TTK 110 HEPA



OPERATING MANUALDEHUMIDIFIER







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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:



TTK 110 HEPA



https://hub.trotec.com/?id=39663

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.
- Do not use the device in aggressive atmosphere.
- Set the device up in an upright and stable position.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- 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.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.



- 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.
- 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.
- Only transport the device in an upright position with an emptied condensation tank or drain hose.
- Discharge the collected condensate before transport and storage. Do not drink it. Health hazard!

Intended use

Only use the device for drying and dehumidifying room air, while adhering to and following the technical data.

In addition, the device may also be used as a kind of clothes dryer to dry wet laundry.

Intended use comprises:

- dehumidifying and drying:
 - living rooms, bedrooms, bathrooms and basements
 - laundries, holiday homes, camper vans, boats
- maintaining the dryness of:
 - storage spaces, archives, laboratories, garages
 - bathrooms, wash rooms, changing rooms etc.

Improper use

The device is not intended for industrial 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.

Maintenance tasks which require the housing to be opened must only be carried out by specialist companies for cooling and air-conditioning or by Trotec.



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.

Note

Do not operate the device without an inserted air filter! Without the air filter, 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

The device has a function for air purification that is active in *powerful dehumidification*, *automatic* and *laundry drying* mode and enables HEPA air purification with an efficiency of 99.97 %, thus filtering out pollen, viruses, dust mite residue, mould fungus spores and other allergens.

Moreover, the device has an ionisation function that can be switched on in addition. The released ions remove pollen, dust, viruses and bacteria from the room air. Thanks to this air purification method, the quality of the room air can be additionally improved.

Another feature is the device's self-cleaning function. This function serves to dry the interior of the device in order to prevent the formation of mould or similar inside the device due to residual moisture.

The device uses the principle of condensation to automatically dehumidify rooms.

The fan sucks damp room air through the air inlet, the air filter, the evaporator and to the condenser located behind it. The air is cooled at the cold evaporator until it is below the dew point. Water vapour contained in the room air precipitates on the evaporator fins as condensation or rime. The dehumidified, cooled air is slightly warmed at the condenser and blown out again. The drier air thus conditioned mixes with the air in the room. The humidity in the room where the device is positioned is reduced as air constantly circulates through the device.

Depending on the air temperature and the relative humidity, the condensed water either drops continuously or only during the defrost phase through the integrated drain nozzle into the condensation tank below. It is fitted with a float to measure the filling level.

The device has a control panel for operating and controlling the functions

Once the maximum filling level of the condensation tank is reached or in case the condensation tank is not installed correctly, the condensation tank indicator light (see chapter Operating elements) on the control panel is illuminated. The device switches off. The condensation tank indicator light only goes out again once the emptied condensation tank is reinserted.

Optionally, the condensed water can be drained by attaching a hose at the condensation connection.

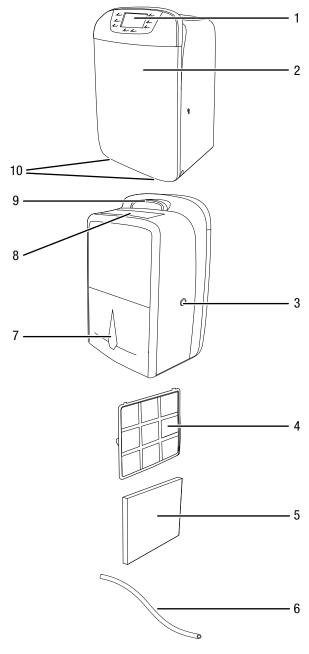
The device can reduce the relative humidity of a room to approx. 40 %.

In addition, the device may also be used as a kind of clothes dryer to dry wet laundry in living and working spaces.

Because of the heat radiation generated during operation, the room temperature may rise slightly.



Device depiction



No.	Designation
1	Control panel
2	Air inlet (behind cover)
3	Condensation drain hose connection
4	Air filter
5	HEPA filter
6	Condensation drain hose
7	Condensation tank with filling level indicator
8	Air outlet
9	Transport handle
10	Wheels

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.
- Do not use the power cable to drag the device.
- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- 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.
- Leave the device to rest for 12 to 24 hours, so the refrigerant can accumulate within the compressor. Wait 12 to 24 hours before switching the device back on! Acting contrary might lead to compressor damage and a malfunctioning device. If so, any warranty claims will be voided.

Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- Carry out the self-cleaning function to prevent the formation of moisture within the device during a longer period of non-use.
- Hold onto the mains plug while pulling the power cable out of the mains socket.

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

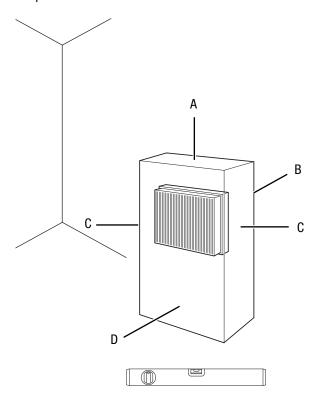
- 1 x Device
- 1 x Condensation drain hose, length: 1.0 m, diameter: 9 mm
- 1 x Air filter
- 1 x HEPA filter
- 1 x Manual

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.

Start-up

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



- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Set the device up in an upright and stable position.
- 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 completely unrolled.

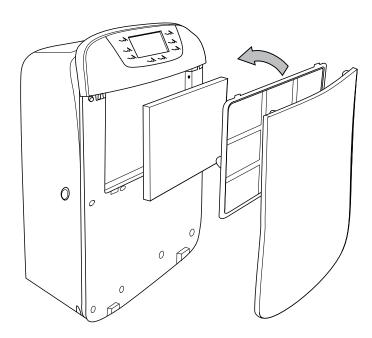
- When positioning the device, keep a sufficient distance to heat sources.
- Make sure that no curtains or other objects interfere with the air flow.
- When positioning the device, particularly in wet areas, secure it locally with an RCD (residual current device) which complies with the respective regulations.

Inserting the air filter

Note

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

 Make sure that the air filter is installed before switching the device on.



Inserting the condensation tank

- Ensure that the float inside the condensation tank is inserted correctly.
- Ensure that the condensation tank is empty and inserted correctly.

Connecting the power cable

dehumidifier TTK 110 HEPA

Insert the mains plug into a properly secured mains socket.

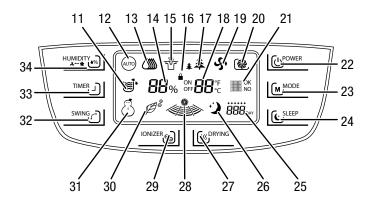


Operation

Notes:

- Avoid open doors and windows.
- After being switched on, the device operates fully automatically.
- The fan permanently runs in automatic mode even after the set nominal value has been reached until the device is switched off.

Operating elements



No.	Designation	Meaning
11	Condensation tank full indication	Flashes when the condensation tank is full, see chapter Emptying the condensation tank.
12	Automatic indication	Automatic mode is active.
13	Powerful dehumidification indication	Continuous operation is active.
14	Humidity level indication	Indicates the current room humidity. Indicates the desired relative room humidity during setting. Indicates the error code in the event of a fault: • EF (motor fault) • E1 (fault at temperature sensor) • E2 (fault at humidity sensor) • E3 (fault at coil sensor)
15	Laundry drying function indication	Laundry drying mode is active.
16	Child lock indication	Child lock is active.
17	Air purification indication	Air purification mode is active (only possible when HEPA filter is used).
18	Temperature and timer indication	Indicates the current room temperature. Indicates the number of hours of the activated timer. ON is displayed if the timer for automatic switch-on is active. OFF is displayed if the timer for automatic switch-off is active.
19	Ventilation indication	Ventilation mode is active.
20	Self-cleaning function indication	Self-cleaning mode is active.

