

B 400

EN

OPERATING MANUAL
HUMIDIFIER



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Notes regarding the operating manual

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

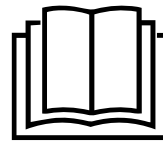
Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the operating manual must be observed.

You can download the current version of the operating manual and the EU declaration of conformity via the following link:



B 400



<https://hub.trotec.com/?id=42098>

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Do not expose the device to directly squirting water.
- Fill the device with fresh drinking water only.
- Never insert any objects or limbs into the device.
- Do not cover or transport the device during operation.
- Do not sit on the device.
- This appliance is not a toy! Keep away from children and animals. Do not leave the device unattended during operation.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!

- The electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.
- Check whether the device is switched off and all installation instructions have been observed, before connecting the power cable to a properly grounded socket.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
Defective power cables pose a serious health risk!
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that the suction side is kept free of dirt and loose objects.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Do not use the device when the water tank is empty.
- Before filling the water tank, switch the device off and disconnect the power cable from the mains socket. Hold onto the mains plug while doing so.
- Only transport the device in an upright position with an emptied water tank.
- Empty the water tank before transport and storage. Do not drink the water. Health hazard!

- Note that high humidity levels may enhance the growth of biological organisms in the environment.
- Make sure that objects in the surroundings of the device do not become wet or damp. If moisture is present, the output must be reduced. If the output cannot be reduced, the device must only be operated in intervals. Absorbent materials such as carpeting, curtains, sheers or tablecloths must not become damp.
- Make sure that the water in the water tank is replaced every 3 days. Otherwise there is a risk of microorganisms growing in the water tank which presents a health hazard if they get into the air or water.

Intended use

Only use the device as a mobile humidifier for the humidification and filtration of room air, while adhering to and following the technical data.

Intended use comprises humidifying the room air in:

- museums
- living spaces
- warehouses and archives
- libraries
- call centres and computer rooms

Improper use

- Do not place the device on wet or flooded ground.
- Do not place any objects, e.g. clothing, on the device.
- Do not use the device outdoors.
- Any unauthorised modifications, alterations or structural changes to the device are forbidden.
- Any operation other than as described in this manual is prohibited. Non-observance renders all claims for liability and guarantee null and void.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the operating manual, especially the Safety chapter.

Safety signs and labels on the device

Note

Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.

The following safety signs and labels are attached to the device:

Symbols	Meaning
	This symbol located on the device indicates that the filter has to be checked and, if necessary, to be cleaned prior to each operation. Replace the filter if it is defective. Do not insert a wet filter into the device. Wait until the filter has dried.

Symbols	Meaning
	This symbol located on the device indicates that the water tank should be cleaned every 3 days. Change the water in the water tank every 3 days. Disconnect the device from the mains before cleaning the water tank.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!
Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.



Caution

If the device is knocked over, water will leak from the lower part.
Disconnect the device from the mains to prevent damage to the device caused by dry running.

Note

Do not operate the device without inserted evaporation mats!
Without evaporation mats, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device.

Behaviour in the event of an emergency

1. Switch off the device.
2. In an emergency, disconnect the device from the mains feed-in: Hold onto the mains plug while pulling the power cable out of the mains socket.
3. Do not reconnect a defective device to the mains.

