.

To change the menu setting, proceed as follows:



Fig. 5.7.1: Menu on/off

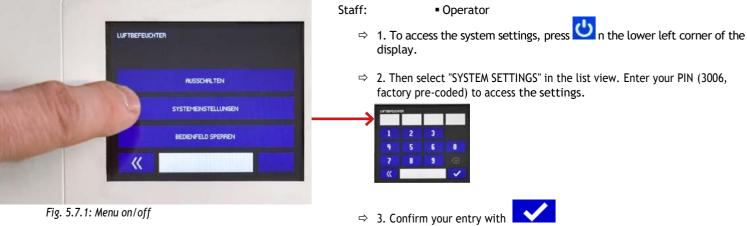




Fig. 5.7.2: System settings

The following settings can be managed here:

- UV lamp OFF/ON
- AWS (Automatic water supply) OFF/ON
- Flushing OFF/ON
- WLAN OFF/ON

If the parameters are set to "OFF", they are greyed out in the main menu and can no longer be called up and configured until this is enabled again in the system settings.

# The following table gives an overview of the menu structure.

Menu	Submenu	Description	Setting	Comment
Main menu	Operating mode	Setting the operating mode	<ul><li>Humidifier/Air Purifier</li><li>Fixed value/timer</li></ul>	The B 600 can be used both as a humidifier and as an air purifier. In addition to normal operation, the B 600 can also be operated via an integrated timer.
	Timer	Configuration of one or more timers for optimum adaptation of the humidifier to the conditions on site	By weekday and time (Mon- Sun)	The B 600 can be programmed by means of an integrated timer.
	Radio transmitter	Configuration of the radio transmitter	<ul><li>8-pin mode/4-pin mode</li><li>Coding</li></ul>	
	Filter change	Next recommended filter change (in days)	Reset to desired filter change interval (in days)	Interval individually adaptable to local conditions (0-98 days)
	Signal tone	Configuration of the individual signal tones	OFF/ON	<ul> <li>Water empty</li> <li>UV lamp defective</li> <li>Water sensor</li> <li>EEZ &gt; 50 L</li> <li>Radio signal missing</li> <li>Filling signal</li> </ul>
	Flushing	<ul><li>Configuration of the automatic flushing interval (in days)</li><li>Start manual flushing</li></ul>	<ul> <li>Automatic flushing:</li> <li>Rinse after X days</li> <li>Flushing time</li> <li>Manual flushing</li> <li>"Rinse now!"</li> </ul>	Only in combination with AWS (automatic water supply)
	Network	Connect to network	<ul><li>Network selection</li><li>Management of existing networks</li></ul>	
	Ext. operation	Operation via external circuit	OFF/ON	
	Fan	Setting the fan speed and switching between manual and automatic mode	<ul><li>Manual mode:</li><li>Level 1-8</li><li>Off</li><li>Automatic mode</li></ul>	
	Language	Setting the menu language	<ul> <li>German</li> <li>English</li> <li>Spanish</li> <li>French</li> <li>Russian</li> <li>Italian</li> </ul>	
	Date & time	Setting the date and time		Formats: Time = HH:MM Date = DD:MM:YYYY
	Service	Service interval display  Next recommended water change (in days)  Next recommended general cleaning (in days)		The number of days of the service intervals can be individually adapted to the conditions on site.
<mark>ம</mark>	Switch off	Unit is set to standby mode		
	System settings	<ul><li>UV lamp</li><li>AWS (automatic water supply)</li><li>Flushing</li><li>WLAN</li></ul>	OFF/ON	Access only with device PIN
	Lock touch display	Display lock, as protection against unauthorised access	Activation and deactivation of the display lock with the device PIN	Home panel with parameters can still be viewed

## 5.8 Operating modes

You have the option of operating the unit as a humidifier or air purifier. The units are delivered from the factory in humidifier mode. In air purifier mode, the unit is operated without water. The fan always runs, but the water pump is deactivated.

#### 5.8.1 Air purifier mode



Fig. 5.8.1.1: "OPERATION MODE" menu item

## NOTE!

Possible contamination of the unit and working environment during insertion of the activated carbon cleaning filter.

You have the option of operating the unit as a humidifier or air purifier. The units are delivered from the factory in humidifier mode.

#### Staff: • Operator

- ⇒ 1. In the main menu select the menu item "OPERATING
- ⇒ 2. Select the operating mode "AIR CLEANER".
- ⇒ 3. Confirm your selection with
- ⇒ 4. Remove the evaporation filter and replace it with the activated carbon cleaning filter (\$\&\text{chapter}\$ chapter "6.3.2.3 Inserting the activated carbon cleaning filter" on page 32).
- ⇒ 5. Replace the cleaning filters with the cleaning filters intended for the humidifier (\( \bar{b} \) chapter "6.3.2.2 Replacing the cleaning filters" on page 31).

In air purifier mode, the unit is operated without water. The fan is always running but the water pump is deactivated.

#### 5.8.2 Humidifier mode



Fig. 5.8.2.1: "OPERATION MODE" menu item

#### NOT

Clean the appliance thoroughly after removing the activated carbon cleaning filter. Activated carbon particles can get into the water circuit, which can clog water-carrying components in the appliance. Possible consequences may be reduced evaporation capacity and water leakage.

In humidifier mode, the unit is operated with water again as usual. The water pump is now active again.

Staff: • Operator

- ⇒ 1. in the main menu select the menu item "OPERATING MODE"
- ⇒ 2. Select the operating mode "AIR HUMIDIFIER".
- ⇒ 3. Confirm your entry with
- ⇒ 4. Replace the activated carbon cleaning filter with the evaporative filter(

  ⇔ chapter "6.3.2.1 Replacing the evaporative filter" on page 29).
- ⇒ 5. Replace the cleaning filters with the cleaning filters intended for the air purifier mode (♥ chapter "6.3.2.2 Replacing the cleaning filters" on page 31).

#### 5.8.3 Operating modes fixed value & timer



Fig. 5.8.3.1: "TIME SWITCH" menu item



Fig. 5.8.3.2: "TIME SWITCH" menu item

The B 600 offers you the option of controlling the humidification over time. In the factory setting, the unit is set to the desired target humidity value in fixed value mode and thus maintains the humidity in the desired humidity range. Alternatively, you can programme your B 600 with a timer. The unit then brings the humidity to the desired humidity at the desired time.

Staff: • Operator

- ⇒ 2. Set the desired time and fan level.
- ⇒ 3. Confirm your entry with

If you have selected the "TIME SWITCH" mode, you can configure the times under the menu item "TIME SWITCH" ( $\P$ ) see the following note).

# NOTE!

#### The B 600 humidifier works with switching times.

The timer setting works with switching times. When you set the desired level, the unit runs at the set level from the set time until the time when a new command is set. An end point must therefore be set.

**Example:** The unit runs in automatic mode, but should only run at level 1 in the time period from 2:00 p.m. to 4:00 p.m. because it should be as quiet as possible in the room. **Setting:** Switching point 0 = 2:00 p.m. level 1; switching point 1 = 4:00 p.m. level AUTO.

#### 6. Clean humidifier and maintain

## 6.1 Safety instructions for cleaning and care

#### Improper cleaning



## DANGER!

**Danger to life due to improper cleaning!** Improper cleaning of the humidifier can lead to serious or even fatal injuries.

- Always disconnect the mains plug before cleaning.
- Wear protective gloves and goggles when working with limescale remover.

#### NOTE!

## **Risk of material damage due to improper cleaning!** Improper cleaning of the humidifier can cause damage to the

Improper cleaning of the humidifier can cause damage to the unit as well as to the floor and furnishings.