No.	Designation	Meaning
21	Filter indication	OK and full grid box: HEPA filter is
		inserted. NO and empty grid box: HEPA filter is not
		inserted.
22	POWER button	For switching the device on or off
23	MODE button	Selection button for operating modes: • Automatic mode
		Powerful dehumidification (continuous operation)
		Laundry drying function
		Air purification
		Ventilation
24	SLEEP button	Switches night mode on or off.
25	Filter usage indication	Indicates the operating life of the HEPA filter: • Day indication: Number of days in
		the segment display of the <i>filter usage</i> indication
		Hour indication: 1 asterisk
		corresponds to 4 hours, max. 6 asterisks = 24 hours
26	Night mode indication	Is indicated in night mode.
27	DRYING button	Switching on the <i>self-cleaning function</i>
28	Fan speed indication	Dynamic display for the <i>fan speed</i> :
		turning slowly = low fan speed turning quickly = high fan speed
		Dynamic display for the <i>swing function</i> : Vertical bar moves from left to right.
29	IONIZER button	Activates additional air purification by ionization (only possible when the HEPA filter is installed).
30	<i>lonization</i> indication	Air purification by ionization is indicated (only possible when the HEPA filter is installed).
31	Low ambient temperature indication	Is displayed at ambient temperatures between 5 °C and 15 °C.
	mulcation	Flashes at ambient temperatures below 5 °C.
32	SWING button	Switches the automatic movement of the ventilation flap on or off.
33	TIMER button	Switches the timer function on or off. Selection button for number of hours,
		value range between 1 and 24 h
		The <i>temperature and timer</i> indication (18) displays <i>ON</i> for automatic switch-on or <i>OFF</i> for automatic switch-off.
34	HUMIDITY button	Selection button for the relative humidity
		(40 % to 70 % in increments of 5 %)
		Setting the fan speed in <i>air purification</i> and <i>ventilation</i> mode (low or high)
	1	The state of the s



Switching the device on

Once you have completely installed the device as described in the Start-up chapter, you can switch it on.

- 1. Press the *POWER* button (22).
 - ⇒ When used for the first time, the device starts in automatic mode.
 - ⇒ If the device was previously used, it will start in the last selected operating mode upon switch-on.

Setting the operating mode

Setting the relative room humidity

In *automatic* mode, you can modify the relative room humidity at all times.

- 1. Press the *HUMIDITY* button (34) to set the desired room humidity. Setting is possible in the range between 40 % and 70 % in increments of 5 %.
- ⇒ The desired room humidity is indicated in the display for the current room humidity (14) for approx. 5 s. Then the current relative room humidity is displayed again.

Automatic mode

The humidity level can be set (see Setting the relative room humidity).

The fan runs at low speed. The fan speed cannot be changed.

The compressor switches off automatically once the desired relative room humidity has been reached. The fan keeps running.

- 1. Press the *MODE* button (23) until the indication for automatic mode (12) appears on the display.
- 2. Press the *HUMIDITY* button (34) to set the desired relative humidity. Setting is possible in the range between 40 % and 70 % in increments of 5 %.
- ⇒ The desired humidity is indicated in the display for the humidity level (14) for approx. 5 s. Then the current relative room humidity is displayed again.

Powerful dehumidification (continuous operation)

The device dehumidifies the air constantly and regardless of the room humidity.

The fan operation depends on the room humidity: If the room humidity is high, the fan runs at high speed. If the room humidity is low, the fan regulates its speed to a low level.

The relative humidity cannot be adjusted in this operating mode.

 Press the MODE button (23) until the indication for powerful dehumidification (13) appears on the display.



Info

For continuous operation a condensation drain hose can be connected in order to continuously drain the accumulating condensate.

Laundry drying function

The device may be used to dry clothes in a more timely manner. When positioning the device or a clothes horse, please observe the minimum distances specified in the technical data.

The device dehumidifies the air constantly and regardless of the room humidity.

The relative humidity cannot be adjusted in this operating mode.

The fan runs at the highest speed. Additionally, the swing function switches on. The swing function remains activated even if the operating mode is changed.

1. Press the *MODE* button (23) until the indication for the laundry drying function (15) appears on the display.

Air purification

The fan guides the air through the inserted HEPA filter. The HEPA filter filters particles from a size of 20 nanometres out of the air, thus removing dust and smoke particles, bacteria, allergens and some viruses. This guarantees fresh room air for 8 hours.

If the air purification function is activated, the fan starts running too so that the air is cleaned by the HEPA filter. Consequently, *clean* air is blown into the room.

To maintain a constantly high filtering effect, the HEPA filter should be replaced after one year at the latest, or sooner if required.

- ✓ The HEPA filter is installed.
- ✓ The grid box of the filter indication (21) is filled and OK is displayed.
- 1. Press the *MODE* button (23) until the *air purification* indication (17) appears on the display.
- 2. Press the *HUMIDITY* button (34) to select low or high fan speed.



Info

If a HEPA filter is installed, air purification is performed in addition to dehumidification in *automatic*, *powerful dehumidification* and *laundry drying* mode. The *air purification* indication (17) flashes at regular intervals to indicate simultaneous air purification.



