

B500 

Operating instructions

Evaporation Humidifier
B500 Professional



READ AND SAVE THESE INSTRUCTIONS!

Brune Luftbefeuchtung Proklima GmbH
Schwarzacher Strasse 13
74858 Aglasterhausen, Germany
Telephone: +49 6262 54 54
Fax: +49 6262 32 55
E-mail: mail@brune.info
Internet: www.brune.info
Translation of the original operating manual
Prok-22117-DE, 4, en_US

This manual was created by:
Kothes!
Technische Kommunikation GmbH & Co. KG
Internet: www.kothes.de

© Brune Luftbefeuchtung Proklima GmbH 2015

Information about this manual



This manual facilitates safe and efficient use of the Evaporation Humidifier B500 Professional. This manual is an integral part of the humidifier and must be stored, readily accessible for the personnel, in close proximity to the device.

This manual must be carefully read by the user prior to starting any work. The prerequisite for safe working is to comply with all safety and procedural instructions specified in this manual. The local accident prevention regulations and the general safety regulations for the application area of the humidifier also apply.

The illustrations in this manual are intended for basic understanding and may deviate from the actual design.

Copyright

The content of this manual is copyrighted. It may be used for purposes of operating the device. Any further use is not permitted without written permission of Brune Luftbefeuchtung Proklima GmbH.

Customer service

Address	Brune Brune Luftbefeuchtung Proklima GmbH Schwarzacher Strasse 13 74858 Aglasterhausen, Germany
Phone	+49 6262 54 54
E-mail	mail@brune.info

Table of contents

1	The Evaporation Humidifier B500 Professional.....	6
1.1	Complete overview.....	6
1.2	Remote control.....	8
1.3	Wireless sensor system.....	8
1.4	Control panel.....	9
1.5	Functional description.....	10
2	Safety.....	11
2.1	Symbols in this manual.....	11
2.2	Intended use.....	12
2.3	Symbols on the device.....	13
2.4	Safety and dangers.....	14
2.5	Responsibilities of the operator.....	18
2.6	Personnel requirements.....	19
2.7	Environmental protection.....	20
3	Transport and storage.....	21
3.1	Safety instructions for transport and storage.....	21
3.2	Symbols on the packaging.....	21
3.3	Storage of packages.....	21
3.4	Inspection of delivery.....	22
3.5	Storage when not in use.....	22
3.6	Transporting the humidifier.....	23
4	Start-up.....	24
4.1	Safety instructions for the initial commissioning.....	24
4.2	Requirements at the installation location.....	24
4.3	Commissioning the humidifier for the first time.....	24
4.4	Coding the wireless sensor system.....	27
5	Operating the humidifier.....	31
5.1	Indicators on the device.....	31
5.2	Switching on and off.....	32
5.3	Filling the water tank.....	32
5.4	Setting the desired air humidity.....	34
5.5	Regulating the fan.....	34
5.6	Changing the menu settings.....	35
6	Cleaning and servicing the humidifier.....	38
6.1	Safety instructions for cleaning and servicing.....	38
6.2	Cleaning schedule.....	39
6.3	Cleaning tasks.....	40
6.3.1	Monthly cleaning.....	40
6.3.2	Replacing the evaporation filter.....	41
6.3.3	Cleaning the water tank.....	44
6.3.4	Decalcifying the device.....	45
7	Detecting and remedying malfunctions.....	49
7.1	Safety instructions for troubleshooting.....	49

7.2	Malfunction indication.....	49
7.3	Error table.....	51
7.4	Remedying errors.....	53
7.4.1	Replacing the pump.....	53
7.4.2	Replacing the fan.....	56
8	Accessories.....	59
8.1	Waterfresh.....	59
8.2	Automatic water supply.....	60
8.3	Automatic flushing device.....	61
8.4	Activated charcoal cleaning filter.....	63
8.4.1	Overview.....	63
8.4.2	Replacing the activated charcoal cleaning filter.....	64
8.5	Air hood with flexible air hose.....	65
8.6	UV degermination system and lime transforming cartridge.....	65
8.6.1	Cleaning the UV degermination system and lime transforming cartridge.....	67
8.6.2	Replacing the UV lamp.....	70
8.7	Safety collecting basin.....	72
8.8	Safety water sensor.....	73
8.9	External water sensor.....	73
8.10	Safety pressure hose.....	74
8.10.1	Overview.....	74
8.10.2	Replacing the safety pressure hose.....	74
9	Spare parts.....	76
10	Disposing of the humidifier.....	77
11	Technical data.....	78
11.1	Dimensions and weight.....	78
11.2	Connection values.....	78
11.3	Performance data.....	78
11.4	Operating conditions.....	78
11.5	Emissions.....	79
11.6	Type plate.....	79
12	Index.....	80
	Appendix.....	82

1 The Evaporation Humidifier B500 Professional

1.1 Complete overview



Fig. 1: Evaporation Humidifier B500

- | | |
|----------------------|---------------------|
| 1 Filling opening | 4 Air inlet opening |
| 2 Air outlet opening | 5 Water tank |
| 3 Control panel | 6 Cover |

Accessories



The following chapters provide only the description of the humidifier standard version. For the operation and cleaning of the accessories, see Chapter 8 “Accessories” on page 59.

Scope of delivery

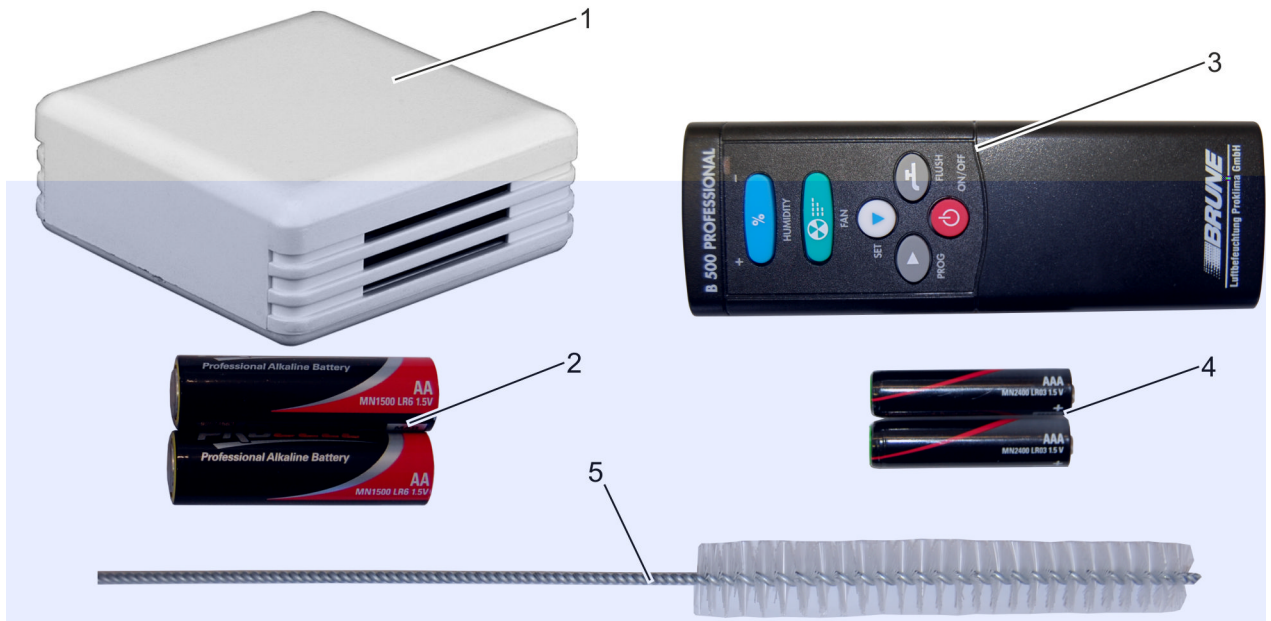


Fig. 2: Scope of delivery

Item	Quantity	Name
Fig. 1	1	Evaporation Humidifier B500 Professional, incl. power plug
1	1	Wireless sensor system
2	2	AA batteries for wireless sensor system
3	1	Remote control
4	2	AAA batteries for remote control
5	1	Cleaning brush
	1	Operation manual

1.2 Remote control

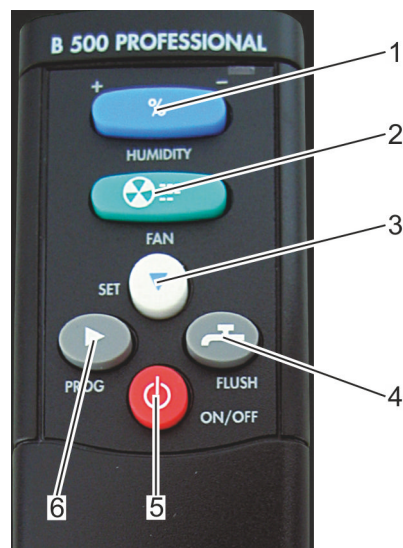


Fig. 3: Remote control

Item	Name	Function
1	[Humidity] rocker switch	The target value for the air humidity can be set using the [Humidity] rocker switch. By pressing the "+" or "-" area several times or continuously, the desired humidity value can be increased or decreased.
2	[Fan] rocker switch	By pressing the "+" or "-" area of the [Fan] rocker switch, the fan speed can be increased or decreased. In addition to the automatic level, four other fan speed levels are available.
3	[Set] button	Using the [Set] button, individual sub-menus can be selected in programming mode.
4	[Flush] button	By pressing the [Flush] button, the flushing device is started (optional accessory).
5	[ON/OFF] button	By pressing the [ON/OFF] button, the humidifier is switched on or off.
6	[Prog] button	By pressing the [Prog] button, the programming mode of the humidifier opens.

1.3 Wireless sensor system



Fig. 4: Wireless sensor system

The wireless sensor system controls the humidifier automatically. It measures the current air humidity and, in intervals of three minutes or in the event of a humidity change of more than 3%, sends the value to the humidifier. The speed of the fan is then automatically adjusted according to the set humidity target value.

1.4 Control panel

The control panel provides information about the state of the device. It provides information about the current water level, the current air humidity value and any possible device malfunctions.



Fig. 5: Control panel

Item	Name	Function
1	[Remote control receiver sensor]	The receiver sensor receives and processes the radio signal of the remote control.
2	[Water level indicator]	Lights up when the humidifier water tank is empty.
3	[Filter replacement display]	Lights up when the humidifier filter needs to be replaced
4	[Water level indicator]	Shows the level of the water tank in liters/gallons
5	[Fan speed level indicator]	Shows the speed level when the fan is in manual mode
6	[Automatic fan indicator]	Lights up when the fan is in automatic mode
7	Display	The following information is shown on the display: - Actual/target value of air humidity - Menu codes in programming mode - Error codes during malfunctions
8	[Malfunction indicator]	Lights up when a malfunction of the humidifier is present. Here, observe the error code on the display.

1.5 Functional description

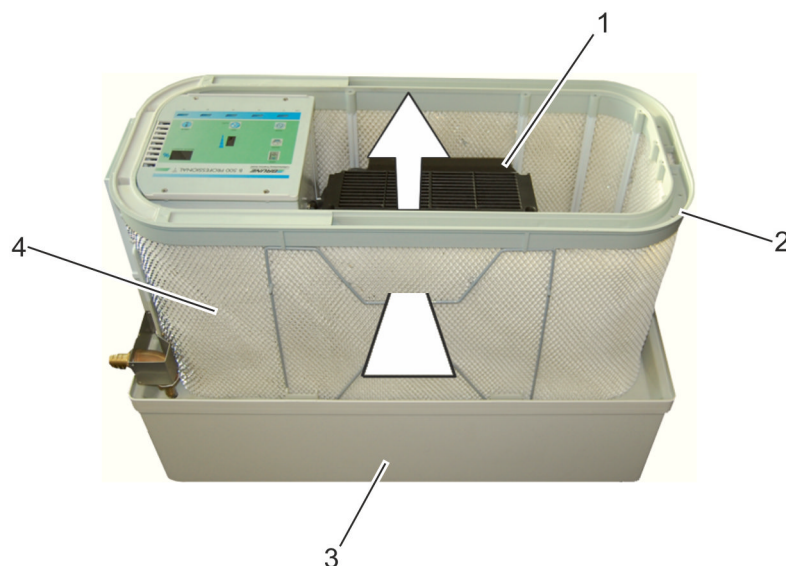


Fig. 6: Functional principle

The humidifier B500 operates based on the natural principle of evaporation. A water pump continuously delivers water from the water tank (Fig. 6/3) to the oval water channel (Fig. 6/2). The water seeps through the drainage holes inside the channel and moistens the evaporation filter (Fig. 6/4).

A fan (Fig. 6/1) inside the humidifier suctions the air in. The air flows through the evaporator filter and is cleaned and humidified at the same time. Then the humidified air is supplied through the air outlet opening on the top and back into the room (Fig. 6/arrow).

The humidifier is filled manually via the filling opening at the top face. The device can also be optionally connected to the local water supply. In this case, the humidifier is automatically filled; no manual filling is required (🔗 *Chapter 8 "Accessories" on page 59*).

2 Safety

This section provides an overview of all important safety aspects to protect persons and to ensure safe and trouble-free operation. There are further task-related safety instructions in the sections about the individual life phases.

2.1 Symbols in this manual

Safety instructions

In this manual the safety instructions are identified by symbols. The safety instructions are introduced by signal words that express the extent of the hazard.



DANGER!

This combination of symbol and signal word indicates a situation of immediate danger which, if not avoided, will result in death or serious injury.



WARNING!

This combination of symbol and signal word indicates a situation of possible danger which, if not avoided, could result in death or serious injury.



CAUTION!

This combination of symbol and signal word indicates a situation of possible danger which, if not avoided, could result in minor or moderate injury.



NOTICE!

This combination of symbol and signal word indicates a situation of possible danger which, if not avoided, could result in damage to property and the environment.

Safety instructions in procedural instructions

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

Example:

1. ➞ Loosen the screw.

2. ➞



CAUTION!
Risk of entrapment at cover plate!

Carefully close the cover plate.

3. ➞ Tighten the screw.