Information about the device

Description of the device

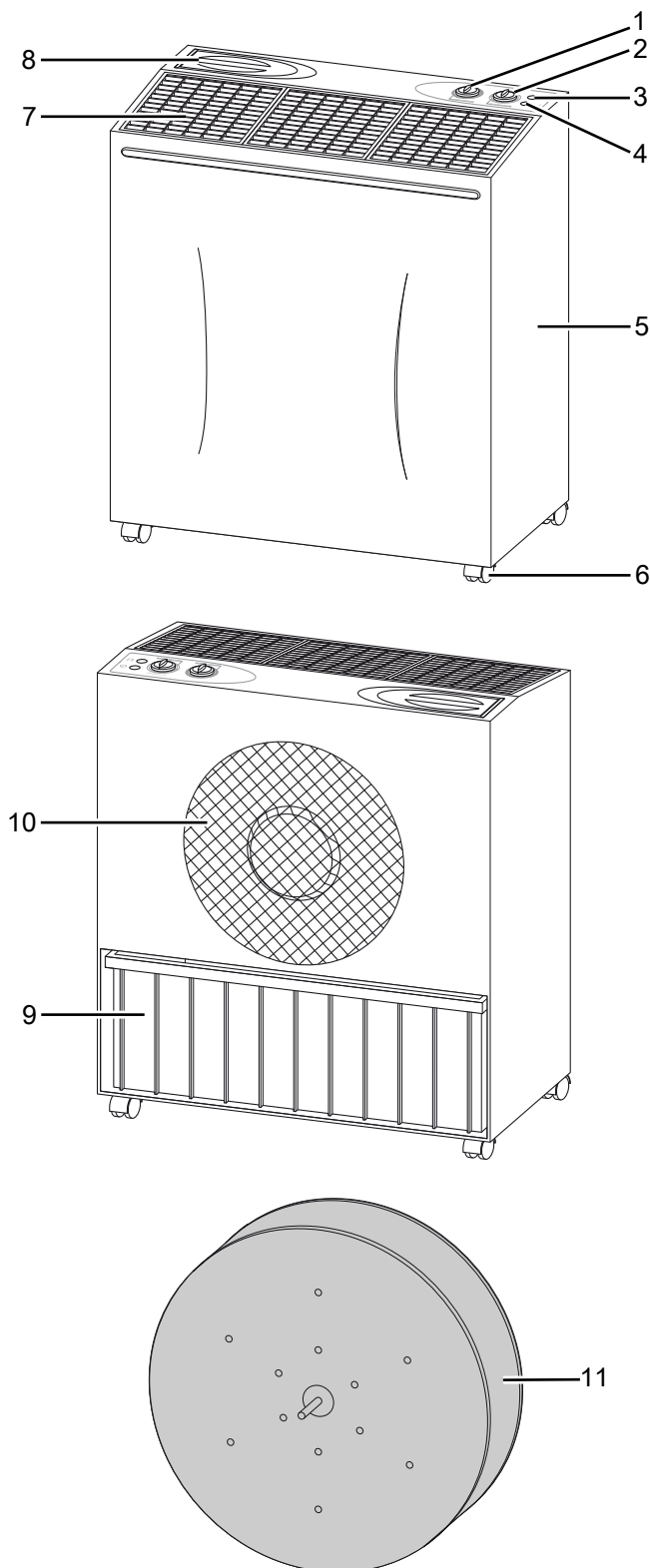
Using humidifier B 400 the humidity level in interior spaces can be regulated to the optimum value for art objects, pieces of furniture or electrical appliances.

To achieve this, the water tank (9) is filled with water via the water funnel (8). Evaporation mats (11) inside the device purify the air, filter the water and promote the evaporation of humidity. The desired humidity level can be adjusted using the HYGROSTAT control dial (1). The rotation of the evaporation mats (11) and the fan at the air inlet (10) are both automatically switched on and off by the HYGROSTAT control dial (1). Thus the humidity in the room is kept at the required level. The comfort zone is reached depending on the room temperature and the humidity level. The higher the room temperature, the more humidification is required.

The fan at the air inlet (10) can be operated at two speed levels by use of the FAN SPEED rotary switch (2). At full speed, the desired humidity level can be reached faster.

If the water level inside the tank (9) falls below 2 cm, the float turns the device off and the red water tank indicator light (4) lights up.

Device depiction



No.	Designation
1	Control dial HYGROSTAT
2	Rotary switch FAN SPEED
3	Operation indicator light
4	Water tank indicator light
5	Housing
6	Wheels
7	Air outlet with cover grilles
8	Water funnel
9	Water tank
10	Air inlet
11	Drum with evaporation mats

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.
Note the information regarding transport and storage of the device.

Transport

To make the device easier to transport, it is fitted with wheels.

Before transporting the device, observe the following:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Empty the water tank.
- Do not use the power cable to drag the device.
- Only wheel the device on a level and smooth surface.

After transporting the device, observe the following:

- Set up the device in an upright position after transport.

Storage

Before storing the device, observe the following:

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Empty the water tank.
- Use a cloth to wipe all parts of the device dry.
- Clean the device according to the Maintenance chapter.

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- in an upright position where it is protected from dust and direct sunlight
- with a cover to protect it from invasive dust, if necessary
- Place no further devices or objects on top of the device to prevent it from being damaged.