- Do not use aggressive cleaning agents such as benzene, scouring agents or agents containing chlorine, which attack plastics.
- Always clean on a surface that is not sensitive to water.
- Make sure that no electronic components come into contact with water.
- Make sure that the unit is dry before putting it back into operation.

#### **Poor cleaning**



#### **WARNING!**

#### Health hazard due to inadequate cleaning!

Poor cleaning can release bacteria and germs.

- Replace the evaporation filter after four months at the latest. If the ambient air is heavily contaminated, shorten the time interval accordingly.
- Always adhere to the described intervals for cleaning (\$\\$\\$\\$\\$ chapter "6.2 Cleaning schedule" on page 27).
- Completely empty and refill the water tank at least once a week.

## Protective equipment

Protective gloves and goggles must be worn when working with limescale remover.



Chemical-resistant protective gloves Chemical resistant protective gloves are used to protect the hands from skin-irritating substances.



#### Safety goggles

The safety goggles are used to protect the eyes from splashes of liquid.

## 6.2 Cleaning schedule

	Interval *	Maintenance work	Staff
DE	daily	Check the water level. The appliance switches off automatically at a residual water level of approx. 15 litres (4 gallons) (not applicable with automatic water supply).	Operator
		Check the humidity value via the display on the control panel.	Operator
	weekly	Change the water and rinse the tank well.	Operator
MODE	monthly	Clean the humidifier thoroughly ( $\mbox{\ensuremath{\heartsuit}}$ chapter "6.3.1 Monthly cleaning" on page 27).	Operator
HUMIDIFIER !		Replace the evaporation filter ( $\$ chapter "6.3.2.1 Replacing the evaporation filter" on page 29).	Operator
		If necessary, remove limescale residues from the water tank ( $\mbox{$^{\diamondsuit}$}$ chapter '6.3.3 Cleaning the water tank' on page 33).	Operator
	annual	Perform basic cleaning of the appliance with limescale remover ( $\mbox{\ensuremath{\lozenge}}$ chapter "6.3.4 Descaling the appliance" on page 34).	Operator
		Clean the UV disinfection and lime conversion cartridge (optional accessory) ( $^{\circlearrowright}$ chapter "8.1.1 Cleaning the UV disinfection and lime conversion cartridge" on page 45).	Operator
ם	daily	Check the humidity value via the touch display.	Operator
MODE	monthly	Clean the unit thoroughly ( $\mbox{$^{\diamondsuit}$}$ chapter "6.3.1 Monthly cleaning" on page 27).	Operator
AIR PURIFIER	every 3-4 months	Replace the activated charcoal cleaning filter ( $^{\mbox{\ensuremath{\lozenge}}}$ chapter "6.3.2.3 Inserting the activated charcoal cleaning filter" on page 32).	Operator

<sup>\*</sup>The specified time intervals apply at normal water quality and normal dust accumulation in the air and may therefore vary.

## 6.3 Cleaning work

## 6.3.1 Monthly Cleaning



Fig. 6.3.1.1: Removing the upper part of the housing

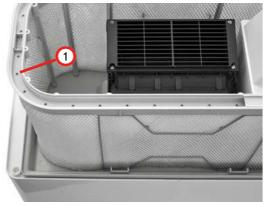


Fig. 6.3.1.2: Cleaning drain holes



Staff: • Operator

- $\Rightarrow\,$  1. Switch off the humidifier and unplug it from the mains. Turn off the water supply, if applicable.
- ⇒ 2. Lift the upper part of the humidifier housing upwards and place it to one side.
- ⇒ 3. Check the evaporation filter for dirt. Replace the evaporation filter if it is very dirty (\(\bigsir \) chapter "6.3.2.1 Replacing the evaporation filter" on page 29).

⇒ 4. Check the drain holes in the water distribution (1) for blockages. Remove residues such as limescale or dust with a needle, screwdriver or wet vacuum cleaner.



Fig. 6.3.1.3: Opening the side cover

- $\Rightarrow$  5. Open the side cover.
- ⇒ 6. Remove the cable grommet on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply



- 7. Lift the centre section out of the water tank and place it on the side surface.
- ⇒ 8. Empty the water tank.
- ⇒ 9. Clean the water tank with a sponge.



This is particularly necessary when using Waterfresh to avoid an over-concentration of biocides.



Fig. 6.3.1.4: Lifting off the middle section

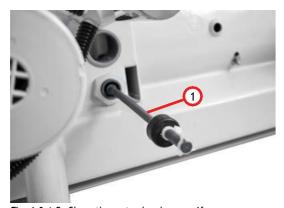


Fig. 6.3.1.5: Clean the water level sensor if necessary.



Fig. 6.3.1.6: Connection of power cable, if necessary AWS & flushing device

- ⇒ 10. Check the water level sensor (1) for dirt. If necessary, remove limescale and other residues with a cloth or sponge.
- $\Rightarrow$  11. Put the centre part back into the water tank.

- ⇒ 12. Thread the power cable back through the opening in the housing and reattach the cable grommet. If necessary, reconnect the automatic water supply and the automatic rinsing device.
- $\Rightarrow$  13. close the side panel.
- ⇒ 14. Replace the upper part of the housing.
  - → The monthly cleaning is finished.

## 6.3.2 Change filter

## 6.3.2.1 Change evaporation

#### Remove old filter



Fig. 6.3.2.1: Removing the upper part of the housing



Fig. 6.3.2.2: Remove filter bracket



Fig. 6.3.2.3: Filter removed



Replacement evaporative filters can be ordered from your local specialist dealer.

Order number:

- 1603: BIO filter B 600 (pack of 2)
- 1601: Foam filter B 600



WARNUNG! Gefahr durch Stromschlag bei nicht gezogenem Netzstecker!

Staff:

- Operator
- ⇒ 1. Switch off the humidifier and disconnect the mains plug. Turn off the water supply, if applicable.
- $\, \Rightarrow \, \, 2.$  Lift the upper part of the humidifier housing upwards and put it to one side.

⇒ 3. Press the filter bracket (1) together and unhook it.

⇒ 4. Unhook the filter from the fastening hooks (1). Then loosen and remove the filter along the water distribution.

#### Insert new filter

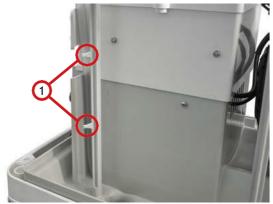


Fig. 6.3.2.4: Fixing the filter

- ⇒ 5. Insert the new filter and fix it along the water distribution.
- $\Rightarrow$  6. Fix the filter on both sides to the fastening hooks (1).



Fig. 6.3.2.5: Incorrect fit of the filter





Fig. 6.3.2.6: Inserting the clamping bracket

⇒ 7. Check that the filter is firmly seated in the water distribution rail and that no fibres are protruding.



Make sure that the filter is positioned inside the U-shaped rail along the entire length of the water distribution. If this is not the case, water may leak out of the unit.

⇒ 8. Replace the clamping bracket.



Ensure that the clamping brackets are correctly seated. The filter must not touch the housing as this may cause water to leak

⇒ 9. Replace the upper part of the humidifier housing.

## Filter change indicator



Fig. 6.3.2.7: Reset filter change indicator

- $\Rightarrow$  10. open the main menu  $\blacksquare$ .
- ⇒ 11. open the menu item "CHANGE FILTER".
- ⇒ 12. Reset the filter change indicator.
- ⇒ 13. Confirm your entry with



## 6.3.2.2 Change cleaning filter

In addition to the evaporation filter or activated charcoal cleaning filter, the B 600 humidifier has a coarse dust filter and a cleaning filter installed in each intake grille to remove coarse dirt from the intake air. We recommend a regular visual inspection.