Tips and recommendations



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

Further labels

The following labels emphasize procedural instructions, results, lists, references and other elements used in this manual:

Label	Explanation
➞	Step-by-step procedural instructions
⇒	Results of the procedural steps
📖	Reference to sections in this manual and to applicable documentation
■	List without set sequence
[Button]	Operating controls (e.g. buttons, switches), display elements (e.g. indicator lamps)

2.2 Intended use

The Evaporation Humidifier B500 Professional is used exclusively to humidify the room air in residential and professional environments.

The observation of all the information in this manual is also part of the intended use.

Any use other than intended use and any use going beyond this use is considered improper use.


WARNING!
Danger from improper use!

Improper use of the Evaporation Humidifier B500 Professional can lead to dangerous situations.

- Only fill the humidifier with normal tap water (max. 30 °C, 86 °F) or with treated water with at least 300 microsiemens. Never fill with distilled water.
- Do not use scented or flavoring substances.
- Never operate the humidifier with an empty water tank.
- Never operate the device near open water sources.
- Only operate the device on a stable and level surface.
- Never expose the device to a source of excessive heat.
- Never cover the device.
- Never put anything on the humidifier. This applies in particular to electrical devices or containers that are filled with liquid.
- Never place the device near furnishings that absorb water (for example, curtains, wallpaper, or carpets).
- Never operate the device in a potentially explosive environment.

2.3 Symbols on the device

The following symbols and information signs are attached to the device. They relate to the immediate surroundings in which they are attached.


WARNING!
Danger when signage is not legible!

Over time, labels and signs can become dirty or otherwise illegible, which means that risks cannot be detected and the necessary operating instructions cannot be followed. This may cause injury.

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

“Electrical voltage” sign



Warning: Dangerous electrical voltage.

“Pull power plug” sign



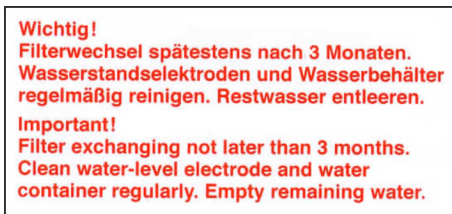
Always disconnect the power plug before beginning cleaning tasks and troubleshooting.

“Fill here” sign



This sign indicates the filling opening of the water tank. Only use this opening to fill the water tank.

“Cleaning instructions” sign



The sign at the filling opening provides important instructions for cleaning and care of the humidifier. For detailed instructions on cleaning and care of the humidifier, observe [Chapter 6 “Cleaning and servicing the humidifier”](#) on page 38.

2.4 Safety and dangers

The humidifier has been designed according to the state of the art and according to current safety requirements. However, residual risks that require careful handling still exist. The residual risks and the resulting conduct and measures are listed below.

Electrical current

DANGER!
Danger to life from electrical current!

Risk of imminent fatal injury from electric shock due to contact with live parts. Damaged insulation or damaged individual components can be dangerous to life.

- Only have qualified electricians perform work on the electronic system.
- Switch off the humidifier immediately and initiate repair, if the power cable is damaged.
- Damaged power cables may only be replaced by the manufacturer or his customer service or a similarly qualified person.
- Keep moisture away from energized parts. This can lead to a short circuit.
- Never submerge the device in water.
- Never direct the outlet openings towards electrical appliances or sockets.
- Always lay the power cable without coming in contact with sources of heat, moisture, oil, sharp objects, sharp edges etc.
- Always first disconnect the power plug prior to cleaning or troubleshooting.
- Never touch the power plug with wet hands.
- When pulling the power plug never pull on the cable but always the plug.
- Never pull the device using the cable.

Batteries



WARNING!

Risk of injury from improper handling of batteries!

Improper handling of batteries creates a risk that the batteries may burst or that noxious liquid may leak from the batteries. The liquid may cause burns in contact with the skin or severe poisoning if swallowed, and can cause blindness in contact with the eyes.

- Never try to charge the batteries.
- Never short-circuit the contacts (plus and minus pole) of the battery.
- Never expose batteries to wetness or moisture (rain, salt water, liquids). A moist or wet battery may not be used under any circumstances.
- Never use or store batteries at locations with potentially explosive atmosphere or where high temperatures can occur.
- Never try to solder, to repair, to change shape, to modify or to dismantle batteries.
- Always protect batteries from unauthorized access.
- To prevent fire, overheating, explosion or leakage of fluid never expose the batteries to severe vibration, high weight loading or other harmful effects. Leaking and spilled liquid can ignite.
- Do not swallow batteries. If swallowed accidentally, get medical attention immediately.
- After eye contact with spilled liquid immediately rinse the eye and also under the eyelid with clear water for at least 15 minutes. For this, point the mild water jet directly into the eye and do not rub. Get immediate medical help.
- Avoid skin contact with spilled liquid. In case of accidental skin contact wash affected area with plenty of soap and water.

Children



WARNING!

Risk of injury for children!

Children are unaware of the dangers related to using the humidifier. This could lead to severe injuries.

- Batteries and other small items could be swallowed. Insert the batteries immediately after receiving the humidifier or store them out of the reach of children.
- Packaging material may not be used for playing. There is an acute danger of suffocation. Packaging materials must be immediately disposed of or stored out of the reach of children.
- Always supervise children to ensure that they do not play with the device, or use the device as a climbing aid.

Inadequate cleaning

WARNING!
Health hazard due to inadequate cleaning!

Bacteria and germs can be released when cleaning is not carried out adequately.

- Replace the evaporator filter at the latest after four months. Reduce the time interval accordingly in case of severe contamination of the ambient air.
- Always comply with the intervals for cleaning described in  *Chapter 6.2 “Cleaning schedule” on page 39.*
- Every 3-4 weeks, completely drain the water tank and refill the water tank again.

Air humidity that is too high

WARNING!
Health hazard due to air humidity that is too high

Overly humidified air favors the formation of mildew and harmful germs.

- Do not exceed the recommended value of 50 – 60% air humidity in living quarters.
- To prevent damage to health, persons with asthma, respiratory diseases or lung problems should consult a physician before using the humidifier.
- In the event of breathing difficulties that may be related to the use of the humidifier, stop using the humidifier immediately and consult a doctor.

Water puddles

CAUTION!
Risk of injury from slipping in water puddles!

Slipping in water puddles on the floor can cause falls. This could lead to injuries.

- Place the humidifier on a horizontal surface.
- Immediately mop up water puddles using a cloth.
- Regularly check the safety collecting basin (optional accessory) and empty it if required.

Tripping



CAUTION!

Risk of injury by tripping over the power cable!

Risk of tripping exists if the power cable is not laid properly. This can lead to falls and injuries.

- Lay the power cable in a manner that there is no risk of tripping.

Incorrect choice of location



NOTICE!

Risk of property damage due to incorrect placement of the humidifier!

If the humidifier is operated on floors that are not moisture-resistant, the floor may be damaged.

- Only set up the humidifier on moisture-resistant flooring.
- Use a safety collecting basin (🔗 *Chapter 8.7 “Safety collecting basin” on page 72*) to protect from leaking water.
- Never place the device near furnishings that absorb water (for example, curtains, wallpaper, or carpets).

2.5 Responsibilities of the operator

Operator

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

Obligations of the operator

If the device is used for commercial purposes, the operator is subject to work safety regulations.

In addition to the safety instructions in this manual, the valid safety, accident prevention and environmental protection regulations must be adhered to for the application area of the humidifier.

In particular, the following applies:

- The operator must clearly define and regulate responsibilities for installation, operation, troubleshooting, and cleaning.
- The operator must ensure that all persons who handle the device have read and understood this manual.
- The operator must provide the personnel with the necessary protective gear and instruct that wearing the required protective gear is mandatory.
- The operator must ensure that the cleaning intervals described in this manual are observed.

2.6 Personnel requirements

**WARNING!****Risk of injury due to insufficient qualifications of the staff!**

Work on the humidifier carried out by unqualified persons may result in hazards that could cause serious injuries and significant property damage.

- Have all tasks and work performed by qualified personnel.
- Always keep unauthorized persons, especially children, away from the device.

In this manual, the qualifications listed below for the personnel for the various areas of activity are used:

Licensed electrician

The licensed electrician is, due to his/her many years of knowledge and experience and knowledge of the relevant standards and regulations, able to work on electrical equipment and to independently recognize and avoid possible hazards.

He/she must furthermore provide proof of his/her professional qualification, attesting to the ability to carry out work on electrical equipment.

The licensed electrician must comply with the applicable legal regulations on accident prevention.

Licensed plumber

The licensed plumber is trained and certified and knows the standards and regulations for the specific task area in which he/she operates.

The licensed plumber can, due to sufficient technical training and experience, perform work on all sanitary equipment, and identify and avoid potential hazards.

He/she must furthermore provide proof of his/her professional qualifications that certify his/her capacity to carry out work on sanitary equipment.

Manufacturer

Certain work may only be performed by specialized staff of the manufacturer. Other personnel are not authorized to perform such work. To perform the required work, please contact our customer service.

Operator

The operator uses and operates the device within the limits of intended use.

If the humidifier is used in a commercial or industrial environment, the operator has to be briefed and trained by the owner about his tasks and potential hazards in case of improper conduct. Tasks that go beyond the handling during normal operation may only be executed by the operator if they are listed in this operating manual and when explicitly entrusted by the owner.

This device may be operated by children aged 8 and up, as well as by persons with reduced physical, sensory or mental capabilities, or by persons lacking knowledge or experience, provided that they are supervised or informed about safe use of the device and the dangers that could arise from use of the device. Children may not play with the device. Children may not carry out cleaning procedures and user maintenance without supervision.

2.7 Environmental protection



NOTICE!

Danger to the environment due to improper handling of environmentally hazardous substances!

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

- Always observe the information listed below for handling and disposing of environmentally hazardous substances.
- If environmentally hazardous substances enter the environment by accident, immediately take appropriate measures. When in doubt, inform the competent local authority about the damage and ask about the appropriate measures to take.

The following environmentally hazardous substances are used:

Batteries

Batteries contain toxic heavy metals. They are subject to special refuse treatment and must be deposited at municipal collection points or be disposed of by a specialist company.

3 Transport and storage

3.1 Safety instructions for transport and storage

Improper transport



NOTICE!

Property damage from improper transport!

If not transported correctly, the transport pieces could fall off or fall over. This could cause significant property damage.

- Proceed carefully when unloading the transport pieces upon delivery. Observe all the symbols and instructions on the packaging.
- Always transport packages upright and never throw them.
- Remove the packaging just before start-up.
- Never transport the humidifier while it is full. This could cause water to emerge and cause damage to the device or the furnishings.

3.2 Symbols on the packaging

The following symbols are affixed to the transport packaging:

Fragile



Marking on packages that have a fragile or sensitive content.

Handle the package with care, do not drop it and do not expose it to impacts.

Keep dry



Protect packages from wet conditions and keep them dry.

Top



The arrow tips of the symbol indicate the upper part of the package. They should always point upwards to prevent damage to the contents.

3.3 Storage of packages

Store packages under the following conditions:

- Do not store outdoors.
- Store dry and free of dust.

- Do not expose to aggressive substances.
- Protect from direct sunlight.
- Avoid mechanical vibrations.
- Storage temperature: 5 to 40 °C (41 to 104 °F).
- Relative humidity: max. 55%.
- When storing for longer than 3 months, regularly check the general condition of all parts and the packaging.



Under certain circumstances, instructions for storage that go beyond the requirements listed here can be found on the packages. Comply with them accordingly.

3.4 Inspection of delivery

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

Upon detecting clearly visible transportation damage, proceed as follows:

- Do not accept the delivery, or accept it with reservations.
- Record the extent of damage on the transport documents or on the delivery note of the transporter.
- Begin a claim.



Make a claim about every defect as soon as it is detected. Damage claims can only be filed within the applicable period for complaints.

3.5 Storage when not in use

When the humidifier is not in operation for a longer period of time, proceed as follows:

Personnel: ■ Operator

1. ➤ Drain and clean the water tank (↗ Chapter 6.3.3 “Cleaning the water tank” on page 44).
2. ➤ Remove the evaporation filter (↗ Chapter 6.3.2 “Replacing the evaporation filter” on page 41).
3. ➤ Clean the humidifier (↗ Chapter 6.3.4 “Decalcifying the device” on page 45).
4. ➤ Store the humidifier according to the information provided under ↗ Chapter 3.3 “Storage of packages” on page 21.

3.6 Transporting the humidifier



NOTICE!

Risk of property damage from the humidifier tipping over!

When moving the humidifier back and forth, there is a risk of the device tipping over. This can lead to damage to the device or subsurface.

- Whenever possible, move the humidifier along its longitudinal axis.
- Before changing the installation location, always empty the water tank.

The humidifier has 4 rollers on the bottom. This allows repositioning of the device by pulling or pushing. Observe the following when the humidifier's installation location is changed:

- Whenever possible, move the humidifier along its longitudinal axis (Fig. 7/arrow). To do so, grasp the humidifier at the green marked area (Fig. 7).

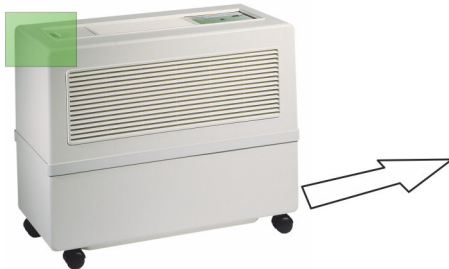


Fig. 7: Moving the humidifier



Fig. 8: Moving the humidifier back and forth

- If the humidifier is moved back and forth, grasp it underneath as well (Fig. 8).

4 Start-up

4.1 Safety instructions for the initial commissioning

**DANGER!****Danger to life from start-up of a defective device!**

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

- Never commission a defective device.
- Always check the power cable for damage.

4.2 Requirements at the installation location

For the humidifier to operate properly, the following must be observed when deciding the installation location:

- Place the humidifier on a level, horizontal surface.
- Ensure air circulation. The air inlet opening and air outlet opening must not be covered.
- Do not place the humidifier in circulation routes or in the pivoting range of doors.
- The clearance to other objects in the vicinity must be at least 10 cm (4 inches) at the side and at least 10 cm (4 inches) on top.
- For optimum functionality, the device can be set up in the vicinity of a heat source. However, the direct temperature influence should not exceed 70 °C (158 °F).

