## **TTK 99 HEPA**



# EN

**OPERATING MANUAL** DEHUMIDIFIER

TRT-BA-TTK99HEPA-TC211001TTRT10-003-EN



## **>**TROTEC

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## Notes regarding the operating manual

### **Symbols**

## Danger

This symbol indicates dangers to the life and health of persons due to extremely flammable gas.

#### 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 99 HEPA



https://hub.trotec.com/?id=45722

## 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.
- 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.
- Do not cover the device during operation.
- Do not sit on the device.
- This appliance is not a toy. Keep away from children and animals.
- Occasionally observe the device 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 mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused 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.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable.
   If the power cable 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!
- 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.
- 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 annex.
- 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.
- Never insert any objects or limbs into the device.
- 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!
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.



## Safety warnings for devices containing flammable refrigerants

- Only position the device in rooms where potentially leaking refrigerant cannot accumulate. Unventilated rooms, in which the device is installed, operated or stored, must be built in a way to ensure that potentially leaking refrigerant cannot accumulate. This serves to avoid fire or explosion hazards resulting from an ignition of the refrigerant by an electric furnace, cooking stove or another ignition source.
- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- Please note that the refrigerant is odourless.
- Only install the device in compliance with the national installation regulations.
- Please observe the local regulations.
- Observe the national gas regulations.
- Only install, operate and store the device in a room measuring more than 4 m<sup>2</sup>.
- Store the device in a way that no mechanical damage can occur.
- Please note that the connected pipelines must not contain any sources of ignition.
- R290 is a refrigerant that complies with European environmental regulations. No part of the cooling circuit may be perforated.
- Observe the maximum refrigerant capacity in the technical data.
- Do not drill through or burn.
- Do not use any means other than those recommended by the manufacturer for accelerating the defrosting process.
- Every person working with or at the refrigerant circuit must be able to provide a certificate of qualification issued by a body accredited by the industry, demonstrating their competence in the safe use of refrigerants based on a procedure well-known in the industry.
- Service work may only be carried out in accordance with the manufacturer's specifications. If maintenance and repair work require the support of additional persons, the person trained in handling flammable refrigerants shall continuously supervise the work carried out.
- 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.

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### 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 and basements
  - holiday homes, camper vans
- maintaining the dryness of:
  - storage spaces, archives, laboratories, garages
  - changing rooms etc.

#### **Foreseeable misuse**

- 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 out of doors.
- Do not use the device in wet rooms (e.g. bathrooms or laundry rooms).
- Never immerse the device in water.
- Do not make any unauthorised modifications, alterations or structural changes to the device.
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.

#### **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.

#### 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:

## WARNING • WARNUNG • ATTENTION

- **DE** Das Gerät muss in einem Raum mit einer Grundfläche größer als 4 m<sup>2</sup> aufgestellt, betrieben und gelagert werden.
- **EN** Appliance shall be installed, operated and stored in a room with floor area larger than 4 m<sup>2</sup>.
- **FR** L'appareil doit être installé, utilisé et entreposé dans une pièce avec une surface supérieure à 4 m<sup>2</sup>.





#### Follow the manual

This symbol indicates that the operating manual must be observed.

#### Eollow the repair manual

Disposal, maintenance and repair work of the refrigerant circuit may only be carried out in accordance with the manufacturer's specifications and by persons having a certificate of qualification. A corresponding repair manual is available from the manufacturer upon request.

#### **Residual risks**



## Danger

Natural refrigerant propane (R290)!

H220 – Extremely flammable gas.

H280 – Contains gas under pressure; may explode if heated.

P210 – Keep away from heat, sparks, open flames and other ignition sources. No smoking.

P377 – Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P410+P403 – Protect from sunlight. Store in a well-ventilated place.



#### Warning of electrical voltage

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



### Warning of electrical voltage

Risk of electric shock!

The device does not have the appropriate protection class for use in wet rooms.

There is a risk of electric shock!

Never use the device in wet rooms (e.g. in bathrooms and laundry rooms) and never immerse the device in water!



#### Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. 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 air filter inserted into the air inlet!

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 the device off.
- 2. 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

#### **Device description**

The device is equipped with an integrated HEPA filter that removes pollen, viruses, dust mite residues, mould spores and other allergens from the with an efficiency of 95 %.

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 HEPA 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 Operation) 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.