Assembly and installation

Scope of delivery

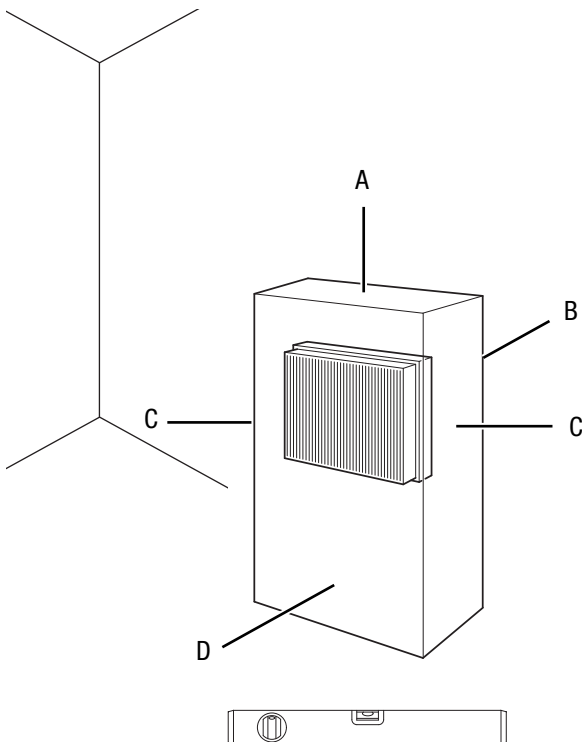
- 1 x Device
- 3 x Cover grille
- 1 x Drum with evaporation mats
- 1 x Water tank
- 2 x Spacer
- 1 x Manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.
4. Remove the styrofoam wedge from the inside of the device by pulling it out at the top.

Start-up

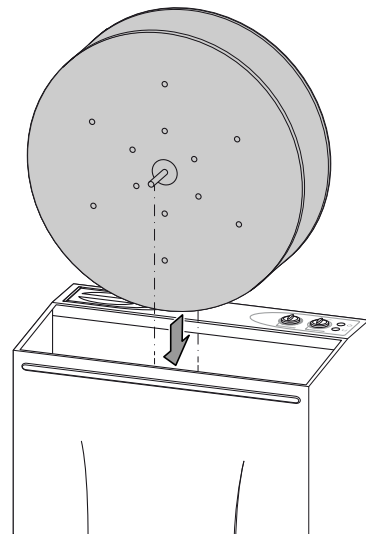
When positioning the device, observe the minimum distance from walls or other objects as described in the Technical data chapter.



- Only put up the device in an upright, stable position on firm ground.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are unrolled completely.
- If possible, set the device up in the middle of a room to ensure optimum performance. A heat source near the device encourages its output.
- Do not set up the humidifier next to furniture, paintings and other devices which can be damaged by humidity.
- Make sure that no curtains or other objects interfere with the air flow.

Inserting the drum

1. Insert the drum and evaporation mats into the device.



Note

Make sure the pinion interlocks with the drum's gearing!
Otherwise, device and drum might be damaged.

- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.

Filling the water tank

The water tank should be filled before use or when the water tank indicator light (4) lights up.

Note

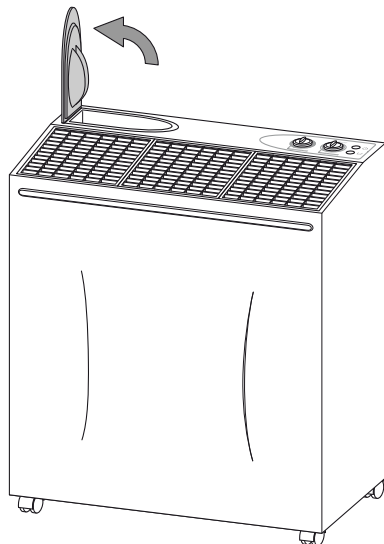
Fill the device with fresh drinking water only. The water temperature must not exceed 40 °C. Scented oil or other additives can damage the plastics and the evaporation mats. When filling the water tank, make sure that no water can reach the control or interior walls of the device.



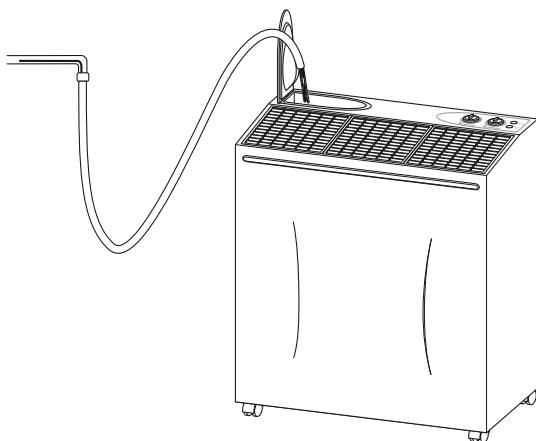
Info

If possible, change the water every 3 days to prevent bacterial growth.