Ventilation

In *ventilation* mode you can choose between low and high fan speed.



Info

Before selecting this operating mode, remove the HEPA filter from the device (see Changing the HEPA filter). The HEPA filter is not required for this operating mode and its lifetime can be increased this way. If you do not remove the HEPA filter, the *filter* indication (21) flashes.

- 1. Press the *MODE* button (23) until the *ventilation* indication (19) appears on the display.
- 2. Press the *HUMIDITY* button (34) to select low or high fan speed.

Night mode

Night mode can be switched on in all operating modes. When the operating mode is changed, night mode remains active.

In night mode, the device runs with a low fan speed.

1. Press the *SLEEP* button (24) to switch night mode on or off.

Self-cleaning function / Internal drying

This function serves to dry the interior of the device in order to prevent the formation of mould or similar inside the device due to residual moisture.

The self-cleaning function should be used if the device is not operated or is stored for a longer period of time.

Self-cleaning takes approx. 1 hour. First, the inside of the device is dehumidified at a high fan speed for approx. 30 minutes. Then, another internal dehumidification process takes place for approx. 10 minutes, during which the air is blown out at a wide angle. During the last 15 minutes, the inside of the device is dehumidified again at a high fan speed.

- 1. Press the *DRYING* button (27) for approx. 2 seconds.
- To switch off the function, press the *DRYING* button (27) for approx. 2 seconds once again. The device switches back to the previous mode. By pressing the *POWER* button (22), the self-cleaning function is stopped and the device switches over to standby mode.

Ionization

With this function, the room air is not only cleaned by means of the HEPA filter, but additionally by means of ions. The released ions remove pollen, dust, viruses and bacteria from the room air.

- 1. Press the *IONIZER* button (29) to start the ionisation.
 - ⇒ The *ionization* indication (30) appears on the display.



Info

This function can only be used if a HEPA filter is installed.

Setting the timer

The timer can be set in all operating modes.

The timer has two modes of operation:

- automatic switch-on upon expiry of a preset number of hours.
- automatic switch-off upon expiry of a preset number of hours.

The number of hours can range from 1 to 24 and can be adjusted in increments of 1 h.

Note

Do not leave the operating device unattended in a freely accessible room with an activated timer.

Automatic switch-on

- 1. Switch the device off.
- 2. Press the *TIMER* button (33) several times until the desired number of hours is displayed on the *temperature and timer* indication (18).
 - ⇒ The number of hours flashes on the *temperature and timer* indication (18).
- 3. Wait for approx. 5 seconds in order to save the setting.
- 4. Press the *MODE* button (23) to select the operating mode in which the device shall start up.
- ⇒ The characters ON and the number of hours left until switch-on appear on the temperature and timer indication (18).
- ⇒ The timer setting equals the desired number of hours.
- ⇒ The device starts in the previously selected operating mode after the set time has elapsed.

Notes regarding automatic switch-on:

 Pressing the *POWER* button (22) deactivates the automatic switch-on function.

Automatic switch-off

- ✓ The device is switched on.
- Press the *TIMER* button (33) several times until the desired number of hours is displayed on the *temperature and timer* indication (18).
 - ⇒ The number of hours flashes on the *temperature and timer* indication (18).
- 2. Wait for approx. 5 seconds in order to save the setting.
- ⇒ The characters *OFF* and the number of hours left until switch-off appear on the *temperature and timer* indication (18).
- ⇒ The timer setting equals the desired number of hours.
- ⇒ The device switches off after the set period of time.

Memory function

During short power failures, the device memorizes the programmed nominal value for the humidity level, the timer and the operating mode setting.



Auto stop function

If the water tank is full, not inserted correctly or the set room humidity has been reached, the device will stop automatically.

Child lock

The child lock can be activated both during operation and in standby mode.

- 1. Press the MODE button (23) for approx. 2 seconds.
 - ⇒ The child lock is activated.
 - ⇒ The *child lock* indication (16) appears on the display.
- 2. Press the *MODE* button (23) for approx. 2 seconds once again.
 - ⇒ The child lock is deactivated.
 - ⇒ The *child lock* indication (16) disappears.

Swing function

Using the swing function, you can adjust the position of the ventilation flap or activate continuous movement of the ventilation flap. This enables an even distribution of the air current in the room.