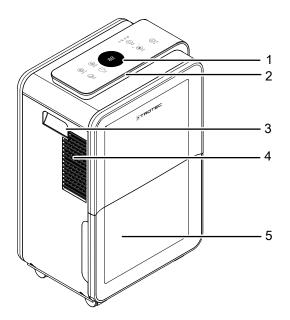
Optionally, the condensed water can be drained by attaching a hose at the condensation connection.

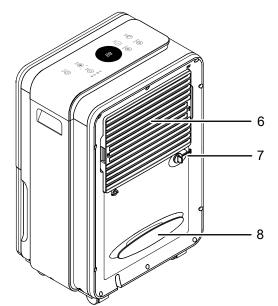
The device can reduce the relative humidity of a room to approx. 30 %.

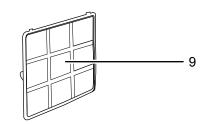
In addition, the device may also be used as a kind of clothes dryer to dry wet laundry in living and working spaces.

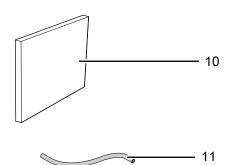
Because of the heat radiation generated during operation, the room temperature may rise slightly.

## **Device depiction**









No.	Designation		
1	Control panel		
2	Colour LED display for room humidity		
3	Transport handle		
4	Air outlet		
5	Condensation tank		
6	Air inlet		
7	Condensation drain hose connection		
8	Power cable holder		
9	Air filter		
10	HEPA filter		
11	Condensation drain hose		

## **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

Please note that additional transport regulations might apply to devices containing flammable refrigerants. The equipment's arrangement and the maximum number of components to be transported together can be gathered from the applicable transport regulations.

To make the device easier to transport, it is fitted with a carry handle.

Before transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- Do not use the power cable to drag the device.

After transporting the device, proceed as follows:

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

## Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- 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:

- Only store the device in a room measuring more than 4 m<sup>2</sup>.
- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- Store the device in a dry location and protected from frost and heat.
- Store the appliance in an upright position where it is protected from dust and direct sunlight.
- If required, use a cover to protect the device from invasive dust.
- Place no further devices or objects on top of the device to prevent it from being damaged.

## Assembly and start-up

### **Scope of delivery**

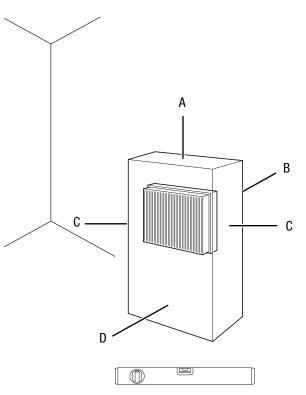
- 1 x device
- 1 x hose for the condensate drain, 30 cm length, 10 mm diameter
- 1 x air filter
- 1 x HEPA filter
- 1 x Manual

#### **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 chapter Technical annex.



- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only position the device in rooms where potentially leaking refrigerant cannot accumulate.
- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- 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 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.

## TROTEC

#### Inserting the air filter and HEPA filter

#### Note

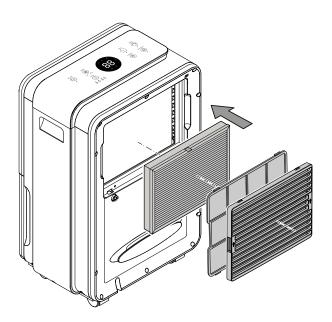
Remove any packing material from the HEPA filter. To change the filter, proceed as described in the Maintenance chapter under Cleaning and replacing the HEPA filter.

#### Note

Do not operate the device without an air filter inserted into the air inlet!

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.

• Before switching the device on, make sure that the air filter and HEPA filter are installed.



#### 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.

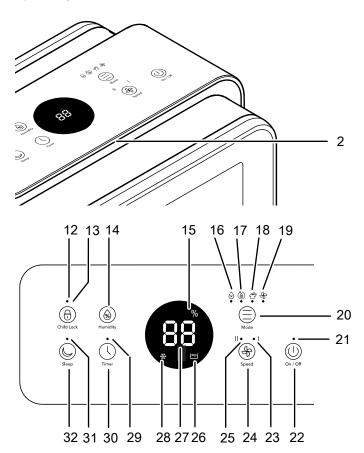
#### Connecting the power cable

Insert the mains plug into a properly secured mains socket.