1. Disconnect the device from the mains before filling in water!
2. Open the water funnel (8).



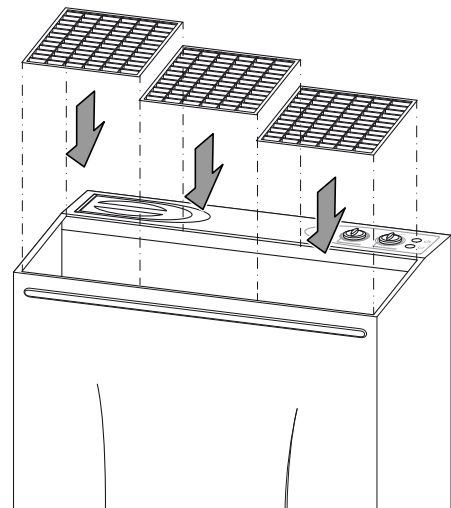
3. Fill the water tank (9) with fresh drinking water only.
⇒ Quit filling at about 2 cm below the tank's water level mark.



4. Close the flap for the water funnel (8).
5. Make sure the float inside the water tank is not jammed and can float freely.
6. Make sure that the device is neither damp nor wet on the outside. Otherwise wipe it dry.

Inserting the cover grilles

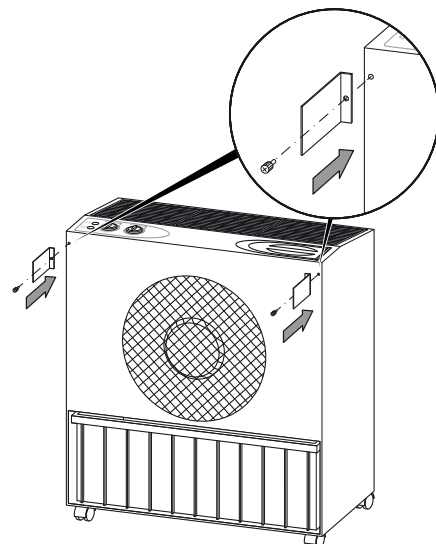
1. Insert the cover grilles for reasons of safety and to provide an individual air outlet.



Mounting the spacers

The spacers ensure a minimum distance of 10 cm to the wall. This minimum distance must be observed to guarantee the humidifier's functioning. For optimum performance a distance of at least 30 cm is recommended.

1. Screw the spacers to the device.



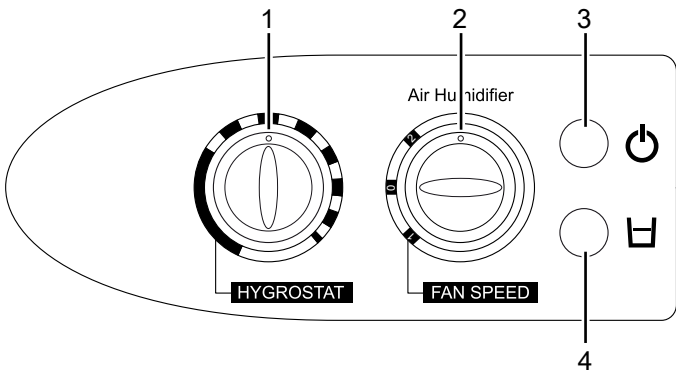
Connecting the power cable

- Insert the mains plug into a properly secured mains socket.

Operation

- Avoid open doors and windows.

Operating element



No.	Designation	Description
1	Control dial HYGROSTAT	Setting the humidity level
2	Rotary switch FAN SPEED	Setting the fan speed 1 Stage 1 = low 2 Stage 2 = high
3	Operation indicator light	Illuminated during operation
4	Water tank indicator light	Illuminated when water tank is empty

Switching the device on

1. Ensure that the tank has been filled with water and is inserted properly.
2. Make sure that the device is neither damp nor wet on the outside. Otherwise wipe it dry.
3. Insert the mains plug into a properly secured mains socket. Do not create tripping hazards. Use cable bridges.
4. Turn the rotary switch FAN SPEED (2) to position 1 or 2.
⇒ The operation indicator light (3) is illuminated in green.



Info

Ideally start with stage 2, so as to reach the desired humidity level at a quicker rate.
Then set it to stage 1, so the humidity can be maintained with little noise emission.

Controlling humidification

Set the desired humidity value by use of the HYGROSTAT control dial (1).

- The device is switched off if you turn the HYGROSTAT control dial (1) counter-clockwise all the way to the stop.
- The device constantly humidifies when you turn the HYGROSTAT control dial (1) clockwise all the way to the stop.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Empty the water tank.
- Use a cloth to wipe all parts of the device dry.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Storage chapter.