On water-sensitive flooring, additional safety measures must be provided.

4.3 Commissioning the humidifier for the first time

Proceed as follows to commission the humidifier:

Preparation



Fig. 9: Removing the cover

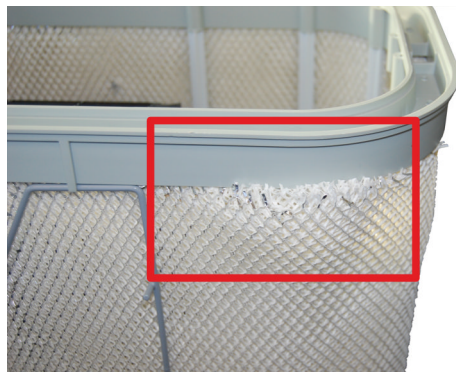


Fig. 10: Incorrect filter placement

Personnel: ■ Operator

1. ➔ Lift the cover of the humidifier upwards and place to the side (Fig. 9).

2. ➔ Check the device visually for defects and correct filter placement.



Ensure that the filter fits against the entire length of the water distribution within the U-shaped rail (Fig. 10). If individual fibers of the filter protrude, water may leak from the device.

3. ➔ Remove the following items from the compartment at the side:
 - Power plug
 - Wireless sensor system
 - Remote control
4. ➔ Replace the device cover.

Commissioning the wireless sensor system



Fig. 11: Opening the cover

Personnel: ■ Operator

1. ➔ Carefully lift and remove the cover of the wireless sensor system using a small screwdriver.

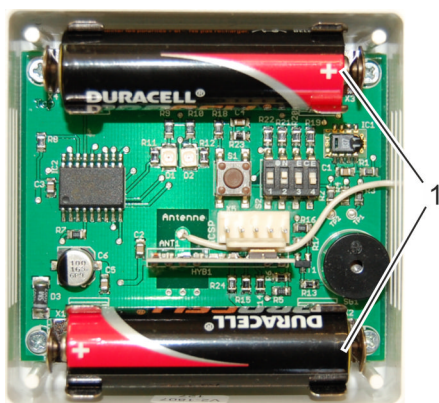


Fig. 12: Inserting batteries

2. ➤ Insert the enclosed AA batteries according to the illustration (Fig. 12/1). The plus and minus poles are marked on the board as well as on the battery. The batteries are correctly inserted if the markings match.

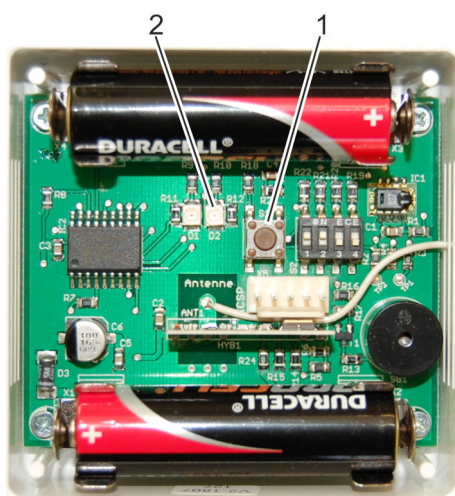


Fig. 13: Checking functionality

3. ➤ Check the wireless sensor system for functionality. To do so, press the black button (Fig. 13/1).
 - ⇒ The diode (Fig. 13/2) briefly lights up; the wireless sensor system is operational. The sound of an alarm indicates that the batteries must be replaced.

Commissioning the humidifier

Personnel: ■ Operator

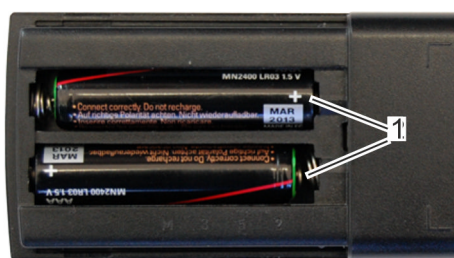
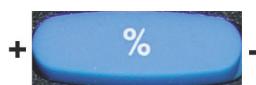


Fig. 14: Inserting batteries

1. ➤ Insert the enclosed AAA batteries in the compartment of the remote control (Fig. 14/1). The plus and minus poles are marked in the compartment of the remote control as well as on the battery. The batteries are correctly inserted if the markings match.
2. ➤ Connect the humidifier power plug to the power supply.
3. ➤ Fill up the water tank of the humidifier using tap water. To do so, proceed as indicated under [Chapter 5.3 "Filling the water tank"](#) on page 32.
4. ➤ Switch on the humidifier using the [ON/OFF] button on the remote control.
5. ➤ Enter the desired value for the air humidity using the [Humidity] rocker switch ([Chapter 5.4 "Setting the desired air humidity"](#) on page 34) on the remote control.





6. ➔ Then, use the [Fan] rocker switch to regulate the strength of the fan (↪ Chapter 5.5 “Regulating the fan” on page 34).

7. ➔ Wait for 10 seconds until the saving process is completed.

⇒ The display read-out jumps back to the actual air humidity value. The humidifier is now operational.

The fan of the humidifier starts if the set target value is above the actual value.

4.4 Coding the wireless sensor system



DANGER!

Danger to life from electrical current!

Risk of immediate fatal injury from electric shock following contact with live parts.

- Disconnect the power plug before opening the device.

The humidifier and the wireless sensor system are dedicated to each other via coding. The devices are shipped from the factory already encoded. When two or more devices that are in close proximity to one another (0-30 meters, 0-98 feet), a different coding may be necessary.

When several devices are operated in one room, the following options are available:

- Several devices are operated via one sensor. For this, all devices should have the same coding.
- Each device is controlled via a separate sensor. For this, all devices have to be coded differently.

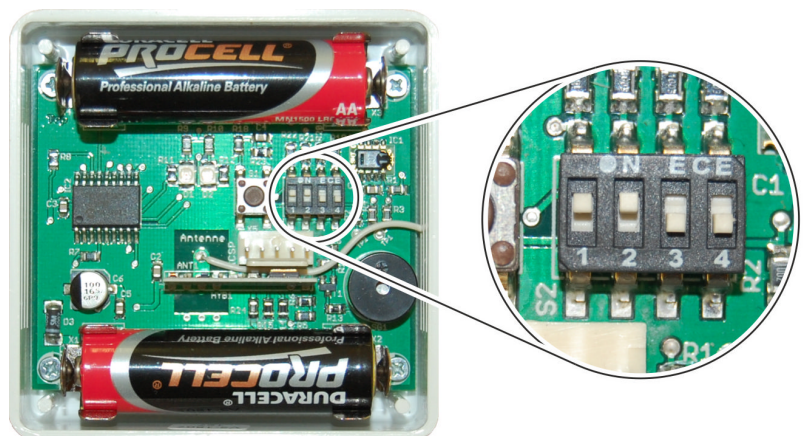


Fig. 15: Slide controls for coding

The slide controls for coding are located on the respective boards of the devices. Each slider has only the following positions: 'ON = top' and 'OFF = bottom.' Accordingly, there are 16 different coding versions.



The coding of the humidifier and the associated wireless sensor system must match exactly. Otherwise functionality is not ensured.

Coding the wireless sensor system

Personnel: Operator

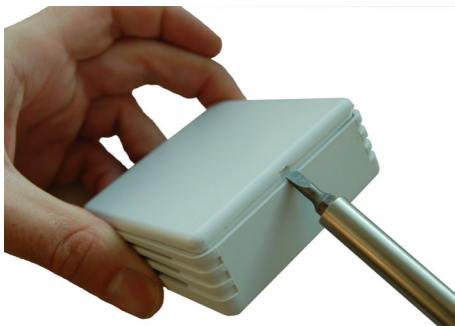


Fig. 16: Opening the cover

1. ➔



NOTICE!

The electronics of the wireless sensor system are very sensitive. Ensure that you do not touch the electronics and do not damage any components.

Carefully lift and remove the cover plate of the wireless sensor system using a small screwdriver (Fig. 16).

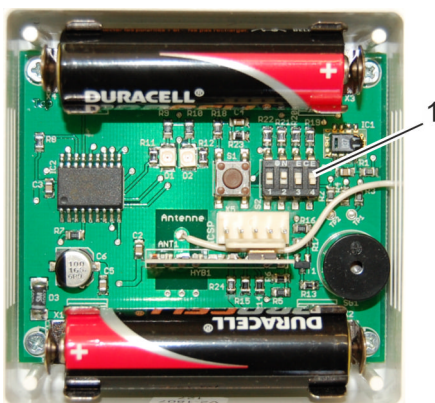


Fig. 17: Coding the wireless sensor system

2. ➔



NOTICE!

Property damage due to short circuit!

- Code the wireless sensor system only with a non-metallic object.

Code the wireless sensor system by setting the slide controls (Fig. 17/1) using a suitable non-metallic object.

3. ➔

Close the cover plate of the wireless sensor system again.

Coding the humidifier

Personnel: ■ Operator

1. ➤ Switch off the device and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 18).



Fig. 18: Removing the cover

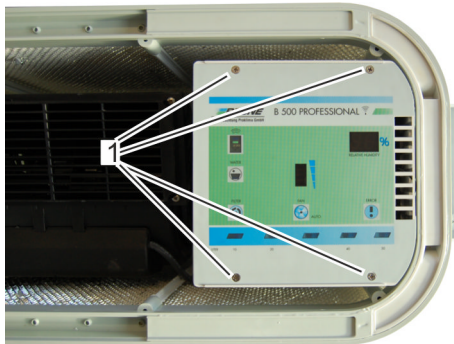


Fig. 19: Releasing the control panel

3. ➤ Use a screwdriver to loosen and completely unscrew the four screws at the top of the control panel (Fig. 19/1) by turning counterclockwise.

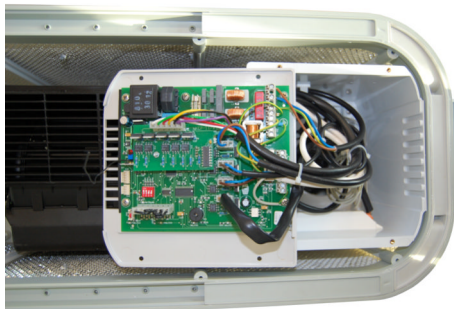


Fig. 20: Removing the control panel

4. ➤



NOTICE!

The electronics of the control panel are very sensitive. Ensure that you do not touch the electronics and do not damage any components.

Remove the control panel and place on the operating side (Fig. 20).

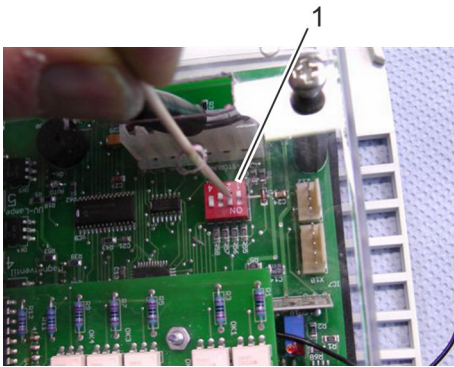


Fig. 21: Coding the humidifier

5. ➤



NOTICE!

Property damage due to short circuit!

- Code the humidifier only with a non-metallic object.

Code the humidifier. To do so, use a suitable non-metallic object to carefully position the slide controls located on the rear side of the board (Fig. 21/1) in the same position as those of the wireless sensor system.

6. ➤

Replace the control panel and affix it using the four screws.

7. ➤

Close the cover of the device again.

8. ➤

Check that the system functions. To do so, carefully breathe into the housing of the wireless sensor system.

⇒ The actual value indicated on the control panel changes.
The wireless sensor system is operational.

5 Operating the humidifier



This chapter only describes the operation of the standard version of the humidifier. For the operation of accessory parts, observe [Chapter 8 “Accessories”](#) on page 59.

5.1 Indicators on the device

Water level indicator



The water level is detected by copper electrodes and displayed by LEDs on the control panel.



If the water supply has been depleted, and the lower level display is reached, the device switches off automatically. About 10 liters (2.5 gallons) of remaining water remain in the device.

[Water level indicator] on the display lights up.

Filter replacement display

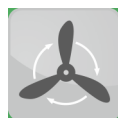


The device has a filter replacement indicator indicating the need of a filter replacement depending on the run-time of the pump, the water hardness and the fan. In the best-case scenario, the filter requires replacement after 98 days; in the worst case a replacement is required after 56 days. This is only a recommendation: external influences (air pollution) can affect the recommendation positively or negatively. Despite this indication, regular visual inspections for signs of wear of the evaporation filter should be carried out. For the filter replacement, see [Chapter 6.3.2 “Replacing the evaporation filter”](#) on page 41.

Fan speed level indicator



The speed of the fan is controllable in four levels. In addition, the device has an automatic function. The speed level of the fan is indicated by the *[Fan speed level indicator]* on the control panel.



When in automatic function, the device controls the fan speed independently, depending on the required output. This means that any change of air humidity is measured via the wireless sensor system, and the fan speed is increased or decreased accordingly.

5.2 Switching on and off

Switching on

Personnel: ■ Operator



- ➔ Press the [ON/OFF] button on the remote control.
- ⇒ The humidifier is switched on.



The wireless sensor system sends a signal only every three minutes. Therefore error code 05 always appears during switch-on. However, it disappears automatically after three minutes at the latest. The process can be accelerated by breathing on the ventilation slots of the wireless sensor system.

Switching off

Personnel: ■ Operator



- ➔ Press the [ON/OFF] button on the remote control.
- ⇒ The humidifier is switched off.



DANGER!

Danger to life from electrical current!

The humidifier is not disconnected from the power supply, but is in stand-by mode. The device is still supplied with electricity.

- Always disconnect the power plug before performing cleaning tasks or during troubleshooting.

5.3 Filling the water tank

Improper filling



DANGER!

Risk of electric shock from improper filling!

Improper filling can lead to death or serious injury from electrical shock.

- Carefully pour in water.
- Always use a funnel for filling.



NOTICE!

Risk of property damage from improper filling!

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

- Only fill the water tank with normal tap water or treated water with at least 300 µS (max. 30 °C, 86 °F). Never fill with distilled water.
- Fill the water tank on a fluid-resistant surface.
- Do not use aromatic substances.
- Ensure that the water does not spill and does not enter the device.
- Every 3–4 weeks, completely drain the water tank and refill it again.