Replacement cleaning filters can be reordered from your local specialist dealer. Order number (by operating mode): Fine dust filter set F7 (humidifier): 1620 Hepa filter set (air purifier): 1619



WARNING! Danger of electric shock if the mains plug is

#### Remove old filter



Fig. 6.3.2.2.1: Opening the intake grille



- ⇒ 1. Switch off the humidifier and unplug it from the mains.
- ⇒ 2. Open the intake grille (filter support) by folding the component away from the unit. The intake grille is held by two magnets. There is no need to open any release.



Cleaning filters are installed on both sides of the B 600. Changing the opposite filters is also done as described here.



Fig. 6.3.2.2: Loosening the retainer

- ⇒ 3. Remove the retaining rubbers from the intake grille.
- ⇒ 4. Remove the cleaning filter and the coarse filter.



Fig. 6.3.2.2.3: Inserting the cleaning filter set

⇒ 5. Insert the coarse filter (1).⇒ 6. Insert the cleaning filter (2).



Fig. 6.3.2.2.4: Fastening the retaining rubbers

- ⇒ 7. Insert the coarse filter (1).
- ⇒ 8. Insert the cleaning filter (2).

## 6.3.2.3 Insert activated charcoal cleaning filter

In air purifier operating mode, the evaporative filter is replaced by an activated carbon cleaning filter.



Replacement evaporative filters can be ordered from your local dealer (order number: 1625).



WARNING!
Danger of electric shock if the mains plug is not pulled out!

#### Remove old filter



Fig. 6.3.2.3.1: Remove evaporation filter

Staff: • Operator

- ⇒ 1. Switch off the humidifier and unplug it from the mains.
- ⇒ 2. Lift the upper part of the humidifier housing upwards and put it aside.
- ⇒ 3. Press the filter bracket together and unhook it.



Fig. 6.3.2.3.2: B 600 without filter

⇒ 4. Unhook the filter from the fastening hooks. Then loosen and remove the filter along the water distribution.



#### NOTE!

Possible contamination of the unit and the work environment during insertion of the activated carbon cleaning filter.

We re commend placing the activated charcoal cleaning filter on a surface that can be cleaned easily. If the filter mat is bent, activated charcoal particles may crumble out.



Fig. 6.3.2.3.3: B 600 with activated carbon cleaning filter

- ⇒ 5. Insert the activated carbon cleaning filter and fix it along the water distribution.
- $\Rightarrow$  6. Fix the filter on both sides to the fastening hooks (1).
- ⇒ 7. Check that the filter is seated in the water distribution rail.
- ⇒ 8. Replace the clamping bracket (2) on both sides.
- ⇒ 9. Replace the upper part of the humidifier housing.



#### NOTE!

Thorough cleaning must be carried out when you switch from air purifier mode to humidifier mode. Clean the appliance thoroughly after removing the activated carbon cleaning filter. Activated charcoal particles can get into the water circuit and clog waterbearing components in the appliance.



#### WARNING!

Possible problems due to inadequate cleaning! Particles of the activated carbon cleaning filter can get into water-bearing components due to inadequate cleaning. This can lead to reduced evaporation performance and water leakage. Activated carbon particles can be released into the air through the evaporation filter.

## 6.3.3 Cleaning the water





Fig. 6.3.3.1: Removing the upper part of the housing



Fig. 6.3.3.2: Opening the side cover



Fig. 6.3.3.3: Lifting off the middle section



Fig. 6.3.4.4: Connection of power cable, AWS & flushing device

Staff: • Operator

Protective equipment: • Chemical-resistant protective gloves

Safety googles

Materials: Limescale remover

- ⇒ 1. Switch off the humidifier and disconnect the mains plug. Turn off the water supply, if applicable.
- ⇒ 2. Lift the upper part of the humidifier housing upwards and put it to one side.
- $\Rightarrow$  3. Open the side cover.
- ⇒ 4. Remove the cable grommet on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply and flushing device.



- ⇒ 5. Lift the centre section out of the water tank and place it on the side surface.
- $\Rightarrow$  6. Empty the water tank.
- ⇒ 7. Clean the water tank with limescale remover. Allow the limescale remover to act briefly. Follow the instructions on the packaging of the limescale remover.
- $\, \Rightarrow \, 8.$  To avoid limescale remover residues, rinse the water tank thoroughly with tap water.

- ⇒ 9. Put the centre part back into the water tank.
- ⇒ 10. Thread the power cable through the opening in the housing and attach the cable gland. If necessary, reconnect the automatic water supply and the automatic flushing device (for AWS unit with flushing device).
- ⇒ 11. Close the side panel.
- ⇒ 12. Replace the upper part of the housing.

## 6.3.4 Descaling the appliance

## **Preparation**



WARNUNG! Gefahr durch Stromschlag bei nicht gezogenem Netzstecker!



Fig. 6.3.4.1: Removing the upper part of the housing

#### NOTE!

Risk of property damage due to the use of aggressive limescale removers! Aggressive limescale removers can cause damage to the appliance and its surroundings, for example to floors.

- Only use suitable limescale removers.
- Before descaling, follow the instructions on the packaging of the limescale remover.
- To achieve an optimal result, the use of the limescale remover (order number: 9016) from BRUNE is recommended.
- Place the appliance on a suitable non-sensitive surface for descaling.



Chemical-resistant protective gloves

Safety glasses

Materials: Limescale remover

- ⇒ 1. Switch off the humidifier and disconnect the mains plug. Turn off the water supply, if any.
- ⇒ 2. To prevent damage to the floor, place the humidifier on a moistureresistant floor.
- ⇒ 3. Lift the upper part of the humidifier housing upwards and put it
- ⇒ 4. Remove the evaporation filter (\$\&chapter\$ chapter "6.3.2.1 Changing the evaporation filter" on page 29).
- ⇒ 5. To avoid damaging the blower, disconnect the blower connector by pressing the connector clips and pull it out. Cover the fan with a foil or remove the fan (\$\&chapter\$ "7.4.2 Replacing the fan" on page 42).
- ⇒ 6. Replace the upper part of the housing.
- ⇒ 7. Add limescale remover diluted with approx. 10 litres (3 gallons) of water to the water tank according to the information on the packaging.
- ⇒ 8. Put the humidifier back into operation and let it run in this state for approx. 12 hours.

## Cleaning



Fig. 6.3.4.2: Removing the upper part of the housing



#### WARNING!

Danger of electric shock if the mains plug is not pulled out!

Staff: Operator

Chemical-resistant protective gloves Protective equipment:

Safety glasses

■ Limescale remover Materials:

- ⇒ 1. Switch off the humidifier and disconnect the mains plug. Turn off the water supply, if appl icable.
- 2. Lift the upper part of the humidifier housing upwards and put it to one side.
- $\Rightarrow$  3. Remove the cleaning brush from the side compartment.



Fig. 6.3.4.3: Opening the side cover

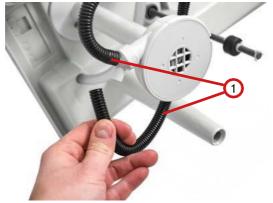


Fig. 6.3.4.4: Pulling off the pump hoses

- ⇒ 4. Open the side cover.
- ⇒ 5. Remove the cable gland (1) on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply (2) and flushing device (3).
- ⇒ 6. Lift the centre section out of the water tank and place it on the side
- ⇒ 7. Place a suitable container under the pump hoses to collect any residual water.

⇒ 9. Clean the pump hoses with the cleaning brush. Replace pump

hoses if they are heavily soiled or worn (order number: 1529).