Available accessories



Warning

Only use accessories and additional equipment specified in the operating manual.
Using insertion tools or accessories other than those specified in the operating manual may cause a risk of injury.

Designation	Article number
B 400 oblong filter	6.100.004.020
B 400 humidifier filter disc	6.100.004.040
B 400 automatic water supply	6.100.004.028

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

The device does not start:

- Check the power connection.
- Check the power cable and mains plug for damage.
- Check the on-site fusing.
- Check whether the water tank indicator light is illuminated. The water tank might be empty and need refilling.
- Check the setting of the desired room humidity level. If it is below the current humidity level, the device will not start.
- Check the setting at the hygrostat's control dial. The control dial must not be turned too far to the left, because otherwise the device switches off. The operation indicator light must be illuminated in green.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electrics checked by a specialist company or by Trotec.

The device runs, but there is no humidification:

- Check evaporation mats and drum for proper seating.
- Check the fan for proper functioning or unusual vibrations and sounds. Remove external dirt.
- Check the float inside the water tank. The float should be able to move freely.
- Check the room temperature.
- Check evaporation mats for dirt. If necessary, clean or replace the evaporation mats.

Water is leaking:

- Check whether the device is set up in a stable and upright position.
- Check the water level in the water tank. The water level might be too high and water is discharged via the overflow.
- Check the device for leaks.

The device gives off an unpleasant odour:

- The device is new. Remove and rinse the water tank. Let the open water tank air for some hours.
- Check the water tank. There may be stale or dirty water in the water tank. Rinse the water tank and fill it with fresh drinking water.

The device gets very warm, is loud or is losing performance:

- Check the air inlets and air grilles for dirt. Remove external dirt.
- Check the inside of the device for dirt (see chapter Maintenance). If necessary, clean the interior of the device using compressed air.

The device is loud or vibrates heavily:

- Check whether the device is set up in a stable and upright position.

Your device still does not operate correctly after these checks?

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

Maintenance

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	every 3 days	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Fill the water tank			X				
Check air inlets and outlets for dirt and foreign objects and clean if necessary	X				X		
Clean housing and water tank		X					X
Visually check the inside of the device for dirt		X			X		
Check air inlet grid, cover grille and evaporation mats for dirt and foreign objects and clean or replace if necessary	X			X			
Change evaporation mats							X
Check for damage	X						
Check attachment screws		X					X
Test run							X

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Clean the water tank																
Check air inlets and outlets for dirt and foreign objects and clean if necessary																
Clean housing and water tank																
Visually check the inside of the device for dirt																
Check air inlet grid, cover grille and evaporation mats for dirt and foreign objects and clean or replace if necessary																
Change evaporation mats																
Check for damage																
Check attachment screws																
Test run																
Remarks:																

1. Date: Signature:	2. Date: Signature:	3. Date: Signature:	4. Date: Signature:
5. Date: Signature:	6. Date: Signature:	7. Date: Signature:	8. Date: Signature:
9. Date: Signature:	10. Date: Signature:	11. Date: Signature:	12. Date: Signature:
13. Date: Signature:	14. Date: Signature:	15. Date: Signature:	16. Date: Signature:

Activities required before starting maintenance



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.

Safety signs and labels on the device

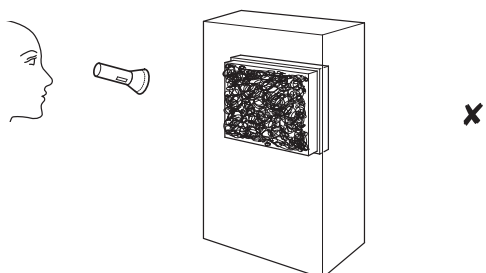
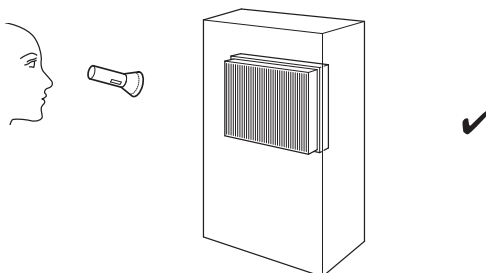
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

Cleaning the housing

Clean the housing with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Visual inspection of the inside of the device for dirt