It is not necessary to fill devices with an automatic water supply. Chapter 8.2 "Automatic water supply" on page 60.

Personnel: ■ Operator



Fig. 22: Opening the fill flap



1. ➔ Connect the power plug of the humidifier to the power supply and switch on the humidifier.
2. ➔ Open the fill flap (Fig. 22/1).
3. ➔ Using a watering can, carefully fill the water tank (up to 50 liters / 13.2 gallons).
4. ➔ Close the fill flap again.

⇒ The [Water level indicator] shows the current fill level (max. 5 bars).

5.4 Setting the desired air humidity

Over-humidifying the air



WARNING!

Health risks are present in the event of over-humidified air!

Over-humidified air facilitates the formation of germs and mildew.

- It is recommended to not exceed a value of 50 – 60% air humidity in living quarters.

Personnel: Operator



1. ➔



The maximum settable humidity value is 90%.

Press the "+" or "-" area of the *[Humidity]* rocker switch several times or continuously until the desired humidity value is reached on the display of the control panel.

⇒ The entered target value is shown in the control panel display.

2. ➔ Wait for 10 seconds until the saving process is completed.

⇒ The actual humidity value reappears on the display.

5.5 Regulating the fan

Personnel: Operator



1. ➔

Press the *[Fan]* rocker switch.

⇒ The *[Fan speed level indicator]* on the control panel starts flashing.

2. ➔

Now increase or decrease the fan speed using the "+" and "-" area of the *[Fan]* rocker switch.

⇒ The current fan speed level is shown in the *[Fan speed level indicator]*.



Proceed as follows to activate the fan automatic:



- ➔ Press the "-" area of the *[Fan]* rocker switch until the last bar on the *[Fan speed level indicator]* is no longer lit.
- ⇒ The *[Automatic fan indicator]* lights up and the fan is now in automatic mode.

5.6 Changing the menu settings

The device offers the possibility to deviate from the factory settings and to make various settings as desired. The menu is visually represented using numbers in the control panel display. The meaning of each number is shown in the table ↗ on page 36.

Proceed as follows to change the menu settings:

Personnel: ■ Operator



1. ➔ On the remote control, press the *[Prog]* button.
 - ⇒ The number 10 appears on the control panel display (substituting the "Set signal tone" menu).

2. ➔ Press the *[Prog]* button until you reach the desired main menu.



3. ➔ Once the desired main menu lights up on the display, use the *[Set]* button to select the desired sub-menu.
 - ⇒ After a few seconds, the value (e.g. 00 or 01) of the setting appears on the display.



4. ➔ Using the *[Humidity]* rocker switch, increase ("+" area) or decrease ("-") the value.
5. ➔ Once the change has been carried out, wait 10 seconds.
 - ⇒ The display read-out jumps back to the default state (display of the actual humidity value). The changes have been saved.



If no further settings are carried out within 10 seconds, the read-out on the display automatically returns to the default display mode (display of the actual humidity value). The programming process can be cancelled at any time by pressing the [ON/OFF] button. In this case, the performed changes are lost.

The following table provides an overview of the menu structure.

Menu overview

Main menu	Sub-menu	Description	Setting	Comment	Factory settings
10		Signal tone setting			
	11	Signal tone active if water tank empty.	00 = OFF 01 = ON		01
	12	Signal tone active if UV lamp defective.	00 = OFF 01 = ON	Only on models with UV technology.	01
	13	Signal tone active on external water sensor alarm.	00 = OFF 01 = ON	Only on models with external water sensor.	01
	14	Signal tone active if fill amount of water tank $\geq$ 50 liters (13.2 gallons).	00 = OFF 01 = ON	Only on models with automatic water supply.	01
	15	Signal tone active during missing radio signal.	00 = OFF 01 = ON		01
20		Relay setting		The relay settings are only required when connected to a central air-conditioning monitoring system.	00
	21	Relay active if water tank empty.	00 = OFF 01 = ON		00
	22	Relay active if UV lamp defective.	00 = OFF 01 = ON		00
	23	Relay active on external water sensor alarm.	00 = OFF 01 = ON		00
	24	Relay active if fill amount of water tank $\geq$ 50 liters (13.2 gallons).	00 = OFF 01 = ON		00
	25	Relay active during missing radio signal.	00 = OFF 01 = ON		00

Main menu	Sub-menu	Description	Setting	Comment	Factory settings
30		General settings			
	31	Flush cycle in days.	00 = OFF (manual) 01 ... 07 days	Only on models with flushing unit.	07
	32	Setting the water hardness.	01 = soft 02 = medium 03 = hard	The water hardness affects the interval of the filter replacement indication.	02
	33	Number of days until the filter needs to be replaced.	0 - 98 = Number of days	The filter replacement indicator shows in how many days the filter will need to be replaced (0-98 days). After replacing the filter, the value must be set manually back to 98.	98
	34	Operation via external timer or other 230 V switch-on mechanism.	00 = OFF 01 = ON	Humidity target value is set to 90%. The actual value constantly shows 00%. The fan setting is freely selectable.	00
	35	Adjustment/control interval of fan during automatic operation.	01 ... 10 min.	Depending on room size.	05

6 Cleaning and servicing the humidifier

6.1 Safety instructions for cleaning and servicing

Improper cleaning



DANGER!

Danger to life from improper cleaning!

Improper cleaning of the humidifier can cause serious or fatal injuries.

- Always disconnect the power plug before cleaning.
- Always wear protective clothing and goggles when working with lime remover.

Inadequate cleaning



WARNING!

Health hazard due to inadequate cleaning!

Bacteria and germs can be released when cleaning is not carried out adequately.

- Replace the evaporator filter at the latest after four months. Reduce the time interval accordingly in case of severe contamination of the ambient air.
- Always comply with the intervals for cleaning described in  *Chapter 6.2 "Cleaning schedule" on page 39.*
- Every 3–4 weeks, completely drain the water tank and refill it again.

Improper cleaning



NOTICE!

Risk of property damage due to improper cleaning!

Improper cleaning of the humidifier can lead to damage to the device as well as the flooring and furnishings.

- Do not use aggressive cleaning agents such as benzene, abrasive agents or chlorine-containing agents that could damage the plastic.
- Always clean on a water-resistant surface.
- Ensure that electronic components do not come into contact with water.
- Ensure that the device is dry before recommissioning.

Protective gear

When using lime remover during cleaning, protective gloves and goggles must be worn.



Chemical-resistant protective gloves

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



Protective goggles

Protective goggles are used to protect the eyes from splashes.

6.2 Cleaning schedule



The indicated time intervals apply for normal water quality and normal dust occurrence in the air and therefore may be longer or shorter.

Interval	Maintenance work	Personnel
Daily	Check the water level. The device automatically switches off at a residual water level of about 15 liters (4 gallons) (not applicable in case of automatic water supply).	Operator
	Check the humidity value using the control panel display.	Operator
Monthly	Thoroughly clean the humidifier (↗ Chapter 6.3.1 “Monthly cleaning” on page 40).	Operator
Every 3 to 4 months	Replace the evaporation filter (↗ Chapter 6.3.2 “Replacing the evaporation filter” on page 41).	Operator
	Replace the activated charcoal cleaning filter (optional accessory) (↗ Chapter 8.4.2 “Replacing the activated charcoal cleaning filter” on page 64).	Operator
	Clean the water tank (↗ Chapter 6.3.3 “Cleaning the water tank” on page 44).	Operator
Annually	Perform thorough cleaning of the device using lime remover (↗ Chapter 6.3.4 “Decalcifying the device” on page 45).	Operator
	Clean the UV degermination system and lime transforming cartridge (optional accessory) (↗ Chapter 8.6.1 “Cleaning the UV degermination system and lime transforming cartridge” on page 67).	Operator

6.3 Cleaning tasks

6.3.1 Monthly cleaning

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 23).
3. ➤ Check the evaporation filter for contamination. In case of severe contamination, replace the evaporation filter (🔗 Chapter 6.3.2 "Replacing the evaporation filter" on page 41).



Fig. 23: Removing the cover

4. ➤ Check the drainage holes of the water distribution (Fig. 24/1) for blockages. Remove residues such as lime or dust using a needle, a screwdriver or wet vacuum cleaner.

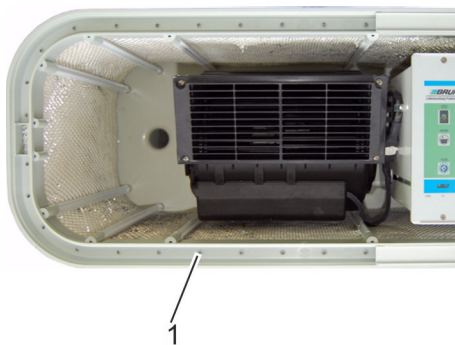


Fig. 24: Cleaning the drainage holes



Fig. 25: Removing the center piece

5. ➤ Lift the center piece from the water tank and place on the side surface (Fig. 25).
6. ➤ Empty the water tank.
7. ➤ Clean the water tank with a sponge.



This is especially required when using Water-fresh to avoid over-concentration of biocide.

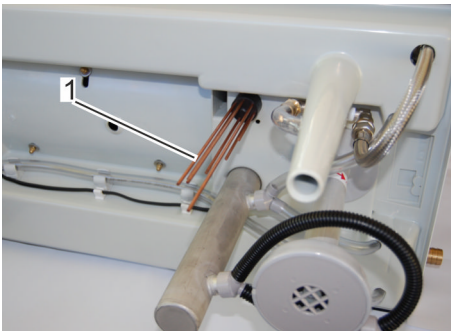


Fig. 26: Cleaning the electrode rods

8. ➤ Check the electrode rods for water level measurement (Fig. 26/1) for contamination. If required, use a cloth or sponge to remove lime or other residues.
9. ➤ Place the center piece back into the water tank and replace the cover.
 - ⇒ The monthly cleaning is completed.

6.3.2 Replacing the evaporation filter



Spare evaporation filters can be ordered from your local specialized retailer (order number: 1603).

Removing the old filter

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.



Fig. 27: Removing the cover

2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 27).



Fig. 28: Removing the filter bracket

3. ➤ Press the filter bracket together and unhinge it (Fig. 28).



Fig. 29: Filter removed

4. ➤ Unlatch the attachment hooks from the filter. Then loosen the filter along the water distribution and remove.

Inserting the new filter

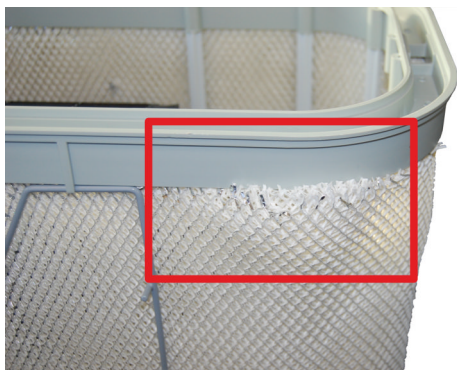


Fig. 30: Incorrect filter placement

5. ➔ Insert the new filter and fasten along the water distribution.



Ensure that the filter fits against the entire length of the water distribution within the U-shaped rail. If this is not the case, water could leak from the device (Fig. 30).

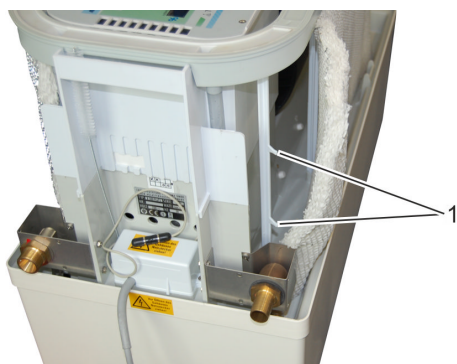


Fig. 31: Fastening the filter

6. ➔ Fasten the filter to the attachment hooks (Fig. 31/1) on both sides.

7. ➔ Check that the filter sits securely in the rail of the water distribution and that no fibers protrude.

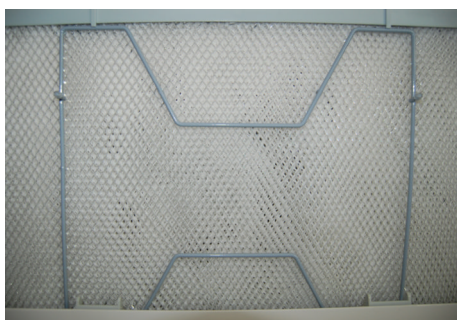


Fig. 32: Inserting the clamping brackets

8. ➔ Insert the clamping brackets again.



Ensure correct fit of the clamping brackets. The filter should not touch the housing, as this could cause water leakage.

9. ➔ Replace the cover of the humidifier.

6.3.3 Cleaning the water tank

Personnel:	■ Operator
Protective equipment:	■ Chemical-resistant protective gloves
	■ Protective goggles
Materials:	■ Lime remover



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 33).



Fig. 33: Removing the cover

3. ➤ Lift the center piece from the water tank and place it on the side surface (Fig. 34).
4. ➤ Empty the water tank.
5. ➤ Clean the water tank using lime remover. Let the lime remover act for a bit. When doing so, observe the instructions on the packaging of lime remover.
6. ➤ To avoid lime remover residues, flush the water tank thoroughly with tap water.
7. ➤ Place the center piece back into the water tank and replace the cover.



Fig. 34: Removing the center piece

6.3.4 Decalcifying the device

Aggressive lime removers



NOTICE!

Risk of property damage due to the use of aggressive lime removers!

Aggressive lime removers can cause damage to the device and to its surroundings, e.g. flooring.

- Use only suitable lime removers.
- Before decalcifying, observe the instructions on the packaging of the lime remover.
- To achieve the best results, we recommend Optima lime remover (order no. 9016) from Brune.
- For decalcifying, place the device on a suitable, nonsensitive surface.

Preparation

- | | |
|-----------------------|--|
| Personnel: | ■ Operator |
| Protective equipment: | ■ Chemical-resistant protective gloves |
| | ■ Protective goggles |
| Materials: | ■ Lime remover |



WARNING!

Risk of electrical shock if the power plug is not disconnected!