#### Operation

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

#### **Operating elements**



No.	Designation	Function	
2	Colour LED display for room humidity	Indicates the current relative room humidity by means of 3 different colours	
12	Child Lock button	Switching the locking function on or off	
13	Child Lock LED	Illuminated when child lock function is activated	
14	Humidity button	For setting the desired relative humidity level	
15	%/relative humidity LED	Illuminated when the relative humidity level is set or the current humidity level is displayed	
16	⊗ LED	Illuminated when the dehumidification mode is selected	
17	led (	Illuminated when the continuous operation mode is selected	
18	岱 LED	Illuminated if the laundry drying function mode is selected	
19	욱 LED	Illuminated when the ventilation mode is selected	
20	Mode button	For setting the operating mode	
21	<i>On/off</i> LED	Illuminated when the device is switched on	

No.	Designation	Function	
22	<i>On/off</i> button	Switching the device on or off	
23	LED I	Illuminated when a low fan speed is set	
24	Speed button	For setting the desired fan speed	
25	LED II	Illuminated when a high fan speed is set	
26	🖻 LED	Is illuminated if the condensation tank is full or not installed correctly	
27	Segment display	Displays the desired relative humidity level, the current humidity or the number of hours of the timer	
28	₩ LED	Illuminated when automatic defrosting is activated.	
29	<i>Timer</i> LED	Is illuminated when the timer is activated.	
30	<i>Timer</i> button	Switching the timer function on and off: 1 h to 24 h	
31	Sleep LED	Illuminated when night mode is activated	
32	<i>Sleep</i> button	Switching night mode on and off	



### Warning of electrical voltage

Risk of electric shock!

The device does not have the appropriate protection class for use in wet rooms.

There is a risk of electric shock!

Never use the device in wet rooms (e.g. in bathrooms and laundry rooms) and never immerse the device in water!

#### Colour LED indication of the current room humidity level

Regardless of the operating mode, the colour LED (2) indicates the current relative room humidity by means of 3 different colours.

LED colour	Meaning
Blue	Relative room humidity below 50 %
Green	Optimal relative room humidity between 50 % and 70 %
Red	Illuminated: relative room humidity is equal to/or above 70 %.

### Switching the device on

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

- 1. Press the On/Off button (22).
  - ⇒ The device starts in the last selected operating mode, and in automatic mode when it is switched on for the first time.
  - $\Rightarrow$  The On/off LED (21) is illuminated.
  - ⇒ The LED of the current operating mode (16, 17, 18 or 19) is illuminated.

### **Operating modes**

The following operating modes can be set on the device:

- Dehumidification
- Continuous operation
- Laundry drying function
- Ventilation

#### Dehumidification

The device keeps running until reaching the preselected relative room humidity. Then the compressor switches off and the fan keeps running. Once the preselected relative room humidity is exceeded, the compressor switches back on.

- Press the *MODE* button (20) to select the operating mode.
  ⇒ The indication of the currently selected operating mode flashes.
- 2. Repeatedly press the *MODE* button (20) until the operating mode LED *Dehumidification* (16) flashes.
  - ⇒ The LED of the selected operating mode flashes for approx. 5 seconds before the operating mode is activated.

#### Setting the desired relative room humidity

You can only change the relative room humidity in *dehumidification* mode.

- 1. Set the desired room humidity on the control panel by pressing the *Humidity* button (14).
  - $\Rightarrow$  Setting is possible in the range between 30 % to 80 %.
  - ⇒ If the *Humidity* button is no longer pressed, the segment display returns back to the indication of the actual humidity.

#### Night mode

In night mode, the control panel is dimmed and the device generates a gentle air current that is adapted to your sleep habits.

Proceed as follows to switch on night mode:

- $\checkmark\,$  The device is switched on.
- 1. Press the *Sleep* button (32).
  - $\Rightarrow$  The Sleep LED (31) is illuminated.
- 2. Press the *Sleep* button (32) again to switch off the night mode.
  - ⇒ The device switches to the previously selected operating mode.

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#### **Continuous operation**

Regardless of the humidity level, the device dehumidifies continuously in continuous operation mode. The  $\textcircled{\otimes}$  LED (17) is illuminated.

In continuous operation mode, the fan speed remains at a low level (LED I is illuminated) and cannot be adjusted.