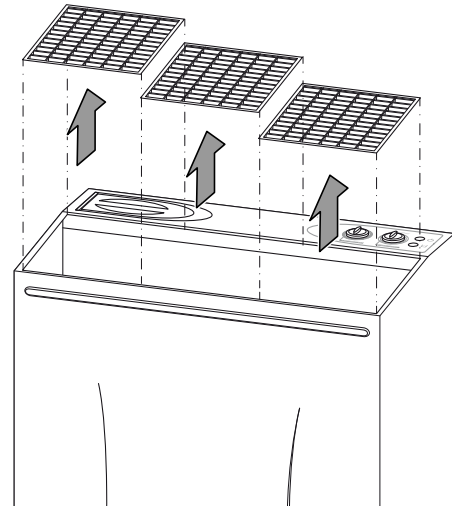
1. Remove the cover grilles (see chapter Cleaning the water tank).
2. Use a torch to illuminate the openings of the device.
3. Check the inside of the device for dirt.
4. If you see a thick layer of dust, clean the device interior (see chapter Cleaning the device interior and evaporation mats).
5. Refit the cover grilles.



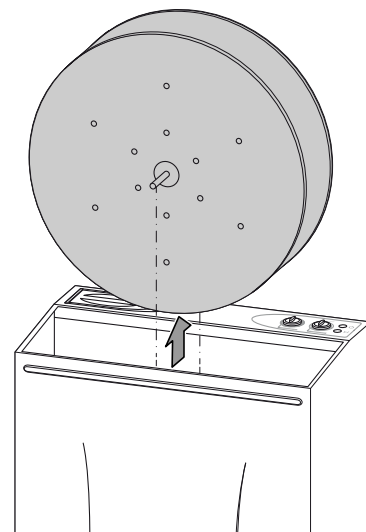
Cleaning the water tank

The water tank should be cleaned every 3 days if actively used. Use dish detergent as cleaning/descaling agent. Observe the manufacturer's specifications and hazard warnings of the descaling agent. Before a longer period of non-use or storage the water tank should be drained.

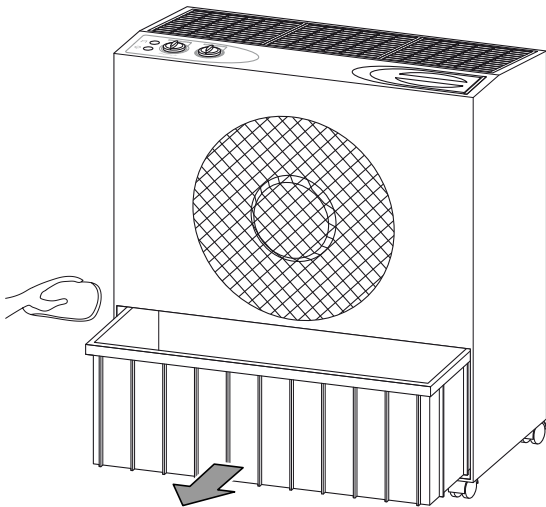
1. Remove the cover grilles at the air outlet.



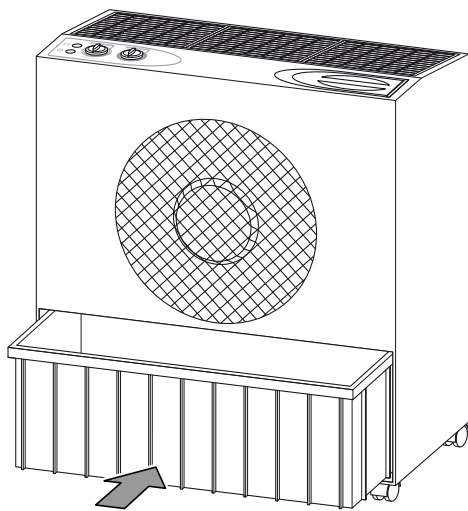
2. Remove the drum incl. evaporation mats from the device.



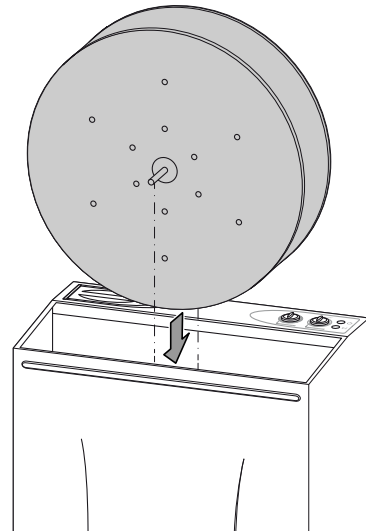
3. Remove the water tank from the device. Make sure not to damage the float when removing the water tank.