Fig. 35: Removing the cover

1. ➔ Switch off the humidifier and disconnect the power plug.
2. ➔ To prevent damage to the surface, place the humidifier on moisture-resistant flooring.
3. ➔ Lift the cover of the humidifier upwards and place it to the side (Fig. 35).
4. ➔ Remove the evaporation filter (↪ Chapter 6.3.2 "Replacing the evaporation filter" on page 41).
5. ➔ To avoid damage to the fan, loosen and pull out the fan plug by pressing the plug clamps. Cover the fan with foil or remove the fan (↪ Chapter 7.4.2 "Replacing the fan" on page 56).
6. ➔ Replace the cover.
7. ➔ Dilute the lime remover with about 10 liters (4 gallons) of water, according to the packaging information, and put into the water tank.
8. ➔ Put the humidifier back in operation and let it operate for 12 hours in this state.

Cleaning

Personnel:	■ Operator
Protective equipment:	■ Chemical-resistant protective gloves
	■ Protective goggles
Materials:	■ Lime remover



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 36).
3. ➤ Remove the cleaning brush from the side compartment.



Fig. 36: Removing the cover

4. ➤ Lift the center piece from the water tank and place it on the side surface (Fig. 37).
5. ➤ Place a suitable container under the pump hoses to collect any possible residual water.



Fig. 37: Removing the center piece

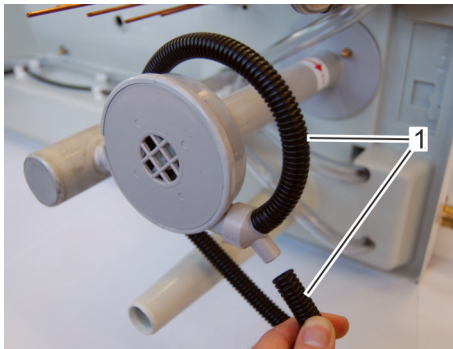


Fig. 38: Removing the pump hoses

- 6.** ➤ Remove the pump hoses (Fig. 38/1).



Fig. 39: Cleaning the pump hoses

- 7.** ➤ Clean the pump hoses using the cleaning brush. In case of severe contamination or wear, replace the pump hoses (order no. 1529).

- 8.** ➤ Reattach the pump hoses.



Ensure that the pump hoses fit securely. Otherwise water could leak out.

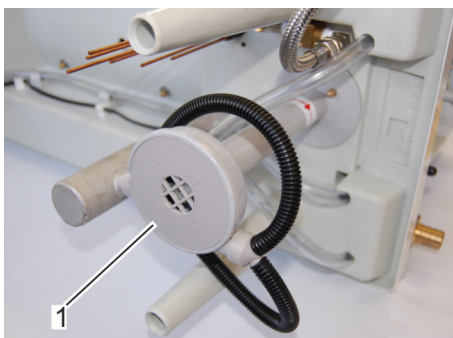


Fig. 40: Cleaning the pump body

- 9.** ➤ Clean the pump body (Fig. 40/1) using a cloth.

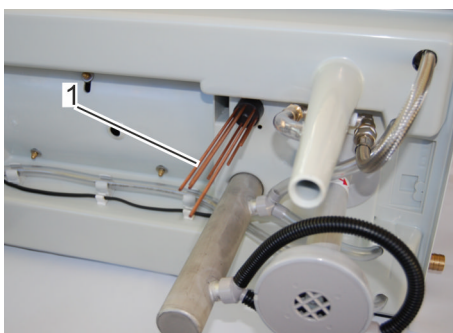
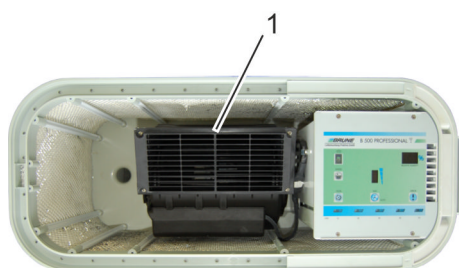


Fig. 41: Cleaning the copper electrodes

- 10.** ➤ Clean the electrode rods for measuring the water level (Fig. 41/1). Depending on the level of contamination, use a sponge or fine-grit sand paper.
- 11.** ➤ To avoid lime remover residues in the device, flush the water tank thoroughly with tap water.
- 12.** ➤ Place the center piece back into the water tank and replace the cover.



- 13.** ➤ Vacuum the surface of the fan (Fig. 42/1) using a vacuum nozzle.

Fig. 42: Vacuuming the fan

7 Detecting and remedying malfunctions

7.1 Safety instructions for troubleshooting



DANGER!

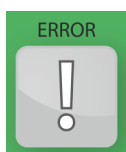
Danger to life from improper troubleshooting!

Improper troubleshooting can cause serious or fatal injuries.

- Always disconnect the power plug before beginning troubleshooting.
- Only attempt to resolve the malfunctions that are described below. For all other problems, contact the manufacturer.

7.2 Malfunction indication

The Evaporation Humidifier B500 Professional has an independent monitoring system that can quickly and reliably detect errors and respond accordingly.



If a malfunction is present, it is displayed on the malfunction indication on the control panel. The malfunction indication can be combined with an acoustic signal. A beep therefore also sounds in addition to the indication. The user can select this setting himself or herself. To do so, see [Chapter 5.6 "Changing the menu settings"](#) on page 35.



In addition to the malfunction indication, an error code appears on the display. The meaning of the error codes can be identified using the following list.



If an error code is displayed, only the [ON/OFF] button as well as the [Prog] and [Set] buttons on the remote control can be used.

Error code display

The following table shows the error codes and the corresponding solution for the problem.

Error code	Cause	Remedy	Personnel
01	The water tank is empty.	■ Check the water level. Top off the water tank, if required (🔗 <i>Chapter 5.3 "Filling the water tank" on page 32</i>). ■ Check the water level electrodes for contamination and clean them if required (🔗 <i>Chapter 6.3.1 "Monthly cleaning" on page 40</i>). ■ Was distilled water used? If yes, top off with tap water. ■ Check the connection of the water level electrodes. ■ If an automatic water supply is used, check it for functionality.	User
02	The UV lamp (optional accessory) is defective.	■ Replace the UV lamp (🔗 <i>Chapter 8.6.2 "Replacing the UV lamp" on page 70</i>).	User
03	There is water leakage (only possible with external water sensors (optional accessory)).	■ Check that the filter fits correctly. ■ Check that the device is placed on a level surface. ■ If an automatic water supply is used, check it for functionality and leak tightness. ■ Check the water tank for leaks.	User
04	The water tank is over-full (only possible with an automatic water supply (optional accessory)).	■ Check the functionality of the solenoid valve. ■ Check the water level electrodes for contamination and clean them if required (🔗 <i>Chapter 6.3.1 "Monthly cleaning" on page 40</i>).	User
05	Missing radio signal from the wireless sensor system. The receiver on the control panel has not received a signal for a long period of time.	■ Since the wireless sensor system sends a signal only every three minutes, this error always appears when switching the humidifier on. The malfunction indication disappears automatically after three minutes at the latest. ■ Decrease the distance between the wireless sensor system and the humidifier to max. 30 meters (98 feet). Concrete and steel walls can impair reception. ■ Check the functionality of the wireless sensor system. If necessary, replace the batteries (🔗 <i>"Commissioning the wireless sensor system" on page 25</i>). ■ Check the coding of the wireless sensor system (🔗 <i>Chapter 4.4 "Coding the wireless sensor system" on page 27</i>).	User
09	Several errors occurred at the same time.	■ Check the device as described in errors 01 - 05.	User

7.3 Error table

Check the following if the device is still not functioning correctly but no malfunction is present:

Fault description	Cause	Remedy	Personnel
No function; the humidifier does not start up.	The device is not switched on.	Switch on the device (☞ on page 32).	Operator
	The device is not connected, or is not connected correctly.	Ensure that the power plug of the humidifier is connected to the power supply.	Operator
The [Water level indicator] illuminates red.	The water level is too low.	Top off the water (☞ Chapter 5.3 "Filling the water tank" on page 32).	Operator
	The copper electrodes of the water level indicator are dirty.	Clean the copper electrodes (☞ Chapter 6.3.4 "Decalcifying the device" on page 45).	Operator
The humidifier is switched on but the fan is not running.	The air humidity is higher than the set target value for humidity.	If required, change the target value (☞ Chapter 5.4 "Setting the desired air humidity" on page 34).	Operator
	The fan is defective.	Replace the fan (☞ Chapter 7.4.2 "Replacing the fan" on page 56).	Operator
	The fan plug is defective.	Check the cable connection and cable. Replace them if necessary.	Licensed electrician
The device runs, but there is no water in the water distribution.	The pump hoses are dirty or are not properly connected.	Clean the pump hoses and connect them properly (☞ Chapter 6.3.4 "Decalcifying the device" on page 45).	Operator
	The lime transforming cartridge (optional accessory) is blocked.	Clean the lime transforming cartridge (☞ Chapter 8.6.1 "Cleaning the UV degermination system and lime transforming cartridge" on page 67).	Operator
	The pump is defective.	Replace the pump (☞ Chapter 7.4.1 "Replacing the pump" on page 53).	Operator
The water channel is overflowing.	The drainage holes are blocked.	Clean the water distribution and the drainage holes (☞ Chapter 6.3.1 "Monthly cleaning" on page 40).	Operator
Water is leaking from the device.	The water tank is leaking.	Check the water tank for damage.	Operator

Fault description	Cause	Remedy	Personnel
	The device is standing at a slant.	Check the installation location and adjust it if necessary (↗ Chapter 4.2 “Requirements at the installation location” on page 24).	Operator
	The filter is exhausted.	Replace the filter (↗ Chapter 6.3.2 “Replacing the evaporation filter” on page 41).	Operator
	The filter is not properly inserted.	Check that the filter is positioned correctly. Ensure that the filter is not placed too close to the housing and that no fibers protrude.	Operator
	The pump hoses are dirty or are not properly connected.	Connect the pump hoses correctly and clean them, if necessary (↗ Chapter 6.3.4 “Decalcifying the device” on page 45).	Operator
The device does not react to the remote control.	The battery is empty or incorrectly inserted.	Check the battery and replace it, if necessary. When doing so, ensure correct polarity (↗ “Commissioning the humidifier” on page 26).	Operator
	The distance between the remote control and the device is too great.	Decrease the distance to a maximum of 1 meter (3 feet).	Operator
The automatic water supply (optional accessory) no longer tops off the water.	The safety pressure hose (optional accessory) is defective – water supply is automatically stopped.	Check the water supply. If necessary, replace the safety pressure hose (↗ Chapter 8.10.2 “Replacing the safety pressure hose” on page 74).	Operator
	The automatic water supply (optional accessory) is defective.	Have the automatic water supply repaired by a licensed plumber or by authorized personnel of the manufacturer.	Licensed plumber Manufacturer
The automatic water supply (optional accessory) is continuously running.	The solenoid valve does not close.	Check the water level electrodes for contamination and clean them if necessary (↗ Chapter 6.3.1 “Monthly cleaning” on page 40).	Operator
	The solenoid valve is defective.	Have the solenoid valve replaced. To do so, contact your local retailer.	Licensed electrician
The water monitor (optional accessory) gives an acoustic signal.	Water has leaked.	Find and remedy the cause, clean the basin. Then disconnect the power connection of the water monitor for a few seconds.	Operator
The wireless sensor system gives an acoustic signal.	The batteries in the wireless sensor system are empty.	Replace the batteries.	Operator
Newly inserted batteries do not work.	The batteries have been incorrectly inserted – polarity not observed.	Insert the batteries correctly (↗ Chapter 4.3 “Commissioning the humidifier for the first time” on page 24).	Operator

Fault description	Cause	Remedy	Personnel
00% appears on the display. If the target value is to be adjusted, then 90% appears.	Operation via an external timer is active (menu number 34).	Deactivate operation using an external timer by changing the value of menu number 34 to 00 (↪ Chapter 5.6 "Changing the menu settings" on page 35).	Operator
A number between 01 and 09 appears on the control panel display. In addition, an alarm sounds. Except for the [ON/OFF] button and the [Prog] and [Set] buttons, all buttons on the remote control are blocked.	The monitoring system of the humidifier has detected a problem.	The meaning of the error and the corresponding remedy is described under ↪ "Error code display" on page 50.	Operator

7.4 Remedying errors

7.4.1 Replacing the pump



A new pump can be ordered from your local specialized retailer (order number: 1521).

Removing the old pump

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 43).



Fig. 43: Removing the cover



Fig. 44: Removing the center piece

3. ➤ Lift the center piece from the water tank and place it to the side (Fig. 44).

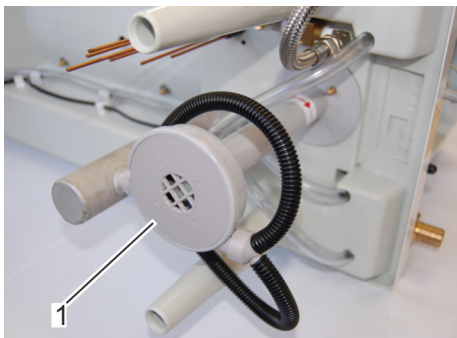


Fig. 45: Water pump

- ⇒ The water pump is located at the bottom on the right-hand side (Fig. 45/1).

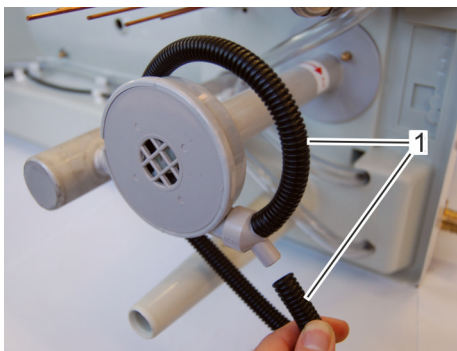


Fig. 46: Removing the pump hoses

4. ➤ To collect any possible residual water, place a suitable container under the pump hoses (Fig. 46/1).
5. ➤ Remove the pump hoses.

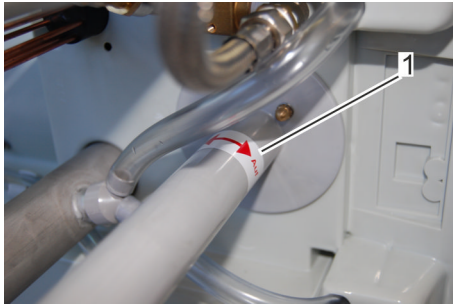


Fig. 47: Releasing the water pump

6. ➤ Release the water pump to the right and pull out it carefully (Fig. 47/1).