The relative room humidity cannot be set.

The current humidity value is indicated on the segment display (27).

## Info

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

#### Laundry drying function

With activated laundry drying function, the device continuously dehumidifies at high power, regardless of the humidity level. The T LED (18) is illuminated.

The fan speed remains at the high level (LED II is illuminated) and cannot be adjusted.

The relative room humidity cannot be set.

The current humidity value is indicated on the segment display (27).

#### Ventilation

In ventilation mode, the device cleans the air without dehumidification.

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

The current humidity value is indicated on the segment display (27).

- 1. Press the *Speed* button (24).
  - $\Rightarrow$  If the fan speed is set to a low level, the 1 LED (23) is illuminated.
  - ⇒ If the fan speed is set to a high level, the II LED (25,) is illuminated.

#### Setting the timer

#### Note

The device must not be left unattended in a freely accessible room with an activated timer.

By pressing the *Timer* (30) button you can activate the timer. 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 function can be set in addition in all operating modes. The number of hours can be set in hourly increments (1 h to max. 24 h).

When the timer function is active, the *Timer* LED (29) is illuminated.

#### Automatic switch-on

- ✓ The device is switched off.
- 1. Repeatedly press the *Timer* button (30) until the desired number of hours until automatic switch-on is indicated on the segment display (27).
  - ⇒ The set number of hours flashes on the segment display (27).
  - ⇒ After approx. 5 seconds, the set number of hours is saved and the segment display goes out.
  - $\Rightarrow$  The device switches on after the predefined time.
  - $\Rightarrow$  The Timer LED (29) is illuminated.

Notes regarding automatic switch-on:

- Manually switching the device on disables the automatic switch-on function.
- If you select 0 hours, the timer will be off.

#### Automatic switch-off

- ✓ The device is switched on.
- 1. Repeatedly press the *Timer* button (30) until the desired number of hours until automatic switch-off is indicated on the segment display (27).
  - ⇒ The set number of hours flashes on the segment display (27).
  - ⇒ After approx. 5 seconds, the set number of hours is saved and the segment display indicates the humidity level again.
  - $\Rightarrow$  The device switches off after the predefined time.
  - $\Rightarrow$  The Timer LED (29) is illuminated.

Notes regarding automatic switch-off:

- Manually switching the device off disables the automatic switch-off function.
- If you select 0 hours, the timer will be off.

#### **Memory function**

If you switch the device back on again, the settings selected for the operating mode, the relative humidity level and fan speed are saved. If a timer has been set, it will not be saved.

The device memorises the settings even during short power failures. In this case, the device automatically switches back on. The previous settings are saved except for the timer.

#### Auto stop function

Once the condensation tank is full, the device will stop automatically. The ≅ LED (26) is illuminated. Empty the condensation tank as described in section Emptying the condensation tank.

## Locking function

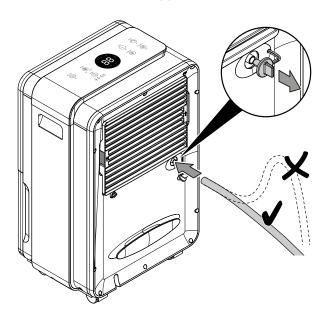
The locking function locks using the buttons on the control panel.

- 1. Press the *Child Lock* button (12) for approx. 3 seconds to activate the locking function.
  - $\Rightarrow$  The *Child Lock* LED (13) is illuminated.
  - $\Rightarrow$  Making inputs on the control panel is locked.
- 2. Press the *Child Lock* button (12) for approx. 3 seconds if you want to deactivate the locking function.
  - $\Rightarrow$  The *Child Lock* LED (13) goes out.
  - $\Rightarrow$  The buttons on the control panel are unlocked.

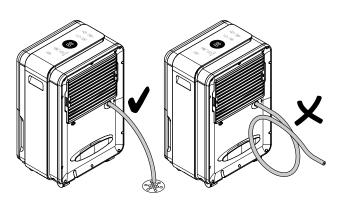
## Operation with hose attached to the condensation connection

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

- $\checkmark$  The supplied hose (diameter = 10 mm) is ready for use.
- ✓ The device is switched off.
- 1. Remove the sealing cap.
- 2. Push one end of the hose onto the connection for the condensation drain hose (7).



3. Guide the other hose end to a suitable drain (e.g. floor drain) or to a sufficiently dimensioned collection container. Please note that the hose must not be kinked.