The swing function can be switched on and off regardless of the operating modes. The setting is maintained even if the operating mode is changed.

- 1. Press the SWING button (32).
 - ⇒ The ventilation flap moves up and down continuously.
- 2. Press the *SWING* button (32) again to stop the ventilation flap in a certain position and to switch off the swing function.

Changing the unit °C / °F

The temperature in the *temperature and timer* indication (18) can be indicated in °C or °F.

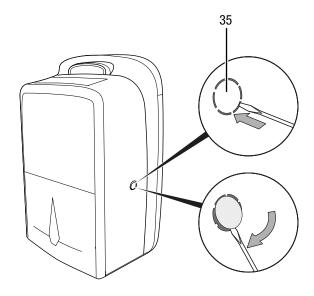
Please proceed as follows to change the temperature unit:

- 1. Simultaneously press the *TIMER* (33) and *HUMIDITY* (34) buttons.
 - ⇒ The displayed temperature is converted to the other unit.

Operation with hose attached to the condensation connection

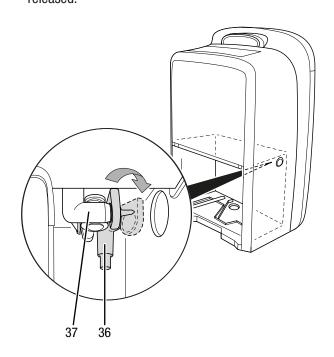
For continuous operation or unattended dehumidification, please connect the supplied condensation drain hose to the device.

- ✓ A suitable hose (diameter = 9 mm) is ready for use.
- 1. Switch off the device.
- 2. Break out the cover (35) with a suitable tool (e.g. a screwdriver).



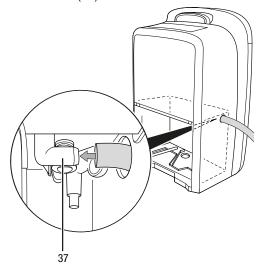
- 3. Take the condensation tank out of the device.
- 4. With one hand, push the fastener (36) at the hose connection (37) to the rear and hold the fastener (36) in this position.

The fastener (36) is fitted with a spring and closes when released.

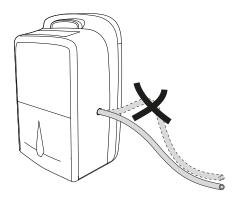




5. With the other hand, push one end of the hose onto the hose connection (37).



- 6. Let go of the fastener (36).
- Refit the condensation tank into the device.
 Make sure not to damage the float when inserting or removing the condensation tank.
 - In doing so, make sure that the float is positioned correctly.
 - In doing so, make sure that the condensation tank is inserted correctly, for otherwise the device cannot be switched back on.
- 8. Guide the other hose end to a suitable drain or sufficiently dimensioned collection container. Please note that the hose must not be kinked.



Remove the hose if you want to collect the condensate in the condensation tank again. Allow the hose to dry prior to storage. The hose can be connected in any operating mode for continuous operation.

Automatic defrost

At low ambient temperatures, ice may form at the evaporator during dehumidification. The device will then carry out an automatic defrost. Dehumidification is briefly interrupted during defrosting.

The duration of the defrost process can vary. Do not switch the device off during automatic defrost. Do not remove the mains plug from the mains socket.

The *low ambient temperature* indication (31) flashes during defrosting.

Drying laundry

In addition, the device may also be used as a kind of clothes dryer to dry wet laundry.

For drying laundry the following values should be selected:

- cupboard dry = 46 % relative humidity
- iron dry = 58 % relative humidity
- slightly dried = 65 % relative humidity

If necessary, use a measuring device to determine the humidity level

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.
- If necessary, remove the condensation drain hose and any residual fluid from it.
- Empty the condensation tank, if need be.
- If necessary, carry out self-cleaning (see Self-cleaning function).
- 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.

Accessories	Article number
HEPA filter	7.710.000.835
Carbon filter	7.710.000.836

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 the filling level of the condensation tank and empty it if necessary. The condensation tank full indication (11) must not be displayed.