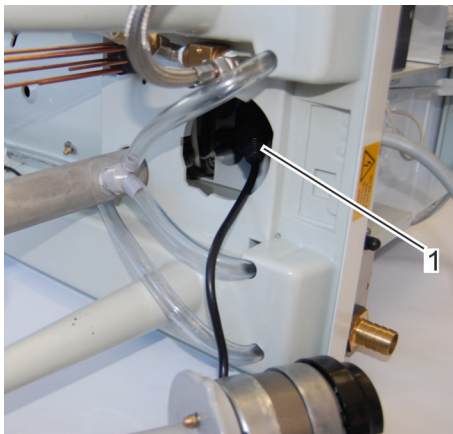


Fig. 48: Disconnecting the plug connection

7. ➤ Disconnect the plug connection (Fig. 48/1).

Installing a new pump

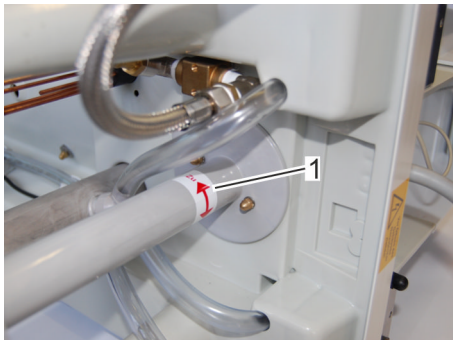


Fig. 49: Attaching the pump

8. ➤ Connect the plug connection of the new pump.
9. ➤ Insert the water pump into the opening and turn in the direction of the arrow until it latches in and sits securely (Fig. 49/1).
- Ensure that the pump cable is not crushed when inserting the pump.



Fig. 50: Attaching the pump hoses

10. ➔ Reattach the pump hoses.



Ensure that the pump hoses fit securely. Otherwise water could leak out.

11. ➔ Place the center piece back into the water tank and replace the cover.

7.4.2 Replacing the fan



A new fan can be ordered from your local specialized retailer (Item no.: 1500S).

Removing the old fan

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➔ Switch off the humidifier and disconnect the power plug.
2. ➔ Lift the cover of the humidifier upwards and place it to the side (Fig. 51).
⇒ The fan is located in the center piece next to the control panel.



Fig. 51: Removing the cover

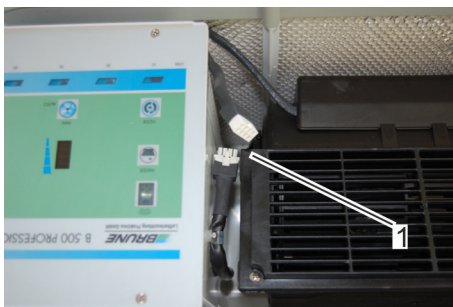


Fig. 52: Removing the fan plug

3. ➔ Loosen and pull out the fan plug by pressing the plug clamps (Fig. 52/1).



Fig. 53: Removing the center piece

4. ➔ Lift the center piece from the water tank and place it to the side (Fig. 53).

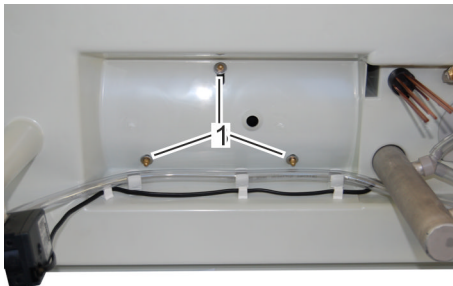


Fig. 54: Removing bolts

5. ➔



NOTICE!

Ensure that the fan does not fall out after the bolts have been removed.

Unscrew the three bolts on the bottom counterclockwise and remove them completely (Fig. 54/1).

6. ➔ Remove the fan.

Inserting a new fan

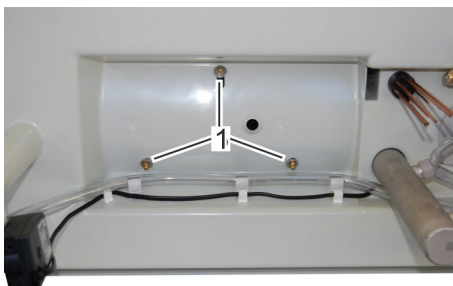


Fig. 55: Tightening the fan

7. ➔ Insert a new fan.
8. ➔ Run the screw threads on the vibration dampers through the holes in the center plate.
9. ➔ Tighten the fan at the bottom of the center piece again (Fig. 55/1).

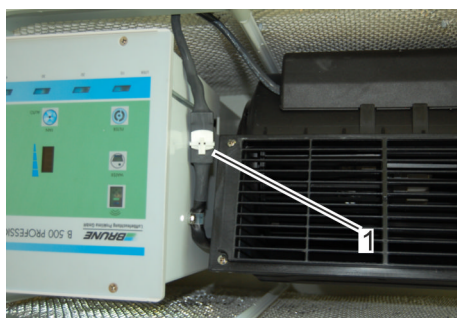


Fig. 56: Connecting the fan

- 10.** ➤ Connect the fan plug again (Fig. 56/1).
- 11.** ➤ Place the center piece back into the water tank and replace the cover.

8 Accessories



WARNING!

Risk of injury due to using the incorrect accessories!

The use of incorrect or defective accessories may cause harm to the user, damage, malfunctions or total failure.

- Only use original accessories from Brune Luftbefeuchtung Proklima GmbH or accessories authorized by Brune Luftbefeuchtung Proklima GmbH.
- Always contact our customer service if anything is not clear.

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

8.1 Waterfresh

Biocide



NOTICE!

Environmental damage due to biocides!

The biocides contained in Waterfresh are harmful to the environment in large amounts.

- Information about correct disposal can be obtained from the local authorities or from specialist waste management companies.
- Always use biocides safely. Read the label and product information before use.



Fig. 57: Waterfresh



Order numbers:

- 1 l bottle 9020
- 5 l can: 9022

Waterfresh can also be added to the water tank to reduce algae growth, germ formation and limescale. It does not enter the room air and does not present any health risks if used properly.

Read the dosing instructions on the bottle when using Waterfresh. To prevent over-concentration, the water tank should be drained regularly and cleaned thoroughly at least every 3–4 months
 ➔ Chapter 6.3.3 “Cleaning the water tank” on page 44.

Always use biocides safely. Always observe the safety instructions on the bottle.

8.2 Automatic water supply



Order number: 1799



Requirement

- *Installation of the automatic water supply is performed exclusively by the manufacturer. A connection to a local water supply system may only be carried out by an authorized plumber.*

When connecting the humidifier to the local water supply system, manual filling is not required. Refilling is performed by an electronically controlled solenoid valve. It automatically opens the water supply when reaching the minimum water level and stops the water supply as soon as the water tank is full. The device is set to a maximum fill level of 30 liters (7.9 gallons). This means that if the fill level of 30 liters (7.9 gallons) is reached, the water supply stops.

For safety reasons, we recommend the following accessories:

- Safety collecting basin (↗ Chapter 8.7 “Safety collecting basin” on page 72)
- Safety water sensor (↗ Chapter 8.8 “Safety water sensor” on page 73)
- External water sensor (↗ Chapter 8.9 “External water sensor” on page 73)



WARNING!

Risk of injury due to unauthorized connection of the humidifier to the local water supply system.

Connecting the humidifier to the local water supply system creates risks that can not be assessed by laypersons.

- Connection of the humidifier to the local water supply system may only be carried out by an authorized plumber.
- To ensure a stable function of the water supply, do not connect to a supply with distilled or treated water.

Operation



If the water supply is active, this is indicated by a diode running light on the [Water level indicator].

The water supply is controlled via the electrode rods of the water level indicator. For the water supply to function properly, it is necessary to clean the electrode rods monthly and to remove lime-scale (↗ Chapter 6.3.1 “Monthly cleaning” on page 40).

Safety devices

To prevent overfilling, the device switches off automatically upon reaching a fill level of 50 liters (13.2 gallons). Here, an acoustic warning signal sounds and error code 04 appears on the display. If there is a defect in the water supply and the water level does not change after 10 minutes despite the solenoid valve being open, the operation is cancelled and error code 01 appears on the display.

Information for licensed plumbers



The following information is directed exclusively to licensed plumbers who connect the humidifier to the local water supply system.



NOTICE!

Risk of property damage due to excessive water pressure!

The humidifier could be damaged if the water pressure of the local water supply system is too high.

- The maximum water pressure may not exceed 1 MPa (145 psi).

Personnel: Licensed plumber

1. ➔ To prevent contamination of the solenoid valve, thoroughly flush the line prior to connecting.
2. ➔ Connect the humidifier to the local water supply system as per the regulations of the local water supply authority. When doing so, observe the following points:
 - The material used and the connection must meet the IEC 61770 standard.
 - Only use new hoses. Used hoses may not be used again.
 - Always observe the regulations of the local water supplier. A backflow preventer may be required.
 - For a diagram with the dimensions of the connection, see Fig. 58.

8.3 Automatic flushing device



Order number: 1740

**Requirement**

- Automatic water supply
- Installation of the automatic flushing device is carried out exclusively by the manufacturer. A connection to a local water supply system may only be carried out by an authorized plumber.

The automatic flushing device is used to exchange, in regular intervals, the residual water in the water tank and to top it off with fresh water. This unit is only used in combination with the automatic water supply; no manual water exchange is required.

Operation

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

Personnel: ■ Operator



- ➔ To start the flushing device manually via the remote control, press the *[Flush]* button.

In addition to the manual start, the flushing device can be programmed so that the water is automatically exchanged in intervals of 1–7 days. To do so, proceed as follows:

Personnel: ■ Operator



1. ➔ To program the flushing device, open the menu by pressing the *[Prog]* button.
2. ➔ Open menu item 31 (↪ Chapter 5.6 “Changing the menu settings” on page 35).
3. ➔ Change the value according to the desired interval (1–7 days).
4. ➔ Once the change has been carried out, wait 10 seconds.
 - ⇒ The display read-out jumps back to the default state (display of the actual humidity value). The changes have been saved.

Information for licensed plumbers

The following information is directed exclusively to licensed plumbers who connect the humidifier to the local water supply system.

Personnel: ■ Licensed plumber

- ➔ Connect the automatic flushing device to the waste water system as per the regulations of the local water supply authority. When doing so, observe the following points:
 - The material used and the connection must meet the IEC 61770 standard.
 - The waste water hose may not be longer than 1.5 meters (5 feet), since the pump only has a certain output and otherwise no pressure is built up.
 - Ensure that the waste water hose is not routed up an incline.
 - To fill the water column, if necessary, fill the hose with water prior to connection.
 - To prevent the formation of a vacuum, equip the line with a bleeder if required.
 - For dimensions and connection sizes, see drawing Fig. 58.

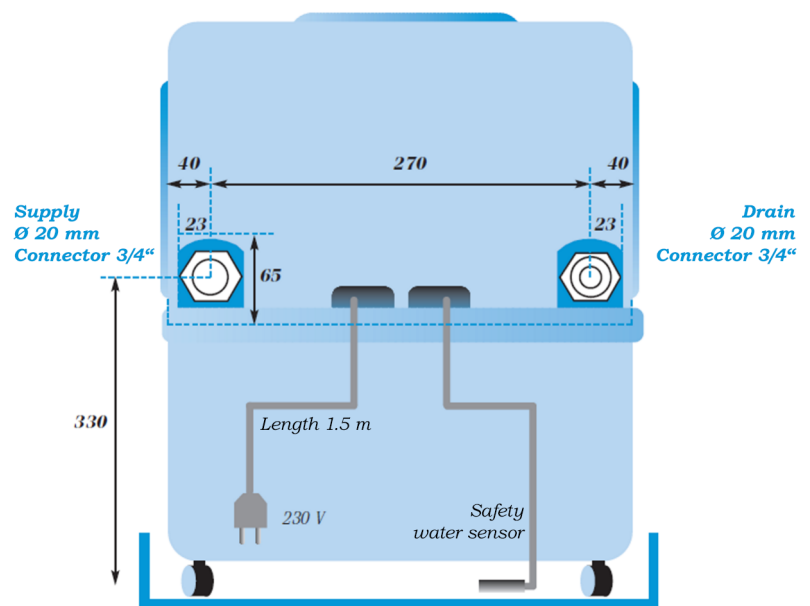


Fig. 58: Automatic flushing device

8.4 Activated charcoal cleaning filter

8.4.1 Overview



Order number: 1605/500



Fig. 59: Activated charcoal cleaning filter

In addition to the bio-filter used as standard, an additional activated charcoal cleaning filter can be used for air filtration. This binds organic pollutants and unwanted odors. The lifetime of the activated carbon cleaning filter is approximately 6 months, but this depends largely on the room air pollution.

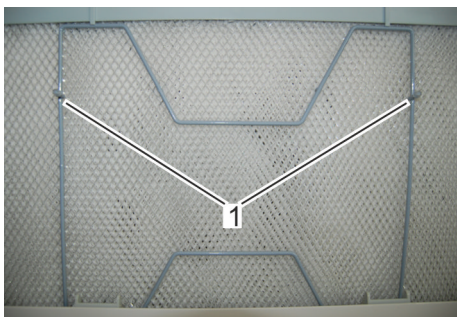


Fig. 60: Clamping bracket for activated charcoal cleaning filter

The activated charcoal cleaning filter is mounted directly above the evaporation filter. For this, the clamping bracket of the evaporation filter must be removed and replaced by the bracket to be ordered (article number 1413/500). It differs from the standard bracket in that it has two additional retaining lugs for the activated charcoal cleaning filter (Fig. 60/1). Proceed as described in [Chapter 8.4.2 "Replacing the activated charcoal cleaning filter"](#) on page 64 to replace the activated charcoal cleaning filter.

8.4.2 Replacing the activated charcoal cleaning filter

Personnel: Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 61).