Make sure that the pump hoses are tight. Otherwise there is a risk of water leaking



⇒ 8. Pull off the pump hoses (1).

⇒ 10. Reattach the pump hoses.



Fig. 6.3.4.5: Cleaning the pump hoses



 $\Rightarrow$  11. Clean the pump body (1) with a cloth.

out.



Fig. 6.3.4.6: Cleaning the pump body



Fig. 6.3.4.7: Opening the pump body

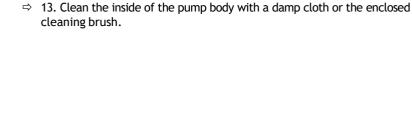


Dirt and limescale often also settle in the pump body around the pump blade, which means that the pump can no longer develop its full performance. We therefore recommend cleaning the inside of the pump body as well.

⇒ 12. Use a small slotted screwdriver to prise open the pump cover at the notch (1). Be careful not to damage any surrounding components.



Fig. 6.3.4.8: Pump body with open pump cover



 $\Rightarrow$  14. Once all impurities have been removed, the pump cover can be refitted. Press the pump cover onto the pump body. Make sure that the side with the flat surface is visible from the outside. If the pump cover is fitted



Fig. 6.3.4.9: Fitting the pump cover



incorrectly, the pump blade could block.





Fig. 6.3.4.10: Clean water level sensor

- ⇒ 15. WClean the water level sensor (1). Depending on the degree of contamination, use a sponge or fine-grained sandpaper.
- 16. To avoid limescale remover residues in the appliance, rinse thoroughly with tap water.
- ⇒ 17. Put the centre part back into the water tank.

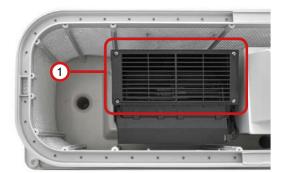


Fig. 6.3.4.11 Blower B 600

⇒ 18. vacuum the surface of the fan (1) with a hoover nozzle.

Fig. 6.3.4.12: Connection of power cable, AWS & flushing

- ⇒ 19. Thread the power cable back through the opening in the housing and reattach the cable grommet. If necessary, reconnect the automatic water supply and the automatic rinsing device.
- ⇒ 20. Close the side panel.
- ⇒ 21. Replace the upper part of the housing.

### 7. Recognise faults and rectify them

### 7.1 Safety instructions for Troubleshooting



#### DANGER!

### Danger to life due to improper troubleshooting!

Improper troubleshooting can result in serious injury or death.

- · Always disconnect the mains plug before troubleshooting.
- Only remedy the faults yourself that are described below.
  - → For all other problems, contact the manufacturer.

### 7.2 Fault indication

The B 600 Professional evaporative humidifier has an independent monitoring system that makes it possible to quickly and reliably detect faults and react accordingly.



Fig. 7.2.1: Fault display on the touch display

If there is a fault, it is indicated via the fault message display on the touch display. The fault display can be combined with an acoustic signal. This means that a beep also sounds. This setting can be selected independently by the user. See  $\mbox{\ensuremath{$\mbox{$}}}$  chapter "5.7 Changing menu settings" on page 24 (table)..

## **Error display**

The following table shows the problems that may occur and the corresponding solutions to the problem.

Error display	Remedy	Staff
Water tank empty.	<ul> <li>Check the water level. Fill the water tank if necessary (♥ chapter '5.3 Filling the water tank' on page 20).</li> <li>If an automatic water supply is used, check that it is working properly.</li> </ul>	Operator
UV lamp defective (optional accessory).	■ Replace the UV lamp (∜ chapter "8.1.2 Replacing the UV lamp" on page 47).	Operator
Water leakage detected (only possible with external water sensor [optional accessory]).	<ul> <li>Check the correct fit of the filter.</li> <li>Check that the unit is standing on a level surface.</li> <li>If an automatic water supply is used, check it for leaks and functionality.</li> <li>Check the water tank for leaks.</li> </ul>	Operator
Water tank too full (only possible with automatic water supply [optional accessory]).	<ul> <li>Check that the solenoid valve is functioning properly.</li> <li>Check water level sensor for dirt and clean if necessary (♥ chapter</li> <li>"6.3.1 Monthly cleaning" on page 27).</li> </ul>	Operator
Radio signal missing. The receiver on the touch display has not received a signal from the radio humidity transmitter for some time.	<ul> <li>Check the functionality of the radio humidity transmitter. Replace the batteries if necessary (♥ chapter "5.6 Coding the radio humidity transmitter" on page 21).</li> <li>Check the coding of the radio humidity transmitter (♥ chapter "5.6 Radio humidity transmitter cod ing" on page 21).</li> <li>Reduce the distance between the radio humidity transmitter and the humidifier. Concrete and steel walls can impair reception.</li> </ul>	Operator
Refilling time	<ul> <li>Safety shut-off of the solenoid valve; no water runs into the appliance.</li> <li>Switch off the humidifier and disconnect the mains plug. Then reconnect the mains plug and switch the appliance on again.</li> </ul>	Operator
Fan	<ul> <li>Safety shutdown</li> <li>Switch off the humidifier and disconnect the mains plug. Then reconnect the mains plug and switch the appliance on again.</li> </ul>	Operator

### 7.3 Error table

If there is no error and the unit still does not work properly, check the following points:

Error description	Cause	Remedy	Staff
No function, humidifier does not start.	Unit not switched on.	Switch on the unit $\$ chapter "5.2 Switching on and off" on page 19).	Operator
	Unit not connected or not connected correctly.	Make sure that the mains plug of the humidifier is connected to the mains.	Operator
Empty water tank"	Water level too low.	Refill water $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Operator
error	Water level sensor dirty.	Clean the water level sensor \$\&\pi\$ chapter "6.3.4 Descale the appliance" on page 34).	Operator
The humidifier is switched on, but the fan does not start.	The humidity of the air is higher than the set target humidity.	If necessary, change the setpoint $\mbox{\ensuremath{$^\circ$}}$ chapter "5.4 Setting the desired air humidity" on page 20).	Operator
	Fan defective.	Replace fan ♥ chapter "7.4.2 Replace fan" on page 42.	Operator
	Connector of the fan is defective.	Check plug connection and cable. Replace if necessary.	Licensed electrician
The unit is running, but there is no water	Pump hoses not properly attached or dirty.	Clean the pump hoses or fit them correctly $\mbox{\ensuremath{$^\circ$}}$ chapter "6.3.4 Decalcifying the unit" on page 34).	Operator
in the water distribution system.	Lime conversion cartridge (optional accessory) clogged.	Clean the limescale conversion cartridge \$\&\psi\$ chapter "8.1.1 Cleaning the UV extraction and limescale conversion cartridge" on page 45).	Operator
	Pump defective.	Replace pump 🔖 chapter "7.4.1 Replace pump" on page 40).	Operator
Water gutter overflows.	Drain holes are blocked.	Clean the water distribution and drain holes $\$ chapter "6.3.1 Monthly cleaning" on page 27).	Operator
Water leaks from the	Water tank leaks.	Check the water tank for damage.	Operator
appliance.	The unit is crooked.	Check location and adjust if necessary ∜ chapter "4.2 Requirements for the location" on page 14).	Operator
	Filter is used up.	Replace the filter $\mbox{\ensuremath{^\circ}}$ chapter "6.3.2.1 Replacing the evaporation filter" on page 29).	Operator
	Filter not inserted correctly.	Check the fit of the filter. Make sure that the filter does not touch the housing and that no fibres are sticking out.	Operator
	Pump hoses not properly attached or dirty.	Fit the pump hoses correctly, clean if necessary $\$ chapter "6.3.4 Descaling the appliance" on page 34).	Operator
Automatic water sup- ply (optional accessory) does not fill up with water.	Automatic water supply (optional accessory) defective.	Have the automatic water supply repaired by a plumbing specialist or by the manufacturer's specialist personnel.	Sanitary specialist / manufact urer
Automatic water supply (optional sup-	Solenoid valve does not close.	Check the water level sensor for dirt and clean if necessary \$\infty\$ chapter "6.3.1 Monthly cleaning" on page 27).	Operator
ply) runs continuously.	Solenoid valve defective.	Have the solenoid valve replaced. To do this, contact the local trade partner.	Licensed electrician
Water monitor (optional accessory) gives an acoustic signal.	Water has leaked out.	Find and eliminate the cause, clean the tank. Then disconnect the water monitor from the mains for a few seconds.	Operator
Radio humidity transmitter gives acoustic signal.	Batteries in the radio humidity transmitter empty.	Replace batteries.	Operator
Automatic flushing device is running.	Drain positioned too low	Set the drain higher $\$ "8.3 Automatic flushing s y s t e m " on page 50).	Operator
Newly inserted batteries do not work.	Batteries were inserted incorrectly - polarity not observed	Insert the batteries correctly $\mbox{\ensuremath{$\psi$}}$ chapter "4.3 Putting the humidifier into operation for the first time" on page 14).	Operator
Fan error display	Fan blocked	Switch off the humidifier and unplug it from the mains. Check the fan for objects that could block the fan wheel.	Operator