- Check the condensation tank for correct seating.
- Check the room temperature. Observe the device's permissible operating range according to the technical data.
- Check whether the *low ambient temperature* indication (31) flashes on the display. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- 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 is running, but there is no formation of condensate:

- Check the float in the condensation tank for dirt. If necessary, clean the condensation tank. The float must be able to move freely.
- Check the room temperature. Observe the device's permissible operating range according to the technical data
- Ensure that the relative room humidity complies with the technical data.
- Check the preselected desired room humidity level. The relative humidity in the room must be above the selected range. If necessary, reduce the preselected desired room humidity.
- Check the air filter for dirt. If necessary, clean or replace the air filter.
- Check whether the *low ambient temperature* indication (31) flashes on the display. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- From the outside, check the condenser for dirt (see chapter Maintenance). If the condenser is dirty, have it cleaned by a specialist company or by Trotec.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.

The device is loud or vibrates:

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

Condensate is leaking:

· Check the device for leaks.

The compressor does not start:

- Check the room temperature. Observe the device's permissible operating range according to the technical data.
- Ensure that the relative room humidity complies with the technical data.

- Check the preselected desired room humidity level. The relative humidity in the room must be above the selected range. If necessary, reduce the preselected desired room humidity.
- Check whether the *low ambient temperature* indication (31) flashes on the display. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- Check whether the overheating protection of the compressor has tripped. Disconnect the device from the mains and let it cool down for approx. 10 minutes before reconnecting it.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.

The fan does not start:

 Check the operating mode. If the device is in air purification mode and the HEPA filter is not inserted, the fan will not start. Insert the HEPA filter in air purification mode (see Replacing the HEPA filter).

The device gets very warm, is loud or loses power:

- Check the air inlets and air filters for dirt. Remove external dirt.
- From the outside, check the device for dirt (see chapter Maintenance). If the inside of the device is dirty, have it cleaned by a specialist company for cooling and airconditioning or by Trotec.

Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

Your device still does not operate correctly after these checks?

Please contact the customer service. If necessary, bring the device to a specialist company for cooling and air-conditioning or to Trotec for repair.

Error codes

The following error codes can be displayed:

Error code	Cause	Remedy					
EF	Motor fault	Disconnect the device					
E1	Fault at temperature sensor	briefly from the mains. Should the error still be					
E2	Fault at humidity sensor	displayed after the restart, please contact the customer service.					
E3	Fault at coil sensor	ductornor corvido.					



Maintenance

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Check the air inlets and outlets for dirt and foreign objects and clean if necessary	X			Х		
Clean the exterior		Х				Х
Visually check the inside of the device for dirt		Х				Х
Check the air filter for dirt and foreign objects and clean or replace if necessary	Х		Х			
Replace the air filter					Х	
Check for damage	Х					
Check the attachment screws		Х				Х
Test run						Х
Empty the condensation tank and/ or drain hose		Х				

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
Check air inlets and outlets for dirt and foreign objects and clean if necessary																
Clean the exterior																
Visually check the inside of the device for dirt																
Check the air filter for dirt and foreign objects and clean or replace if necessary																
Replace the air filter																
Check for damage																
Check the attachment screws																
Test run																
Empty the condensation tank and/ or drain hose																
Comments																

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

Refrigerant circuit

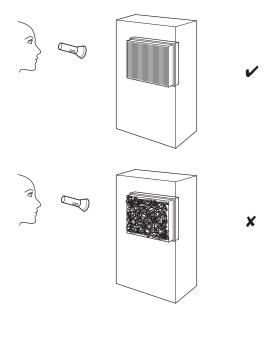
 The entire refrigerant circuit is a maintenance-free, hermetically sealed system and may only be maintained or repaired by specialist companies for cooling and airconditioning or by Trotec.

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 air filter.
- 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, have the inside of the device cleaned by a specialist company for cooling and airconditioning or by Trotec.
- 5. Put the air filter back in.



Replacing the HEPA filter

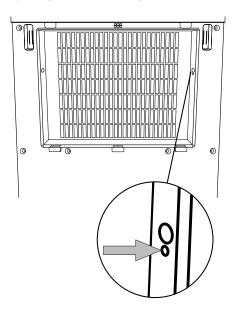
The HEPA filter should be replaced in case of heavy soiling.

The operating life is approx. 1 year, depending on the degree of air pollution.

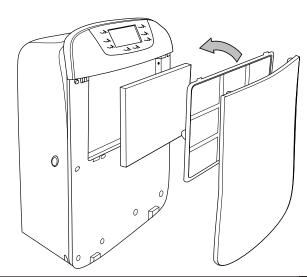
If required, visually inspect the HEPA filter for dirt.