Fig. 61: Removing the cover

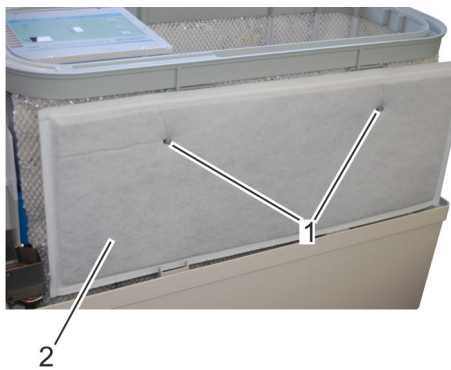


Fig. 62: Removing the plastic sleeves

3. ➔ Remove the plastic sleeves over the retaining lugs of the clamping bracket (Fig. 62/1).
4. ➔ Remove the old activated charcoal cleaning filter (Fig. 62/2).
5. ➔ Hook the new activated charcoal cleaning filter on the retaining lugs. When doing so, observe the following:
 - The filter must not be kinked or bent sharply.
 - The flat side of the filter is pointing towards the device.
 - Ensure that the retaining lugs of the filter are at the same distance from each other as the holes of the filter. If required, adjust the width of the filter bracket by carefully bending.
6. ➔ Reattach the plastic sleeves.
7. ➔ Replace the cover of the humidifier.

8.5 Air hood with flexible air hose



Order numbers:

- Hood B 500, white: 1755.1
- Hood B 500, gray: 1755.2
- Hood B 500, anthracite: 1755.4

The air hose is not within the scope of delivery.



Fig. 63: Air hood

The air hood (Fig. 63/1) is used to direct the humidified air to a specific point. The air hood is placed on the air outlet opening. Then, an aluminum air hose is pushed over the hood and turned in the direction of the desired airflow. This accessory can be used anywhere the humidified air is to be directed into critical areas.

- Height of hood: 270 mm (10.6 inches)
- Diameter: 150 mm (5.9 inches)
- Total height with air hose: 570 mm (22.4 inches)

8.6 UV degermination system and lime transforming cartridge

Mercury vapor



Order numbers:

- UV lamp: 1721
- Lime transforming cartridge: 1725

**WARNING!****Health risk from toxic mercury vapor!**

The tube of the UV lamp contains toxic mercury. Inhaling mercury vapors causes a high risk of acute poisoning.

- When changing the UV lamp, always handle it carefully to avoid damage to the UV lamp.
- Never dispose of the UV lamp in common household trash. Information about correct disposal can be obtained from the local authorities or from specialist waste management companies.

Description**Requirement**

- *Installation of the UV degermination system and the lime transforming cartridge is carried out exclusively by the manufacturer.*

Germs and microorganisms in the water are killed off by radiating the water with ultraviolet light. The humidifier water is disinfected and returns into the water cycle of the device with a reduction in the number of germs.

In addition, the device can be equipped with a lime transforming cartridge, which changes the molecular structure of lime so that it can no longer accumulate on surfaces in the device.

**NOTICE!****Risk of damage from using softened water!**

The use of softened water can cause damage to the lime transforming cartridge.

- Never use softened water when using a lime transforming cartridge.

8.6.1 Cleaning the UV degermination system and lime transforming cartridge

Cleaning the UV degermination system

Personnel:	■ Operator
Protective equipment:	■ Chemical-resistant protective gloves
	■ Protective goggles
Materials:	■ Lime remover

**WARNING!**

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ Lift the cover of the humidifier upwards and place it to the side (Fig. 64).



Fig. 64: Removing the cover



Fig. 65: Removing the center piece

3. ➤ Lift the center piece from the water tank and place it on the side surface (Fig. 65).

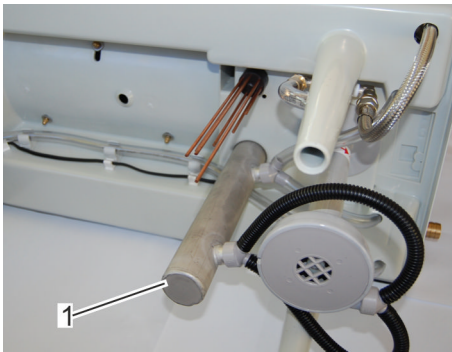


Fig. 66: UV degermination system

- ⇒ The UV degermination system is located below the center plate next to the pump (Fig. 66/1).
4. ➤ Check the stainless steel pipe for damage and contamination. If necessary, remove contamination using a cloth and lime remover.



Fig. 67: Cleaning the pump hoses

5. ➤ Take the pump hoses off the stainless steel pipe and clean them using the cleaning brush. In the event of severe contamination or wear, replace the pump hoses.

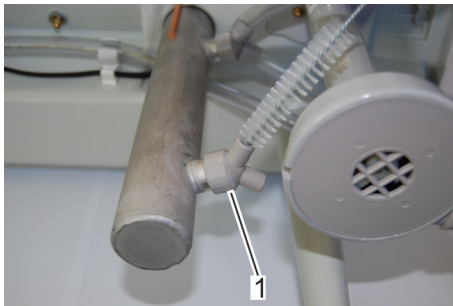


Fig. 68: Cleaning the stainless steel pipe

6. ➔



WARNING!

Toxic mercury vapors could escape if the UV lamp inside the stainless steel pipe is damaged!

Remove the plastic Y piece (Fig. 68/1) from the stainless steel pipe and carefully clean it with the cleaning brush.

7. ➔

Reattach the pump hoses to the stainless steel pipe.



Ensure that the pump hoses fit securely. Otherwise water could leak out.

Cleaning the lime transforming cartridge

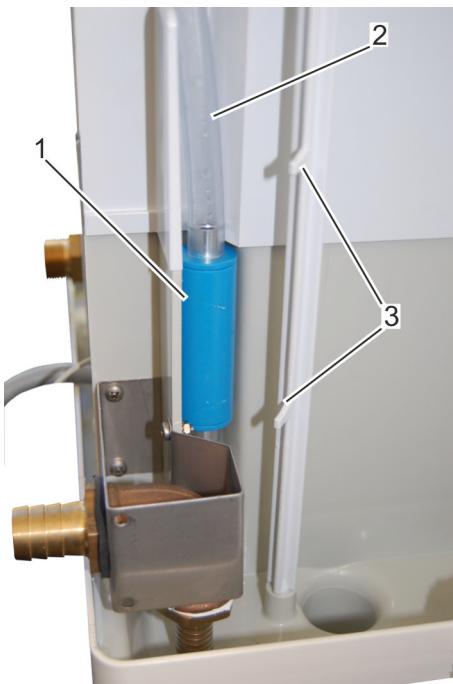


Fig. 69: Lime transforming cartridge

1. ➔

The lime transforming cartridge (Fig. 69/1) is located on the right-hand side between the water supply and the center plate. To remove the cartridge, first remove the evaporation filter from the retaining lugs (Fig. 69/3) and tilt to the side.

2. ➔

Remove the pump hoses (Fig. 69/ 2) and remove the lime transforming cartridge.



Fig. 70: Cleaning the lime transforming cartridge

3. ➤ Check the passage of the cartridge for contamination. Remove any contamination with the cleaning brush. Heavy contamination can be removed using a screwdriver or drill (diameter max. 7 mm).
4. ➤ Reattach the lime transforming cartridge to the pump hoses.



Ensure that the pump hoses fit securely. Otherwise water could leak out.

5. ➤ Place the center piece back into the water tank and replace the cover.

8.6.2 Replacing the UV lamp



WARNING!

Health risk from toxic mercury vapor!

The tube of the UV lamp contains toxic mercury. Inhaling mercury vapors causes a high risk of acute poisoning.

- When changing the UV lamp, always handle it carefully to avoid damage to the UV lamp.



CAUTION!

Injury to the eyes from ultraviolet radiation!

Unfiltered, direct and indirect UV radiation could damage the skin and eyes.

- Never look into the light of the lamp when switched on.



NOTICE!

Property damage due to incorrect handling of the UV lamp!

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

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

The UV lamp is located under the control panel on the center plate adjacent to the pump motor. Proceed as follows to replace it:

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➔ Switch off the humidifier and disconnect the power plug.
2. ➔ Lift the cover of the humidifier upwards and place it to the side (Fig. 71).



Fig. 71: Removing the cover

3. ➔ Use a screwdriver to loosen and unscrew the four screws at the surface of the control panel by turning counterclockwise (Fig. 72/1).

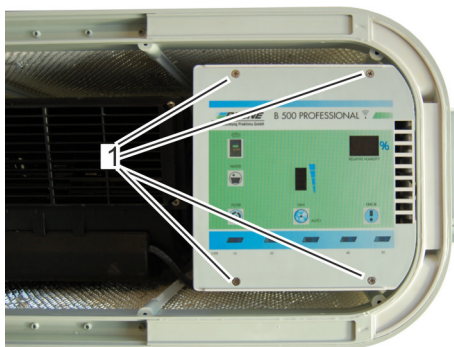


Fig. 72: Releasing the control panel

4. ➔



NOTICE!

The electronics of the control panel are very sensitive. Ensure that you do not touch the electronics and do not damage any components.

Remove the control panel and place it on the operating side (Fig. 73).

⇒ The UV lamp is located in metal housing below the control panel (Fig. 74/1).



Fig. 73: Removing the control panel

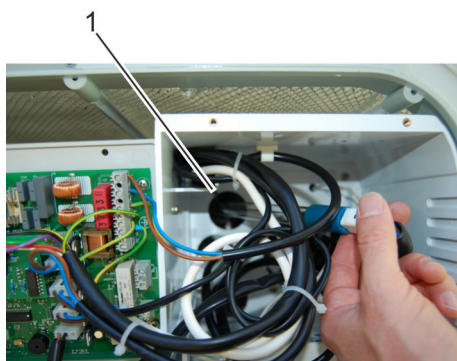


Fig. 74: Pulling out the UV lamp

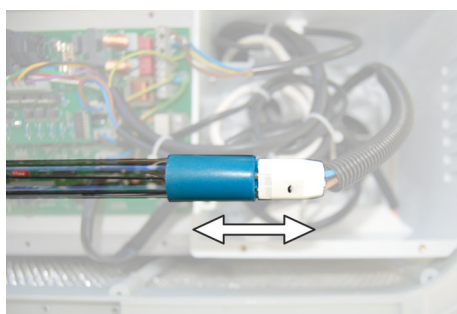


Fig. 75: Releasing the connection cable

5. ➤



WARNING!

Danger of poisoning and damage to property from careless removal of the UV lamp!

Carefully pull out the UV lamp at the connection cable (Fig. 74).

6. ➤

Only touch the UV lamp at its blue end pieces. Remove the UV lamp connection cable (Fig. 75).

7. ➤

Grasp the new UV lamp on the end caps and unpack it.

8. ➤

Attach the connection cable to the new UV lamp.

9. ➤

Carefully insert the UV lamp into the quartz glass body.

10. ➤

Replace the control panel and affix it using the four screws.

11. ➤

Replace the device cover.

8.7 Safety collecting basin



Order numbers:

- Safety collecting basin, white: 1752.1
- Safety collecting basin, gray: 1752.2
- Safety collecting basin, anthracite: 1752.4

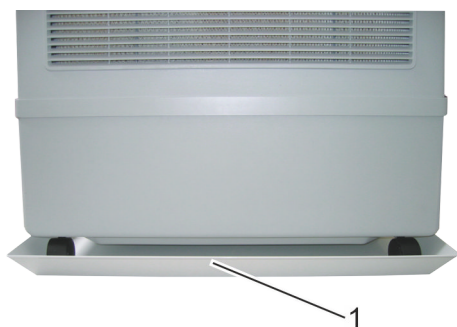


Fig. 76: Safety collecting basin

The safety collecting basin (Fig. 76/1) is placed below the Evaporation Humidifier B500. It collects any excess water during water leakage.

8.8 Safety water sensor



Order number: 1757



Requirement

- Installation of the safety water sensors is carried out exclusively by the manufacturer.
- Safety collecting basin



Fig. 77: Safety water sensor

The safety water sensor is placed below the device in the safety collecting basin and reacts in the event of water leakage from the device. The humidifier immediately stops working and the user is alerted of the water leakage by a signal tone and an error display (03). As soon as the leaked water is removed, the humidifier starts again automatically.

8.9 External water sensor



Order number: 1753



Requirement

- Automatic water supply
- Safety collecting basin



Fig. 78: External water sensor

The external water monitor can be used as an additional safety device on humidifiers with an automatic water supply. Unlike the water safety sensor, the water monitor is equipped with an independent solenoid valve, which is connected between the safety pressure hose and water tap.

The sensor of the water monitor is located in the safety collecting basin and shuts off the water supply to the humidifier when it comes into contact with water. In addition, a signal tone sounds that can only be deactivated by disconnecting the power supply.

8.10 Safety pressure hose

8.10.1 Overview



Order number: 1754



Requirement

- Automatic water supply



Fig. 79: Safety pressure hose

The safety pressure hose secures the connection between the humidifier and water tap. If leakage occurs on the hose, this is detected by a safety fabric within the hose and the water supply is automatically stopped.

8.10.2 Replacing the safety pressure hose

Proceed as follows to replace the safety pressure hose:

Personnel: ■ Operator



WARNING!

Risk of electrical shock if the power plug is not disconnected!

1. ➤ Switch off the humidifier and disconnect the power plug.
2. ➤ To collect any possible residual water, place a suitable container under the connection of the water supply.
3. ➤ Rotate the safety pressure hose twist-lock located at the water supply connection (Fig. 80/1) counterclockwise and remove.

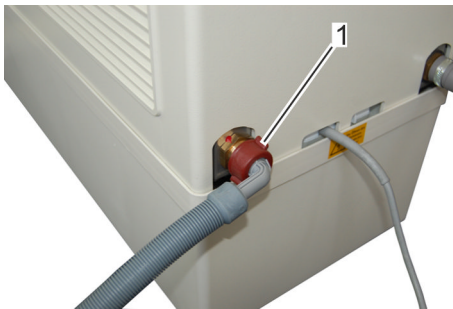


Fig. 80: Removing the safety pressure hose from the humidifier

4. ➤ Rotate the twist-lock located at the water monitor connection (Fig. 81/1) counterclockwise and remove.
5. ➤ Remove the safety pressure hose.
6. ➤ Attach the new safety pressure hose at the water monitor connection and tighten the twist-lock.
7. ➤ Attach the safety pressure hose at the water supply connection and tighten the twist-lock.

