

TTK 167 ECO / TTK 171 ECO

EN

INSTRUCTIONS
DEHUMIDIFIER

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Information on the use of these instructions

Symbols



Danger

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



Warning

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



Warning of electrical voltage

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

Notice

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



Info

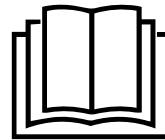
Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

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

You can download the current version of these instructions via the following link:



TTK 167 ECO



<https://hub.trotec.com/?id=47750>

TTK 171 ECO



<https://hub.trotec.com/?id=42377>

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 done 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 an aggressive atmosphere.
- Place the device in an upright and stable position on a horizontal and stable surface.
- 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.
- Check the device regularly 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 supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
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/tray 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.
- Store the appliance in a room without continuously operating open flames (for example an operating gas appliance) or other potential ignition sources (for example an operating electric heater, hot surfaces).
- 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 regulations for gas installations.
- Only install, operate and store the device in a room measuring more than 12 m².
- Store the device in a way that no mechanical damage can occur.
- 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 into or burn.
- Do not use any means other than those recommended by the manufacturer for accelerating the defrosting process or cleaning the device.
- 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 air-conditioning or by the manufacturer.

Intended use

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

Intended use comprises:

- dehumidifying and drying:
 - building shells
 - premises e. g. after water damage (water damage restoration)
- maintaining the dryness of:
 - storage spaces, archives, laboratories, garages
 - holiday homes
 - changing rooms etc.

Any use other than the intended use is regarded as misuse.

Reasonably foreseeable misuse

- Do not place the device on wet or flooded ground, e.g. near floor drains.
- Do not place any objects, e.g. clothing, on the device.
- Do not use outdoors.
- Do not use the device in the immediate vicinity of swimming pools, bathtubs and showers.
- Never immerse the device in water.
- Do not make any unauthorised modifications, alterations or structural changes to the device.

Personnel qualification

People who use this device must:

- have basic knowledge of how to safely handle electrical equipment.
- have read and understood the instructions, 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 the manufacturer.

Safety signs and labels on the device

Notice

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 12 m² aufgestellt, betrieben und gelagert werden.

EN Appliance shall be installed, operated and stored in a room with floor area larger than 12 m².

FR L'appareil doit être installé, utilisé et entreposé dans une pièce avec une surface supérieure à 12 m².



Follow the manual

This symbol indicates that the instructions must be observed.



Follow 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 is not protected against water.

There is a risk of electric shock!

Never use the device in areas where dripping, spraying or running water can enter the device! Never immerse the device in water!



Warning of electrical voltage

Risk of electric shock!

Risk of an electric shock if the device comes into contact with water!

Do not use this device in the immediate vicinity of bathtubs, showers or swimming pools!



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.

Notice

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 can 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 by removing the mains plug from the socket. When doing so, be sure to hold the plug, not the cable.
3. Do not reconnect a defective device to the mains.

Information about the device

Device description

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 an automatic defrost function. Defrosting takes place electronically in air circulation mode.

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) is illuminated. The compressor and fan will switch 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.

Moreover, an air hose connection can be used for the selective admission of dry air or for drying hollows.

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

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

Furthermore, the device can be switched on and off automatically with time delay. The according number of hours can be set in hourly increments (1 h to 24 h).

The device is not protected against water (IPX0).

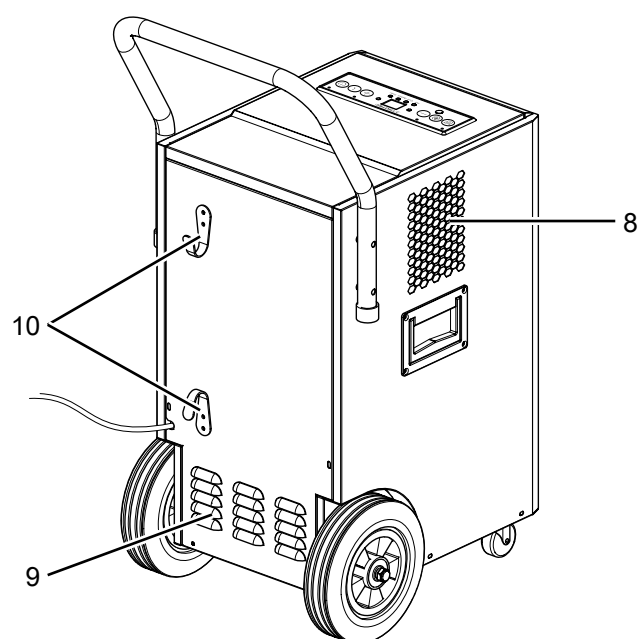
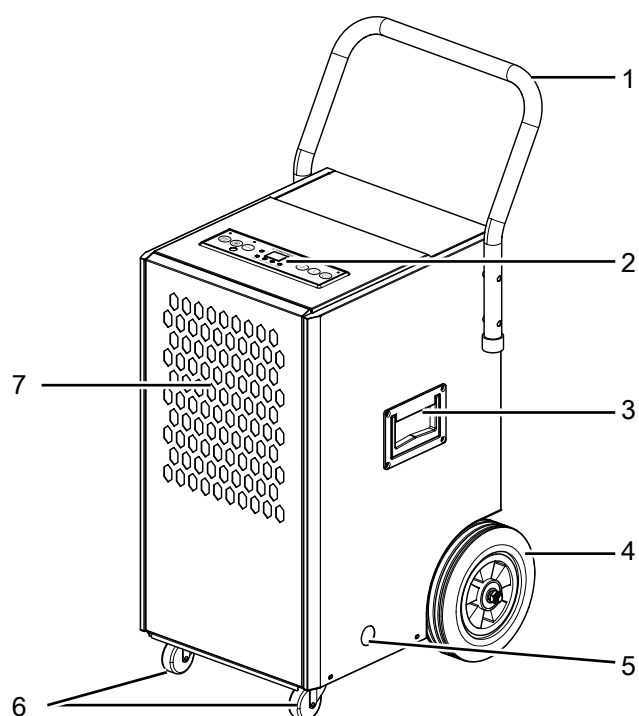