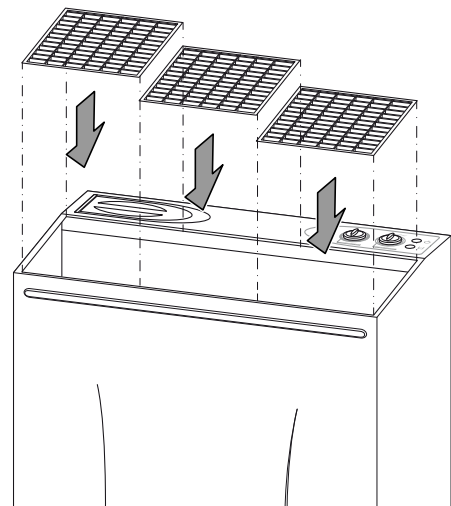
4. Thoroughly rinse the water tank in a sink or similar.
5. Thoroughly rinse the water tank with dish detergent (descaling agent).
6. Then rinse the inside of the device with water.
7. Dry the inside of the tank with a lint-free cloth.
8. Fill the water tank with fresh drinking water if you want to continue operation (see chapter Filling the water tank).
9. Refit the water tank into the device. Make sure not to damage the float when inserting the water tank.



10. Reinsert the drum and evaporation mats in the device (see chapter Inserting the drum).



11. Fit the cover grilles onto the air outlet (see chapter Inserting the cover grilles).



12. Make sure that the device is neither damp nor wet on the outside. Otherwise wipe it dry.

Cleaning the device interior and evaporation mats

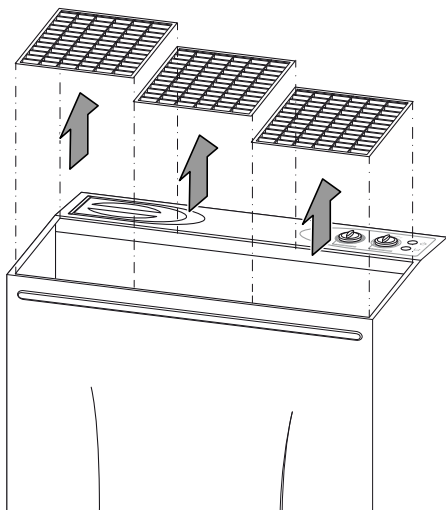


Warning

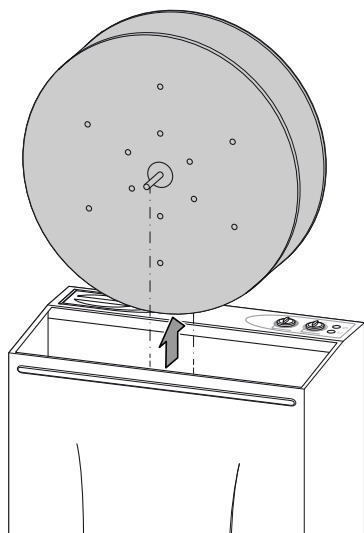
Make sure that the evaporation mats are neither worn nor damaged. The evaporation mats' edges must not be torn or misshaped.

Before reinserting the evaporation mats, ensure that these are undamaged! Observe the chapter Maintenance intervals and replace the evaporation mats in due time!