#### 7.4 Correct errors

### 7.4.1 Replace pump

### Remove old pump



Fig. 7.4.1.1: Removing the upper part of



Fig. 7.4.1.2: Opening the side cover



Fig. 7.4.1.3: Remove centre part



Fig. 7.4.1.4: Putting down the centre part sideways



A new pump can be ordered from your local dealer (order no. 1521).



WARNING!

Danger of electric shock if the mains plug is not pulled out!

Staff: • Operator

- ⇒ 1. Switch off the humidifier and disconnect the mains plug. Turn off the water supply, if any.
- ⇒ 2. Lift the upper part of the humidifier housing upwards and put it to one side.
- $\Rightarrow$  3. Open the side cover.
- ⇒ 4. Remove the cable gland (1) on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply (2) and flushing device (3).



⇒ 5. Lift the centre section out of the water tank.

- ⇒ 6. put the middle part to the side.
- $\Rightarrow$  7. Place a suitable container under the pump hoses to collect any residual water.



Fig. 7.4.1.5: Pulling off the pump hoses



Fig. 7.4.1.6: Loosening the water pump

 $\Rightarrow$  9. loosen the water pump in the direction of the arrow to the right and pull it out carefully.

⇒ 8. Pull off the pump hoses.



Fig. 7.4.1.7: Loosening the plug connection

 $\Rightarrow$  10. Disconnect the connector (1) in the cable shaft under the touch display.

### Insert new pump



Fig. 7.4.1.8: Attach the pump

- $\Rightarrow$  11. Connect the plug connection of the new pump.
- ⇒ 12. Insert the water pump into the opening and turn it to the left in the direction of the arrow until it engages and is firmly seated.
- $\Rightarrow$  13. Take care not to crush the pump cable when inserting it.



Fig. 7.4.1.9: Attach pump hoses



Fig. 7.4.1.10: Connection of power cable, if necessary AWS &

⇒ 14. Reattach the pump hoses.



Make sure that the pump hoses are tight. Otherwise there is a risk of water leaking out.

- ⇒ 15. Place the centre section in the water tank.
- ⇒ 16. Thread the power cable through the opening in the housing and attach the cable grommet. If necessary, connect the automatic water supply and the automatic flushing device.
- $\Rightarrow$  17. close the side panel.
- ⇒ 18. Put on the upper part of the housing.

### 7.4.2 Replace blower

#### Remove old blower



Fig. 7.4.2.1: Removing the upper part of the housing



Fig. 7.4.2.2: Opening the side cover



A new blower can be ordered from your local dealer (order number: 1595).



#### **WARNING!**

Danger of electric shock if the mains plug is not pulled out!

#### Staff:

- Operator
- ⇒ 1. Switch off the humidifier and unplug it from the mains.
- ⇒ 2. Lift the upper part of the humidifier housing upwards and put it to one side.
  - → The fan is located in the centre section next to the touch display.
- $\Rightarrow$  3. Open the side cover.
- ⇒ 4. Remove the cable grommet on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply and flushing device.





Fig. 7.4.2.3: Remove centre part

 $\Rightarrow$  5. Lift the centre section out of the water tank and place it to the side.

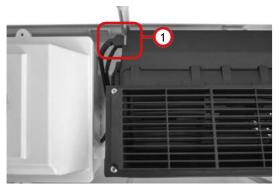


Fig. 7.4.2.4: Loosening the fan plug

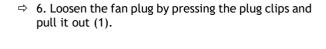




Fig. 7.4.2.5: Loosening the screw

⇒ 7. Loosen the three screw connections on the underside counterclockwise and unscrew them completely (1).



### NOTE!

Make sure that the fan does not fall out after loosening the screws.

⇒ 8. Remove the fan.

#### Insert new blower



Fig. 7.4.2.6: Connecting the fan plug

- $\Rightarrow$  9. Insert a new blower.
- ⇒ 10. Insert the screw threads on the vibration dampers through the holes in the centre plate.
- $\Rightarrow$  11. Screw the fan to the underside of the centre section.
- ⇒ 12. Connect the fan plug (1).
- $\Rightarrow$  13. Place the centre section in the water tank.



Fig. 7.4.2.7: Connection of power cable, AWS & flushing device

- ⇒ 14. Thread the power cable through the opening in the housing and reattach the cable grommet. If necessary, connect the automatic water supply and the automatic flushing device.
- $\Rightarrow$  15. close the side panel.
- ⇒ 16. Put on the upper part of the housing.

#### 8. Accessories

The accessories that can be ordered in addition to the standard version of the humidifier are described below. Some accessories may only be installed by the manufacturer. In this case, contact the manufacturer.



#### WARNING! Risk of injury due to the use of incorrect accessories!

The use of incorrect or faulty accessories can be dangerous for the user and cause damage, malfunctions or total failure.

- Only use original accessories from BRUNE Luftbefeuchtung Proklima GmbH or accessories approved by the manufacturer.
- If you are unsure, always contact our service department.

### 8.1 UV disinfection and lime conversion cartridge



#### WARNING!

#### Health hazard due to toxic mercury vapour!

The tube of the UV lamp contains toxic mercury. If the mercury vapours are inhaled, there is an acute danger of poisoning.

- When changing the UV lamp, always proceed carefully and do not damage the UV lamp.
- Never dispose of the UV lamp in household waste. Contact your local authority or specialist waste disposal company for information on environmentally friendly disposal.



#### Order numbers:

- UV lamp: 1107
- Lime conversion cartridge: 1725



#### Prerequisite:

The installation of the UV disinfection system is carried out exclusively by the manufacturer.

#### **Description**

Irradiating the water with UV light kills germs and microorganisms in the water. The humidifier water is disinfected and returns to the water circuit of the unit with a reduced germ count.

In addition, the appliance is equipped with a lime conversion cartridge, which changes the molecular structure of the lime in such a way that it can no longer be deposited on surfaces in the appliance.