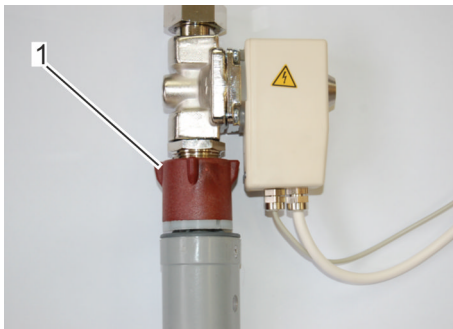


Fig. 81: Removing the safety pressure hose from the water monitor

9 Spare parts

**WARNING!****Risk of injury due to using wrong spare parts!**

Using incorrect or faulty spare parts endangers the user and can cause damage, malfunctions or complete failure.

- Only use original spare parts from Brune Luftbefeuchtung Proklima GmbH or spare parts authorized by Brune Luftbefeuchtung Proklima GmbH.
- Always contact our customer service for any questions.

Ordering spare parts

Spare parts can be ordered at your local specialized retailer or directly from the manufacturer. For the order numbers see  *Appendix "Parts list" on page 86.*

10 Disposing of the humidifier

If no return or disposal agreement was made, have disassembled components recycled:

- Have metals scrapped.
- Send elements made of plastic for recycling.
- Dispose batteries and UV tube as hazardous waste.
- Sort other components acc. to material properties and dispose.



NOTICE!

Danger to the environment due to wrong disposal!

Wrong disposal can pose risks to the environment.

- Electronic waste and electronic components must be disposed of by authorized certified companies.
- In case of doubt, information about correct disposal can be obtained from the local authorities or from special waste management companies.

11 Technical data

11.1 Dimensions and weight

Data	Value	Unit
Weight (empty)	approx. 24 / 53	kg / lbs
Width	755 / 29.7	mm / in
Height	620 / 24.4	mm / in
Depth	365 / 14.4	mm / in
Water tank volume	approx. 50 / 13.2	l / US gal

11.2 Connection values

Electrical

Data	Value	Unit
Voltage	230	V
Frequency	50	Hz
Power consumption, maximum	130	W
Fuse, at least	10	A
Maximum water pressure when connecting to the public water supply	1	MPa
Minimum water pressure when connecting to the public water supply	0	MPa

11.3 Performance data

Data	Value	Unit
Air output	900 / 3962	m³/h / gal/min
Evaporation performance	2.6 / 16.5	l/h / US gpd
Evaporation filter surface	3.5 / 37.7	m² / sq ft

11.4 Operating conditions

Environment

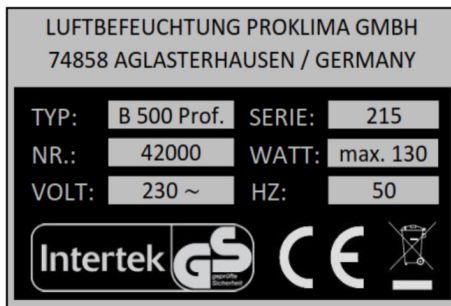
Data	Value	Unit
Temperature range	10 – 40 / 50 – 104	°C / °F

Data	Value	Unit
Relative humidity	15 – 80	%

11.5 Emissions

Data	Value	Unit
Noise emission	32 – 44	dB(A)

11.6 Type plate



The type plate is located under the cover above the power connection and contains the following information:

- Manufacturer
- Type
- Series
- Serial number
- Electrical power and connection values

Fig. 82: Type plate

12 Index

A		
Accessories	59	
Activated charcoal cleaning filter	63	
Air hood	65	
Automatic flushing device	61	
Automatic water supply	60	
External water sensor	73	
Lime transforming cartridge	65	
Safety collecting basin	72	
Safety pressure hose	74	
Safety water sensor	73	
UV degermination system	65	
Activated charcoal cleaning filter	63	
Replacing	64	
Air hood	65	
Automatic flushing device	61	
Automatic water supply	60	
C		
Changing the menu settings	35	
Cleaning	38	
Cleaning schedule	39	
Connection		
Automatic flushing device	61	
Automatic water supply	60	
Connection values	78	
Control panel	9	
Symbols	31	
Copyright	3	
Customer service	3	
D		
Dangers	14	
Decalcifying	45	
Defects	49	
Dimensions	78	
Disposal	77	
E		
Electrical current	15	
Emissions	79	
Environment	78	
Environmental protection	20	
Error code display	50	
External water sensor	73	
F		
Fan		
Regulating	34	
Replacing	56	
Filling	32	
H		
Humidifier		
Cleaning	38	
Commissioning	24	
Decalcifying	45	
Disposing	77	
Operating	31	
Storing	21	
Switching off	32	
Switching on	32	
Transporting	21	
I		
Improper use	12	
Inspection of delivery	22	
Installation location	24	
Intended use	12	
L		
Lime transforming cartridge	65	
Cleaning	67	
M		
Malfunction indications	49	
Malfunctions	49	
Detecting	49	
Overview	51	
Remedying	53	
Menu overview	36	
N		
Noise emission	79	
O		
Operating conditions	78	
Operation	31	
Operator	18	
Order numbers	86	
Overview		
Control panel	9	
Humidifier	6	
Menu	36	
Remote control	8	
Wireless sensor system	8	
P		
Parts list	86	
Performance data	78	
Personnel	19	
Problems	49	
Protective gear	39	
R		
Remote control	8	
Replacement		
Activated charcoal cleaning filter	64	
Evaporation filter	41	
Fan	56	

Pump	53	Symbols	
Safety pressure hose	74	in this manual	11
UV lamp	70	on the control panel	31
Replacing the evaporation filter	41	on the device	13
Replacing the pump	53	on the packaging	21
Replacing the safety pressure hose	74		
Replacing the UV lamp	70	T	
Residual risks	14	Table of malfunctions	51
		Technical data	78
S		Transport	21
Safety collecting basin	72	Type plate	79
Safety pressure hose	74		
Safety signs	13	U	
Safety water sensor	73	Use	12
Scope of delivery	7	User	19
Setting		UV degermination system	65
Air humidity	34	Cleaning	67
Fan	34		
Menu	35	W	
Setting the air humidity	34	Warning message	50
Signs	13	Water tank	
Spare parts	76	Cleaning	44
Spare parts list	86	Filling	32
Start-up	24	Weight	78
Storage	21	Wireless sensor system	8
Switching off	32	Coding	27
Switching on	32		

Appendix

Table of contents for the appendix

A	Exploded view	84
B	Parts list	

A Exploded view

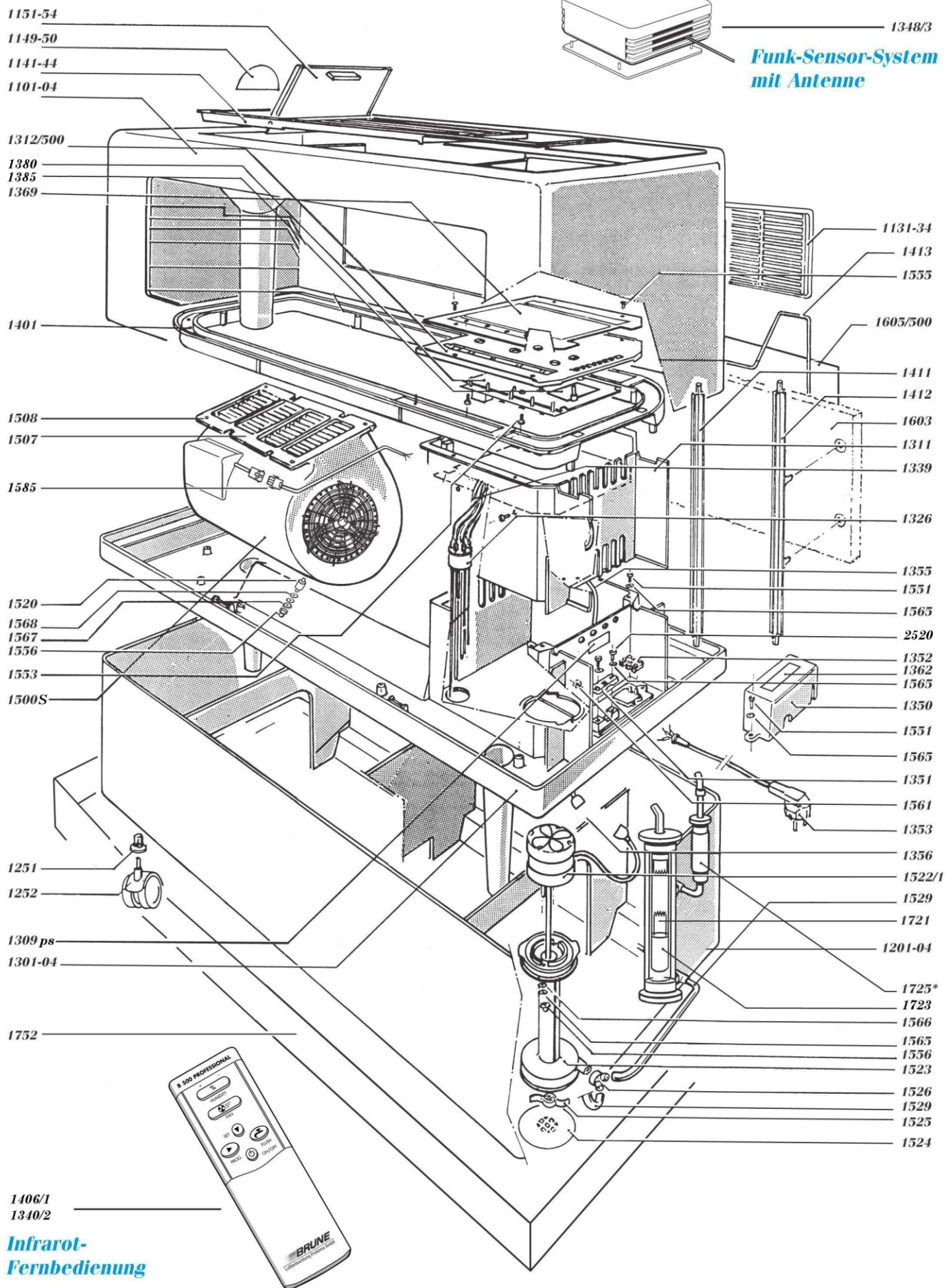


WARNING!

Risk of injury from disassembling the humidifier!

The illustrations and parts list below are only intended for specialized retailers. Unauthorized disassembling of the humidifier may cause serious injury.

- Never disassemble the device on your own.
- Only perform the repairs described in this manual.
- For problems where the solution is not described in this manual, contact the local specialized retailer.



B Parts list



WARNING!

Risk of injury from disassembling the humidifier!

The illustrations and parts list below are only intended for specialized retailers. Unauthorized disassembling of the humidifier may cause serious injury.

- Never disassemble the device on your own.
- Only perform the repairs described in this manual.
- For problems where the solution is not described in this manual, contact the local specialized retailer.

Standard version

No.	Name	No.	Name
1101	Housing, upper part, white	us1377	Board cover
1102	Housing, upper part, light gray	1380	Motherboard 115
1104/500	Housing, upper part anthracite	1385	Additional board for multi-speed fan
1149	“Filter replacement” sign	1401	Water distribution
1150	“Fill here” sign	1406/1	Remote control without batteries
1151	Fill flap, white	1411	Filler rods without rib (6)
1152	Fill flap, light gray	1412	Filler rods without rib (4)
1154	Fill flap, anthracite	1413	Clamping bracket with 2 lugs
1201	Housing, lower part, white	1500S	Fan, complete with motor, safety guard and fastening material
1202	Housing, lower part, light gray	1507	Safety guard for fan
1204/500	Housing, lower part, anthracite	1508	Sheet metal screw M 4.2 x 19 A2 (4)
1251	Impact sleeve (4)	1520	Rubber metal buffer M 4, stainless steel (3)
1252	Castors (4)	1521	Pump, complete
1301	Center plate, white	1522/1	Pump motor incl. cable 0.3 m and pump ventilator
1302	Center plate, light gray	1523	Pump body
1304/500	Center plate, anthracite	1524	Pump cover plate
1311	Shaft	1525	Pump impeller blade
1312/500	Shaft cover	1526	Y piece
1326	Electrode rods (set = 7) with head	1529	Pump hose, crystal clear (2)
1339	Cable harness	1551	Cylinder head screw M 4 x 10

No.	Name	No.	Name
1340/2	Battery for remote control	1553	Cylinder head screw M 4 x 6
1348/3	Measuring and transmitter module in housing without battery	1556	Cap nut M 4
1348/4	Battery 1.5 V AA (2 pcs.)	1561	Brass nut M 4
1350	Cover box	1565	Tooth lock washer M 4
1351	Strain relief	1566	U washer M 4
1352	Terminal strip	1567	U washer V2 M 5 x 15
1353	Power cable with plug	1568	Poly U washer M 5 x 15
1355	Cable 0.8 m	1585	Cable 0.8 m for fan
1356	Cable 0.8 m with socket	1603	Bio-filter B 500
1362	"Pull power plug" sign	2520	Screw/bolt M4x12 strain relief
1369	Keyboard foil		

Special equipment and accessories

No.	Name	No.	Name
1413/500	Clamping bracket with 4 lugs for activated carbon filter	1752.2	Safety collecting basin, light gray
1601	Foam filter B 500	1752.4	Safety collecting basin, anthracite
1605/500	Activated charcoal filter set	1753	Water monitor with sensor
1720	UV technology	1754	Safety pressure hose
1721	6-watt emitter (UV degermination system)	1755.1	Hood, white
1723	Quartz dip tube B500	1755.2	Hood, gray
1725	Lime transforming cartridge	1755.4	Hood, anthracite
1740	Flushing device, complete	1757	Safety water sensor
1741	Pump for flushing device	1799	Automatic water supply, complete
1747	Drain hose for flushing device	1799.1	Solenoid valve, complete
1752.1	Safety collecting basin, white	1799.2	Coil for automatic water supply



Luftbefeuchtung Proklima GmbH - Schwarzacher Str. 13 - 74858 Aglasterhausen - Germany
Tel.: 06262-5454 - Fax: 06262-3255 - Mail: mail@brune.info - Web: www.brune.info