 Remove the hose and attach the sealing cap if you want to collect the condensate again via the condensation tank. Allow the hose to dry prior to storage.

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

The  $^{4}$  (28) indication is illuminated on the segment display during automatic defrost.

#### **Drying laundry**

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

When positioning the device or a clothes horse, please observe the minimum distances specified in the technical data.

The following humidity values are suitable for drying laundry:

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

Adjust the settings for the relative humidity level to the device (e.g. 60 % relative humidity for iron dry laundry). 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.

- Press the On/off button (22) to switch the device off.
- 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.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and 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	
HEPA filter	7.710.000.025	

## **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 condensation tank for correct seating.
- Check the room temperature and the current room humidity level. If the current room humidity level is below the room humidity level set, the device will not switch on. Observe the device's permissible operating range according to the technical data.
- 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 and the current room humidity level. If the current room humidity level is below the room humidity level set, the device will not switch on. 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 and HEPA filter for dirt. If necessary, clean or change the air filter or HEPA filter.

#### 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 and the current room humidity level. If the current room humidity level is below the room humidity level set, the device will not switch on. 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 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 device gets very warm, is loud or is losing performance:

- 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 10 minutes after maintenance and repair work. Only then switch the device back on.

## The 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.

## Maintenance

#### at least Maintenance and care interval before every as needed at least every at least every at least every start-up 2 weeks 4 weeks 6 months annually Check air inlet and outlet for dirt and Х Х foreign objects and clean if necessary Clean the exterior Х Х 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 Replace the air filter Х Cleaning and replacing the HEPA filter Х Х Х Check for damage Check the attachment screws Х Х Х Test run Empty and clean the condensation Х tank and/or drain hose

#### Maintenance and care log

Device type: ..... Device number: ..... 1 2 7 14 15 16 Maintenance and care interval 3 4 5 6 8 9 10 11 12 13 Check air inlets and outlets for dirt and foreign objects and clean if necessary Check the air filter for dirt and foreign objects and clean or replace if necessary Clean the exterior Visually check the inside of the device for dirt Replace the air filter Cleaning and replacing the HEPA filter Check for damage Check the attachment screws Test run Empty and clean the condensation tank and/or drain hose Comments

1. Date:	2. Date:	3. Date:	4. Date:
Signature:	Signature:	Signature:	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:	Signature:	Signature:	Signature:

## **Maintenance intervals**

#### Activities required before starting maintenance



#### Warning of electrical voltage

<sup>2</sup> 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 device to be opened must only be carried out by authorised specialist companies or by Trotec.

#### **Refrigerant circuit**



## Danger

Natural refrigerant propane (R290)!

H220 – Extremely flammable gas.

H280 – Contains gas under pressure; may explode if heated.

P210 – Keep away from heat, sparks, open flames and other ignition sources. No smoking.

P377 – Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P410+P403 – Protect from sunlight. Store in a well-ventilated place.

 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.

#### Safety signs and labels on the device

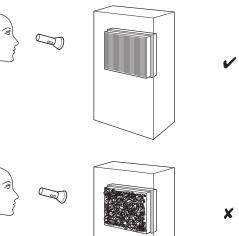
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

#### **Cleaning the housing**

Clean the housing with a soft, damp and lint-free cloth. Make sure 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 air-conditioning or by Trotec.
- 5. Put the air filter back in.





## **Cleaning and replacing the HEPA filter**

#### Note

Do not operate the device without a HEPA filter inserted!

#### Note

The HEPA filter cannot be washed and must be replaced if necessary.

#### Note

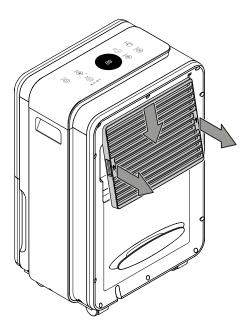
The lifetime of the HEPA filter depends on the ambient conditions and the application period of the device.

- The HEPA filter must be cleaned or replaced if it is very dirty. This is brought to light e.g. by a reduced capacity (see chapter Errors and faults).
- Make sure that the HEPA filter is installed before switching the device on.