### 8.1.1 UV disinfection and lime conversion cartridge cleaning

#### **UV** disinfection clean

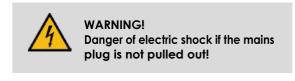




Fig. 8.1.1.1: Removing the upper part of the housing



Fig. 8.1.1.2: Opening the side cover



Fig. 8.1.1.3: Remove centre part



Fig. 8.1.1.4: UV disinfection

- Staff: Operator
- Protective equipment: Chemical-resistant protective gloves
  - Safety goggles

Materials: Limescale remover

- ⇒ Switch off the humidifier and unplug it from the mains.
- ⇒ Lift the upper part of the humidifier housing upwards and put it to one side.
- $\Rightarrow$  3. Open the side cover.
- ⇒ 4. Remove the cable gland (1) on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply (2) and flushing device (3).



- ⇒ 5. Remove the side panel and remove/disconnect the power cable and, if necessary, the connections for the automatic water supply.
- $\Rightarrow$  6. Lift the centre section out of the water tank.

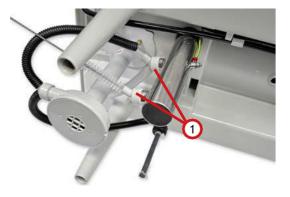
- → The UV disinfection unit is located below the centre plate next to the pump (1).
- ⇒ 7. Check the stainless steel pipe for damage and contamination. If necessary, remove contamination with a cloth and lime remover.



Fig. 8.1.1.5: Cleaning the pump hoses

⇒ 8. Pull the pump hoses off the stainless steel pipe and clean them with the cleaning brush. Replace the pump hoses if they are very dirty or worn.

⇒ 9. Clean the plastic Y-piece (1) carefully with the cleaning brush.





#### WARNING!

If the UV lamp inside the stainless steel tube is damaged, toxic

⇒ 11. Reattach the pump hoses to the stainless steel pipe.



#### Prerequisite:

Make sure that the pump hoses are tight. Otherwise, there is a risk of water leaking out.

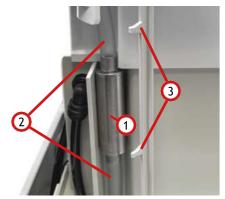


Fig. 8.1.1.7: Lime conversion cartridge

### Cleaning the lime conversion cartridge

- ⇒ 1. The limescale conversion cartridge (1) is located on the right-hand side between the water guide and the centre plate. To remove the cartridge, first detach the evaporation filter from the retaining lugs (3) and fold it slightly to the side.
- ⇒ 2. Pull off the pump hoses (2) and remove the lime conversion cartridge.



Fig. 8.1.1.8: Cleaning the lime conversion cartridge

- ⇒ 3. Check the passage of the cartridge for dirt. Remove contamination with the cleaning brush. If there is a lot of dirt, remove it with a screwdriver or drill (maximum diameter 7 mm).
- ⇒ 4. Attach the pump tubing to the lime conversion cartridge.
- ⇒ 5. Place the centre section in the water tank.
- ⇒ 6. Thread the power cable through the opening in the housing and reattach the cable grommet. If necessary, connect the automatic water supply and the automatic flushing device.
- ⇒ 7. Cose the side panel.
- ⇒ 8. Put on the upper part of the housing.



Make sure that the pump hoses are tight, otherwise water could leak out.

### 8.1.2 Replace UV lamp

The UV lamp is located under the centre plate next to the pump motor. To replace it, proceed as follows:

#### NOTE!

# Material damage due to incorrect touching of the UV

The UV lamp is very sensitive. Touching the glass body can greatly reduce its service life. Stains burn into the quartz glass and lead to early failures.

- Only touch the white end pieces of the UV lamp.
- Do not touch quartz glass with bare hands.
- Carefully remove stains with a clean cloth soaked in alcohol.
- Always remove the UV lamp slowly and carefully.



#### **WARNING!**

### Health hazard due to toxic mercury vapour!

The tube of the UV lamp contains toxic mercury. If the mercury vapours are inhaled, there is an acute danger of poisoning.

When changing the UV lamp, always proceed carefully and do not damage the UV lamp.



Injury to the eyes due to ultraviolet radiation! Unfiltered, direct and indirect UV radiation can cause damage to the skin and eyes.

Never look into the light of the burning lamp.



WARNING! Danger of electric shock if the mains plug is not pulled out!



Fig. 8.1.2.1: Removing the upper part of the housing

- Staff: Operator
  - ⇒ 1. Switch off the humidifier and unplug it from the mains.
  - $\Rightarrow$  2. Lift the upper part of the humidifier housing upwards.



Fig. 8.1.2.2: Opening the side cover

- ⇒ 5. Lift the middle part of the humidifier out of the lower part of the unit and place it on its side.



Fig. 8.1.2.3: Remove centre part

- ⇒ 4. Remove the cable gland (1) on the back of the unit and thread the power cable through the opening in the housing.
  - → If necessary, disconnect the connections for the automatic water supply (2) and flushing device (3).



Fig. 8.1.2.4: Disconnect connections



Fig. 8.1.2.5: Remove UV disinfection housing



Fig. 8.1.2.6: UV lamp in quartz glass tube.

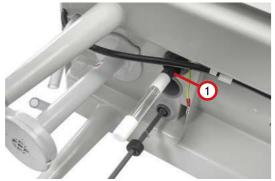


Fig. 8.1.2.7: UV lamp without quartz glass tube.



Fig. 8.1.2.8: UV disinfection unit, complete

- ⇒ 6. Disconnect the tubes from the UV lamp housing.
- $\Rightarrow$  7. Remove the earth cable (2).





⇒ 8. Remove the metal housing around the UV lamp. To do this, turn the metal tube anticlockwise. Then carefully pull off the housing.



#### WARNING!

If the UV lamp inside the stainless steel tube is damaged, toxic mercury vapours may escape!

9. the UV lamp is in an additional quartz glass tube. Remove this by turning the bayonet catch counterclockwise (1). The glass tube can then be removed.



#### WARNING!

If the quartz tube is damaged, glass fragments are produced which can cause cuts. Handle the component with care.

- ⇒ 10. Pull the UV lamp out of the connection socket (1). Only hold the UV lamp by the end pieces.
- ⇒ 11. Plug the new UV lamp into the four-pole connection socket (1).

 $\Rightarrow\;$  12. The UV disinfection unit can now be reassembled. To do this, follow the steps in reverse order.

#### 8.2 Automatic Water supply

Connecting the humidifier to the local water supply eliminates the need for manual filling. Refilling is done by an electronically controlled solenoid valve. This automatically opens the water supply when a minimum water level is reached and stops it as soon as the water tank is full. The unit is set to a maximum fill level of 30 litres (7.9 gallons). This means that when the fill level of 30 litres (7.9 gallons) is reached, the water supply is stopped.

The following additional accessories are recommended for safety:

- Safety catch basin
  - ♦ Chapter "8.4 Safety catch basin" on page 51
- Safety water sensor
  - ♦ Chapter "8.5 Safety water sensor" on page 51)
- External water monitor
  - ♦ Chapter "8.6 External water monitor" on page 51)

#### Operation

The water supply is controlled via the water level sensor of the water level indicator. For the water supply to function properly, it is therefore necessary to clean the water level sensor every month and remove any limescale deposits ( $\mbox{\ensuremath{$^\circ$}}$  chapter '6.3.1 Monthly cleaning' on page 27).

#### Safety devices

To prevent overfilling, the appliance switches off automatically when the fill level reaches 30 litres (7.9 gallons). An acoustic warning signal sounds and the error message appears on the touch display. If the water supply is defective and the water level does not change after 10 minutes despite the solenoid valve being open, the process is aborted and the error message "Refill time" appears on the touch display.