1. Remove the cover grilles at the air outlet.

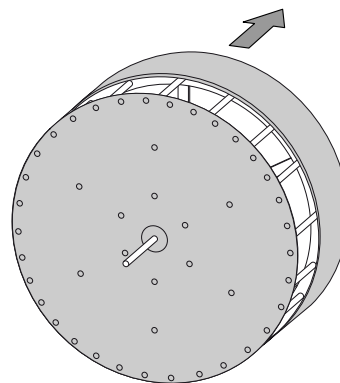


2. Remove the drum incl. evaporation mats from the device.

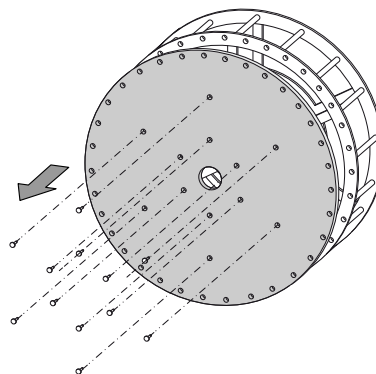


3. Clean the device interior with a soft, lint-free cloth.

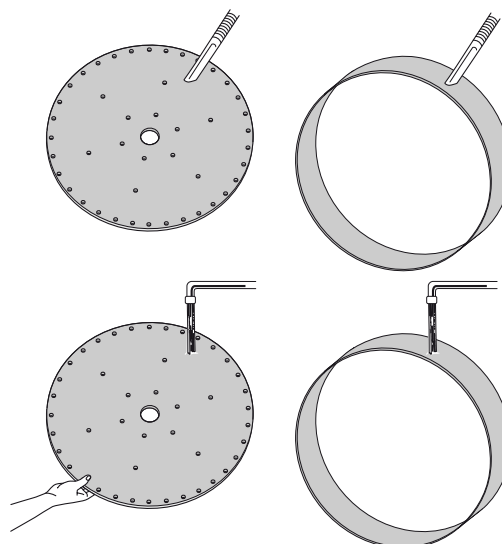
4. Remove the evaporation mat from the drum's lateral surface.



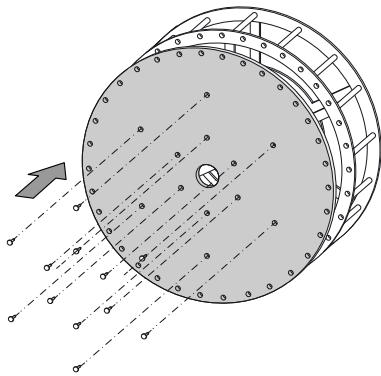
5. Detach the screws on both sides and remove the round evaporation mat from the drum.



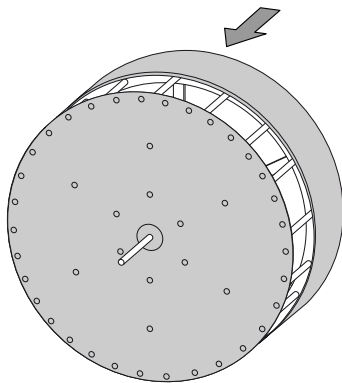
6. Clean the evaporation mats by means of a vacuum cleaner and rinse them with drinking water.



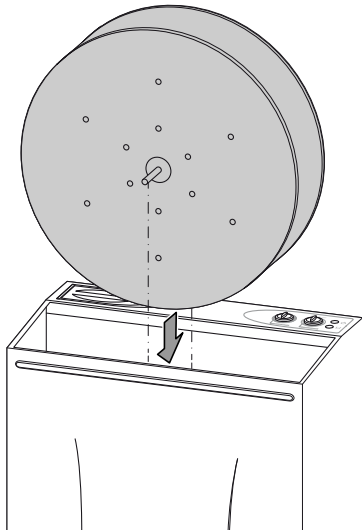
7. Reattach the round evaporation mat to the drum.



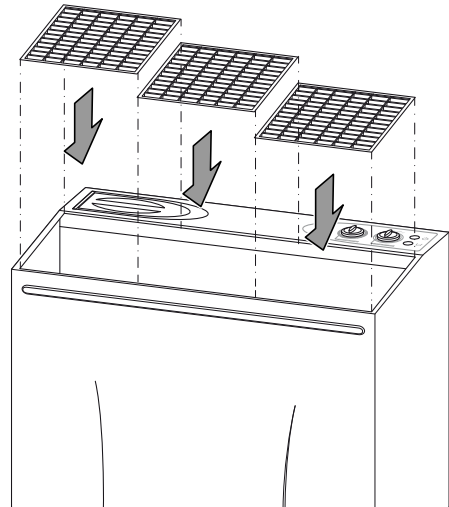
8. Refit the evaporation mat to the drum's lateral surface.



9. Reinsert the drum and evaporation mats in the device (see chapter Inserting the drum).



10. Fit the cover grilles onto the air outlet (see chapter Inserting the cover grilles).



Activities required after maintenance

If you want to continue using the device:

- Reconnect the device to the mains.

If you do not intend to use the device for a considerable time:

- Store the device according to the Storage chapter.

Technical annex

Technical data

Parameter	Value
Model	B 400
Max. evaporation capacity	60 l / 24 h
Mains connection	1/N/PE ~ 230 V / 50 Hz
Power consumption	53 W
On-site fusing	10 A
Room size	up to 900 m ³
Water tank capacity	34 l
Sound pressure level (at a distance of 1 m)	42 dB(A)
Dimensions (width x height x length)	625 x 720 x 316 mm
Minimum distance to walls and other objects	top (A): 30 cm rear (B): 10 cm (recommendation: 30 cm) sides (C): 30 cm front (D): 30 cm
Weight	18.6 kg

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website <https://de.trotec.com/shop/>.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

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