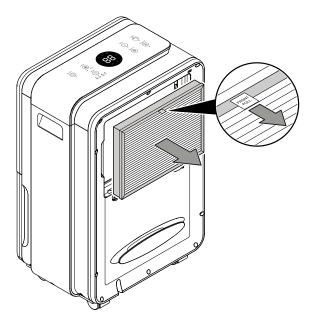
The operating life is approx. 1 year, depending on the degree of air pollution.

If required, visually inspect the HEPA filter for dirt.

1. Remove the cover of the air inlet.

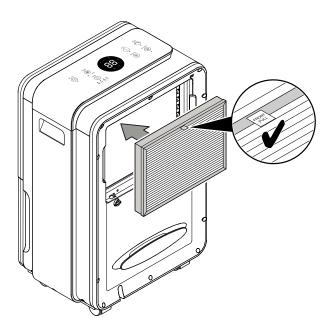


2. Pull the strip to take the HEPA filter out of the device.

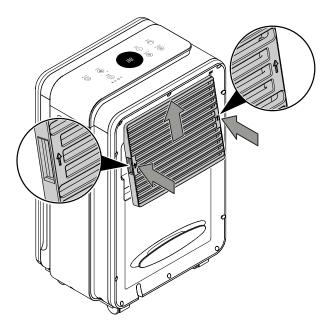


3. Clean the HEPA filter with a dry, lint-free cloth if it is slightly dirty. If heavily soiled, dispose of the HEPA filter in accordance with the national regulations and remove the new HEPA filter from the plastic cover.

4. Insert the cleaned / new HEPA filter into the device. Make sure that the strip is positioned as indicated.



5. Insert the air inlet cover back into the device.



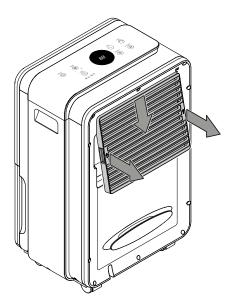
## **Cleaning the air filter**

#### Note

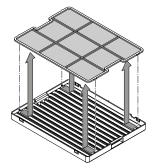
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

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).

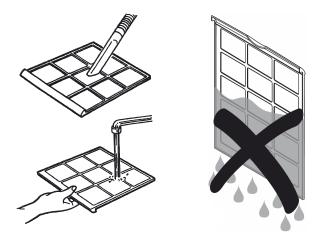
1. Remove the cover of the air inlet.



2. Remove the filter from the cover.



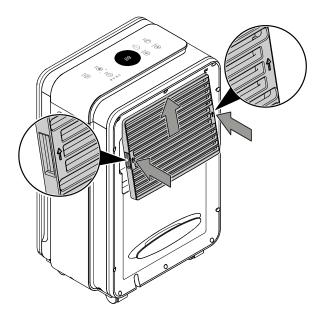
3. Clean the filter using a slightly damp, soft, lint-free cloth. If the filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.



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



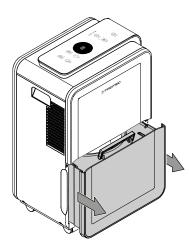
6. Insert the air inlet cover into the device.



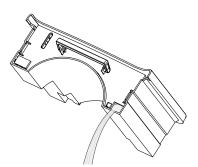
## Emptying the condensation tank

If the condensation tank is full or not installed correctly, the  $\bowtie$  LED (26) will be illuminated on the segment display.

1. Take the condensation tank out of the device.

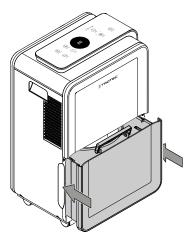


2. Empty the condensation tank over a suitable drain, e.g. a toilet, a wash basin or a sink.



- 3. Rinse the tank with clear water. Clean the tank regularly using a mild cleaning agent (no detergent!).
- 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:

• 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 Transport and storage chapter.