The HEPA filter's current time of usage is displayed on the *filter* usage indication (25):

- Day indication: Number of days on the *filter usage* indication (25)
- Hour indication: 1 asterisk corresponds to 4 hours, max. 6 asterisks = 24 hours
- 1. Remove the HEPA filter from the device.
- 2. Dispose of the used HEPA filter according to the national regulations.
- 3. Reset the internal counter for the filter usage by pressing a small, pointed object (e.g. a piece of wire of a paper clip) into the opening shown in the figure below.



- ⇒ An acoustic signal is emitted as confirmation.
- \Rightarrow The *filter usage* indication (25) is reset to **0**.
- 4. Insert the new HEPA filter into the device.





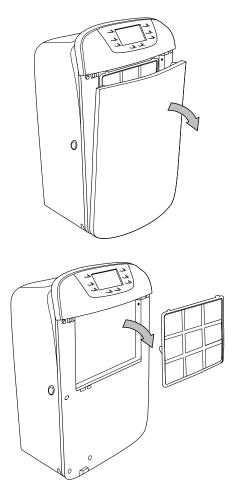
Cleaning the air filter

Note

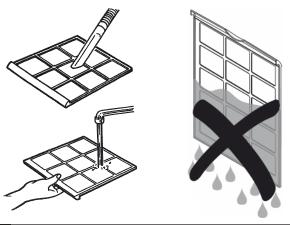
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

The air filter has to be cleaned as soon as it is dirty. This is brought to light e.g. by a reduced capacity (see chapter Errors and faults).

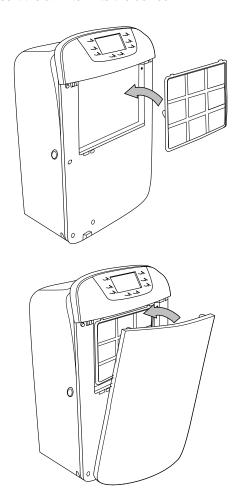
1. Remove the air filter from the device.



2. Clean the filter using a slightly damp, soft, lint-free cloth. If the filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.



- 3. Allow the filter to dry completely. Do not insert a wet filter into the device!
- 4. Reinsert the air filter into the device.



Emptying the condensation tank

Once the condensation tank is full, the device stops dehumidification operation and switches itself off.

1. Take the condensation tank out of the device.



2. Empty the condensation tank over a drain or sink.



- 3. Rinse the tank with clear water. Clean the tank regularly using a mild cleaning agent (no detergent!).
- 4. Refit the condensation tank into the device.

 Make sure not to damage the float when inserting or removing the condensation tank.

In doing so, make sure that the float is positioned correctly.

In doing so, make sure that the condensation tank is inserted correctly, for otherwise the device cannot be switched back on.



Activities required after maintenance

If you want to continue using the device:

- Leave the device to rest for 12 to 24 hours, so the refrigerant can accumulate within the compressor. Wait 12 to 24 hours before switching the device back on! Acting contrary might lead to compressor damage and a malfunctioning device. If so, any warranty claims will be voided.
- 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	TTK 110 HEPA
Dehumidifying capacity max.	40 l / 24 h
Air flow rate	260 m³/h
Ambient temperature	5 °C to 32 °C
Operating range relative humidity	30 % to 95 % RH
Pressure suction side	0.5 MPa
Pressure outlet side	1.5 MPa
Mains supply	1/N/PE~230 V / 50 Hz
Max. power input	0.52 kW
Nominal current	2.3 A
Refrigerant	R-134a
Amount of refrigerant	320 g
GWP factor	1,430
CO ₂ equivalent	0.46 t
Condensation tank	6 I
Sound pressure level (at a distance of 1 m)	46 dB(A)
Dimensions (length x width x height)	265 x 410 x 665 mm
Minimum distance to walls and other objects	
A: top:	
B: rear:	I .
C: side:	
D: front:	30 cm
Weight	18 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 www.trotec24.com.

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.

The device is operated with fluorinated greenhouse gas which can be dangerous for the environment and contribute to global warming when emitted to the atmosphere.

Further information is provided on the nameplate.

Dispose of the refrigerant appropriately and according to the national regulations.

Trotec GmbH

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