#### Information for the sanitary specialist

Staff:

- Sanitation specialist
- ⇒ 1. To prevent contamination of the solenoid valve, flush the line thoroughly before connecting it.
- ⇒ 2. Connect the humidifier to the water supply system in accordance with the regulations of the local water supply company. Pay particular attention to the following points:
  - The material used or the connection must comply with the requirements of the IEC 61770 standard.
  - Only use new hoses. Hose sets that have already been used must not be reused.
  - Always observe the regulations of the local water supply company. A system separator may have to be used.
  - For a sketch with the dimensions of the connection see Fig. 8.3.1



Order numbers: 1800

#### Requirements

 The automatic water supply is installed exclusively by the manufacturer. The connection to the local water supply system may only be carried out by an approved sanitary specialist.



#### WARNING!

Risk of injury due to unauthorised connection of the humidifier to the local water supply system!

Connecting the humidifier to the local water supply system involves dangers that are not obvious to a layman.

 Only have the humidifier connected to the local water supply system by an authorised plumbing specialist.



The following information is intended exclusively for the sanitary specialist who connects the humidifier to the local water supply network.



#### NOTE!

Risk of property damage due to excessive water pressure!

If the water pressure of the local water supply network is too high, there is a risk that the humidifier will be damaged.

 The maximum water pressure must not exceed 1 MPa (145 Psi).

#### 8.3 Automatic Flushing device

The automatic rinsing device is used to replace the residual water in the water tank at regular intervals and to add fresh water. It is only possible in combination with the automatic water supply; water exchange by hand is not necessary.



**Requirements** 

- Automatic water supply
- The installation of the automatic flushing device is carried out exclusively by the manufacturer. The connection to the local water supply system may only be carried out by an approved plumbing spe-

#### Operation

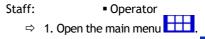
The water exchange can be started manually. To do this, proceed as follows:



Staff: • Operator

- ⇒ To start the rinse function manually, select the menu item "RINSE" the main menu
- ⇒ Press the "RINSE NOW!" button. The rinsing process begins.

In addition to starting manually, the flushing device can be programmed to automatically replace the water at intervals of 1-7 days. To do this, proceed as follows:

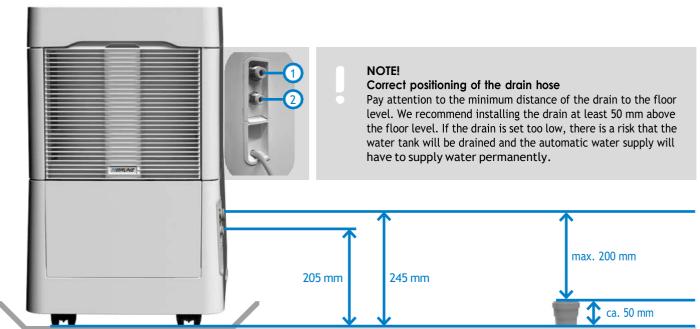


- ⇒ 2. Open the menu item "RINSE" .
- ⇒ 3. Set the button "AUTOMATIC RINSE" to "ON
- ⇒ 4. Change the value according to the desired interval.
- ⇒ 5. Confirm your entry with

#### Information for the sanitary specialist

Staff: • Sanitation specialist

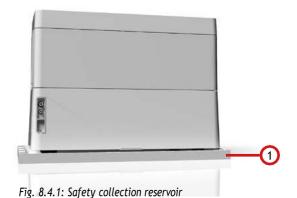
- ⇒ Connect the automatic flushing device to the sewage system in accordance with the regulations of the local water supply company. Pay particular attention to the following points:
  - The material used or the connection must comply with the requirements of the IEC 61770 standard.
  - The waste water hose must not exceed a length of 150 cm, as only a certain pumping capacity is available and otherwise no pressure is built up.
  - Maximum delivery height of the flushing pump: 140 cm
  - Make sure that the waste water hose is not laid in an upward direction.
  - To build up the water column, if necessary fill the hose with water before connecting it.
  - To prevent the formation of a vacuum, fit the line with a deaerator if necessary.
  - For a sketch with the dimensions of the connection, see Fig. 8.3.1.



(1) Outlet automatic flushing device; (2) Inlet automatic water supply (AWS)

Fig. 8.3.1: Dimensional drawing for water connections

#### 8.4 Safety catch basin



The safety collection tray (1) is placed below the evaporative humidifier B 600. It catches the excess water in the event of a water leak.

(j)

Order number: 1820

#### 8.5 Safety water sensor



Abb. 8.5.1: Sicherheitswassersensor



#### Order number: 1757

#### **Requirements**

- The safety water sensor is installed exclusively by the manufacturer.
- Safety catch basine

The safety water sensor is placed underneath the unit in the safety drip tray and reacts in case of an uncontrolled water leakage from the unit. The humidifier stops immediately and the user is notified of the water leakage by a beep and an error message on the touch display. As soon as the leaked water has been removed, the humidifier continues to run automatically.

#### 8.6 External Water monitor



Fig. 8.6.1: External water monitor



#### Order number: 1753

### Requirements

- Automatic water supply
- Safety catch basin

With the automatic water supply of the humidifier, the external water monitor can be used as an additional safety device. In contrast to the safety water sensor, the water monitor has its own solenoid valve that is connected between the safety pressure hose and the water tap.

The sensor of the water detector is located in the safety drip tray and stops the water supply to the humidifier in case of water contact. In addition, a signal tone sounds which is only deactivated when the power supply is interrupted.

#### 8.7 Water Fresh

#### **Biozide**



Fig. 8.7.1: Water fresh



#### Order numbers:

1 litre bottle: 90205 litre canister: 9022



### Environmental damage caused by biocides

The biocides contained in Water fresh are harmful to the environment in larger quantities.

- Obtain information on environmentally sound disposal from the local municipal authority or specialised disposal companies.
- Use biocides safely. Always read the label and product information before use.

Water fresh can also be added to the water tank to reduce the formation of germs and algae as well as limescale. It is not released into the room air and is harmless to health when used as intended.

When using Water fresh, always follow the dosing instructions on the bottle. To prevent over concentration, the water tank must be emptied and cleaned regularly \$\\$\$ chapter "6.3.3 Cleaning the water tank" on page 33.

Use biocides safely. Always follow the safety instructions on the bottle.

Safety data sheet can be requested.

### 8.8 Wlan/Wifi

### 8.8.1 Wlan/Wifi Setup

Switch on the humidifier B 600, after a short time a new network should be visible.

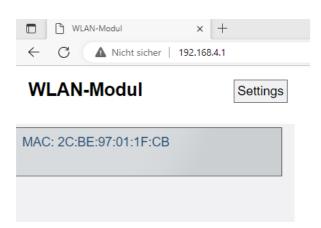
To do this, search the network environment on the PC or search for "Brune WLAN" under Network & Internet settings (mobile device) and connect to it:



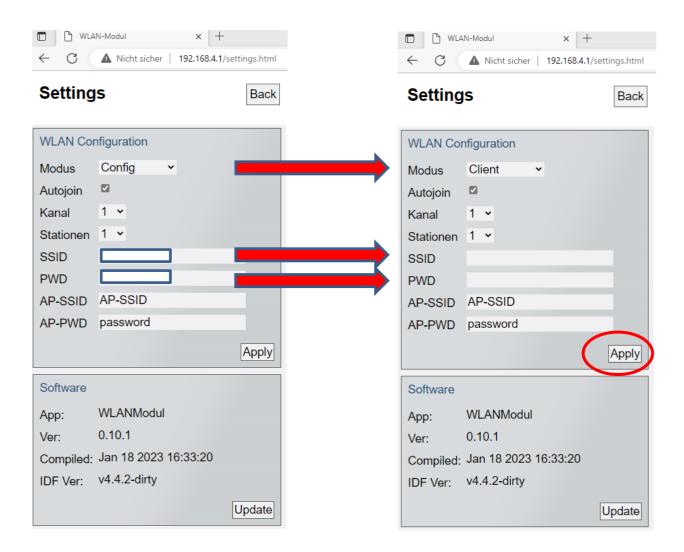
The IP address 192.168.4.1 should now be displayed on the device.