## **Technical annex**

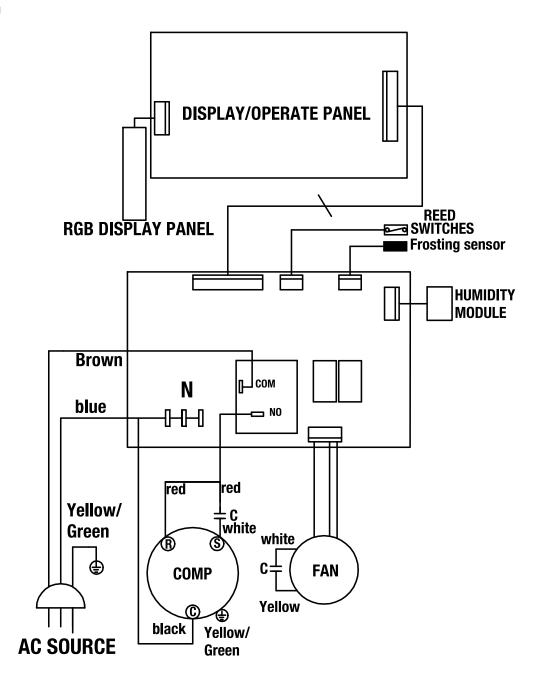
## **Technical data**

Parameter	Value
Model	TTK 99 HEPA
Dehumidification performance @ 32 °C and 80 % RH	31 I / 24 h
Dehumidification performance @ 30 °C and 80 % RH	30 I / 24 h
Air flow rate	170 m <sup>3</sup> /h
Operating range (temperature)	5 °C to 32 °C
Operating range (relative humidity)	30 % to 80 % RH
Pressure suction side	1.2 MPa
Pressure outlet side	2.5 MPa
Max. permissible pressure	2.5 MPa
Mains connection	220-240 V / 50 Hz
Max. power consumption	720 W
Nominal current	3.38 A
Fusing -	3.15 A (slow-blowing)
Type of protection	IPX0
Refrigerant	R290
Amount of refrigerant	90 g
GWP factor	3
CO <sub>2</sub> equivalent	0.00027 t
Water tank	41
Sound pressure level	51 dB (A)
Dimensions (length x width x height)	250 x 370 x 585 mm
Minimum distance to walls and other objects	
A: top	50 cm
	50 cm
	50 cm
D: front	
Weight	17 kg

17

## TROTEC

### **Circuit diagram**

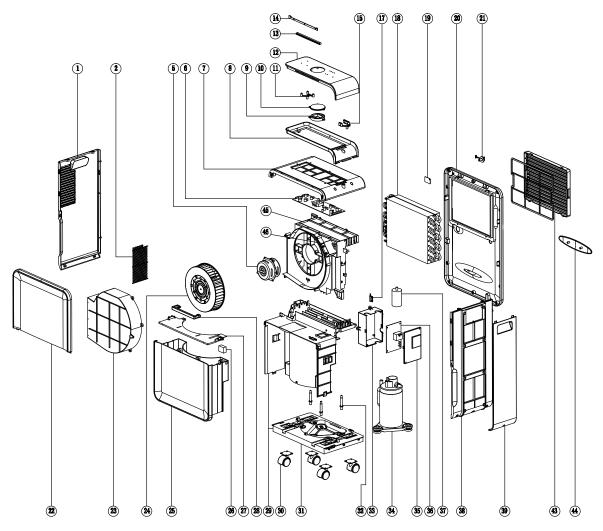


### **Overview of spare parts**



## Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



## List of spare parts

No.	Spare part	No.	Spare part	No.	Spare part
1	Left Cover	18	Condenser & Evaporator	32	Screw Arbor
2	Wire Netting	19	Sensor	33	Electrical Cover (down)
5	Motor	20	Back Cover	34	Compressor
6	Control PCB	21	Water Plug	35	Electrical Cover (up)
7	Top Cover	22	Front Shell	36	Main PCB
8	Transparent Parts	23	Duct (down)	37	Compressor Capacitor
9	Lampshade	24	Wind Wheel	38	Right Cover
10	Display Window	25	Water Tank	39	Decorative Strip
11	Indicator Lamp Cover 1	26	Float	42	Filter Frame
12	Panel	27	Tank Cover	43	Inlet Frame
13	Lampshade	28	Handle	44	Clip
14	Light Board	29	Main Body	45	Duct (up)
15	Indicator Lamp Cover 2	30	Universal Wheel	46	Motor Capacitor
17	Reed Pipe	31	Base		

## **Disposal**

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out waste bin on waste electrical or electronic equipment is taken from Directive 2012/19/EU. It states that this device 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. You can also find out about other return options that apply for many EU countries on the website https://hub.trotec.com/?id=45090. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

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.

Have the refrigerant (propane) disposed of appropriately and according to the national regulations by a company with the relevant certification (European Waste Catalogue 160504).

#### **Only for United Kingdom**

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

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