Using a web browser, enter the IP address 192.168.4.1 as shown in the device and open the start page of the network setup.



Click on "Settings" to open a new menu for the WLAN configuration.



- 1.) The mode must be changed from "Config" to "Client".
- 2.) Enter the name of your existing WLAN network in the SSID field.
- 3.) Enter the corresponding password for your WLAN network in the PWD field.

Finally, transfer all entries to the device with "Apply".

The device now connects to the existing WLAN and receives a new IP address. It can now be controlled with the Brune Control APP (available for iOS and Android) or in the remote portal.



Newly obtained IP address from your network; process thus successfully completed. The humidifier B 600 is now ready for use.

### 8.8.2 Brune Control App

The humidifier B 600 can now be controlled with the Brune Control app (available free of charge for Android and iOS).



















### 8.8.3 Activate Brune WLAN / reset network settings

Press and hold the Settings button for 10 seconds. In the Network field, a counter counts down to 0. The Brune WLAN is then activated and the network settings are reset.

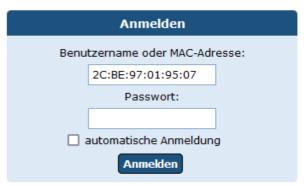
#### **ATTENTION!**

Once the countdown is complete, all settings of the WLAN/WiFi module are deleted.

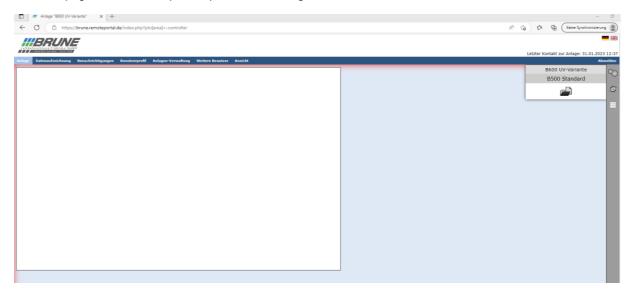
To enable operation of the device via the remote portal, you must log in at <a href="https://brune.remoteportal.de">https://brune.remoteportal.de</a>.
To do this, enter the enclosed MAC address (see enclosed sticker) and the password below in the login window.







The start page of the remote portal opens and a configuration can be made.



After registering, you can use the remote portal free of charge for 30 days via a trial account.

### 9. Spare parts

#### Order spare parts

Spare parts can be ordered from your local specialist dealer or directly from the manufacturer. For order numbers, see \$\&\chapter "Appendix" on page 60.



#### WARNING!

# Risk of injury due to the use of incorrect spare parts!

The use of incorrect or faulty spare parts can be dangerous for the user and cause damage, malfunctions or total failure.

- Only use original spare parts from BRUNE Luftbefeuchtung Proklima GmbH or spare parts approved by BRUNE Luftbefeuchtung Proklima GmbH.
- If you are unsure, always contact our service department.

#### 9.1 Filter overview

Various evaporation and cleaning filters are available for the B 600.

Designation	Order number
BIO evaporation filter	1603
Foam evaporation filter	1601
Activated carbon cleaning filter	1625
Fine dust filter set F7 (humidifier)	1620
Hepa Filter Set H10 (air purifier)	1619

### 10. Dispose of humidifier

Unless a take-back or disposal agreement has been made, disassembled components should be recycled:

- Scrap metals.
- Give plastic elements for recycling.
- Dispose of batteries and UV tube as special waste.
- Dispose of remaining components sorted according to material composition.



#### NOTE!

Danger to the environment due to incorrect disposal! Incorrect disposal can be hazardous to the environment.

 Have electrical waste and electronic components disposed of by authorised specialist companies.



 In case of doubt, obtain information on environmentally sound disposal from the local municipal authority or specialised disposal companies.

#### 11. Technical Data

#### 11.1 Dimensions and Weight

Indication	Value	Unit
Unladen weight	28	kg / lbs
Wide	850 / 33,47	mm / in
Height	630 / 25,24	mm / in
Depth	390 / 15,35	mm / in
Water tank volume	50	l / US gal

### 11.2 Connection values

#### **Electric**

Indication	Value	Unit
Voltage	220-240	V
Frequency	50-60	Hz
Power consumption, maximum (with special equipment)	max. 130	W
Hedging, at least	10	W
Maximum water pressure when connected to the water supply network	1	MPa
Minimum water pressure for connection to the water supply network	0	MPa

### 11.3 Operating conditions

#### Surroundings

Indication	Value	Unit
Temperature range	10 - 40 / 50 - 104	°C / °F
Relative humidity	30 - 90	%

### 11.4 Nameplate

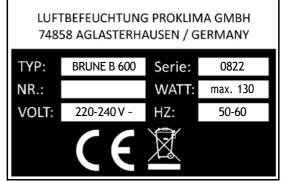


Fig. 11.6.1: Type plate

The type plate is located under the upper part of the housing above the mains connection and contains the following information:

- Manufacturer
- rype
- Séries
- Serial number

### **Appendix**

"Spare parts list" on page 61



#### WARNING!

#### Risk of injury from disassembling the humidifier!

The following illustration and parts list are intended exclusively for the specialist dealer. Unauthorised disassembly of the humidifier can lead to serious injuries.

- Never disassemble the appliance on your own.
- Only carry out the repairs described in the instructions independently.
- For all problems whose solution is not described in the instructions, contact the local specialist dealer.

### Spare parts list Standard version

Standard version		
NO.	Naming	
1255	Upper part of housing (1)	
1160	Glass top incl. hinges (2)	
1395	Basic board B 600	
1521	Pump complete (3)	
1522/1	Pump motor incl. cable and pump fan	
1260	Housing lower part/water tank (4)	
1264	Swivel castor B 600	
1411	Filter rods without rib (5)	
1412	Filter rods with rib (6)	
1413	Clamp with 2 lugs (7)	
1595	Fan complete with motor, protective grille and fixing material (8)	
1401	Water distribution (9)	
1348/5	Radio humidity sensor (10)	
1526	Y-piece (11)	
1529	Pump hose transparent (12)	
1733	Corrugated tube 10 mm / 24 cm long for UV technology (13)	
1377	Level sensor	
1353	Mains cable with plug	
1624	Retaining rubber for cleaning filter	
1256	Intake grille	



### Special equipment and accessories

No.	Naming
1753	Water detector with sensor
1757	Safety water sensor
1800	Automatic water supply complete
1801	Solenoid valve complete
1107	8-watt radiator (UV disinfection)
1108	Quartz dip pipe B 600
1725	Lime conversion cartridge
1803	Supply hose (100 cm)
1741	Pump for flushing device
1859	Drain hose for flushing unit (100 cm)
1263	Water connection Housing lower part B 600
1820	Safety drip tray B 600

### Filters & Filter Sets

No.	Naming
1601	Foam filter B 500 / B 600
1603	Bio-Filter B 500 / B 600
1620	Fine dust filter set F7 B 600 (humidifier)
1619	Hepa Filter Set H10 B 600 (air purifier)
1625	Activated carbon cleaning filter B 600



Luftbefeuchtung Proklima GmbH Schwarzacher Str. 13 74858 Aglasterhausen Germany

Phone.: +49 (0) 6262 / 5454 Fax: +49 (0) 6262 / 3255

Mail: mail@brune.info Web: www.brune.info