Info

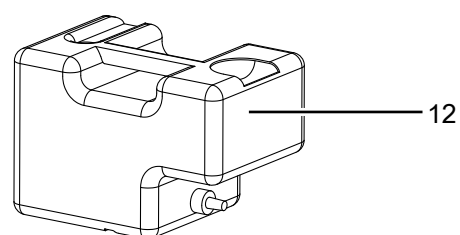
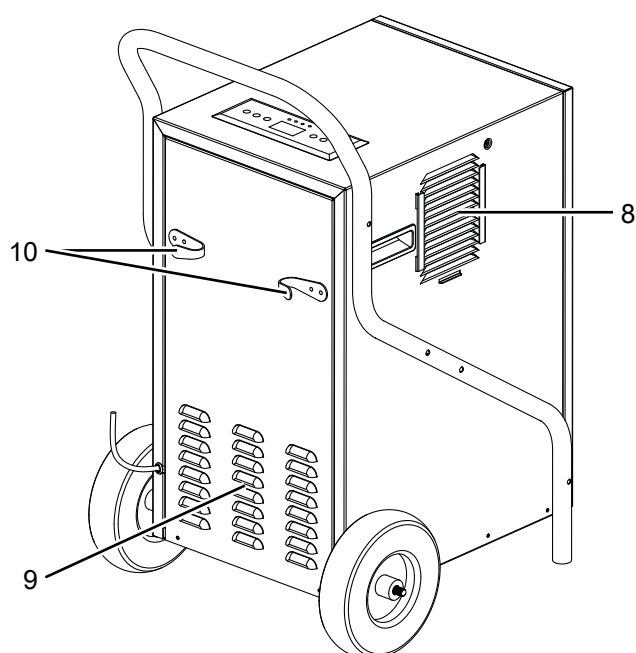
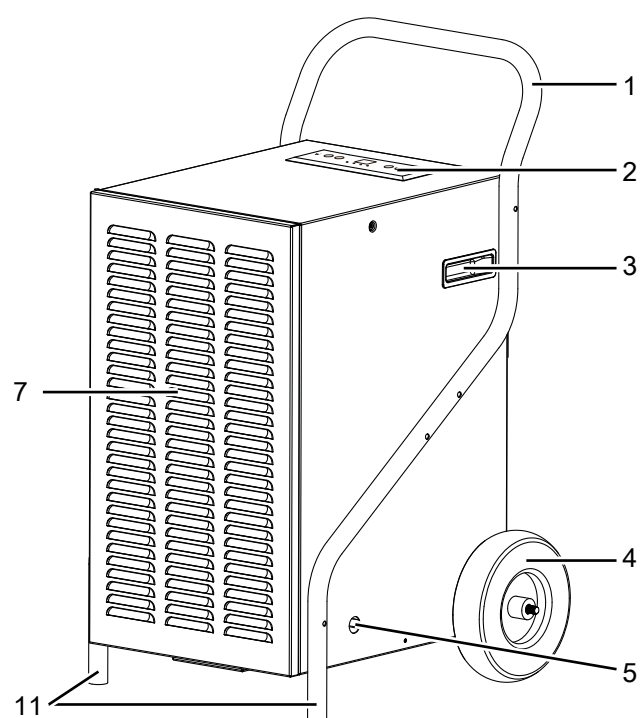
The illustrations in these instructions feature device TTK 171 ECO by way of example. However, the depicted operating steps and explanations also apply to the device TTK 167 ECO unless otherwise mentioned.

Device depiction

TTK 167 ECO



TTK 171 ECO



No.	Designation
1	Transport handle
2	Operating element
3	Foldable handle (TTK 167 ECO) Recessed grip (TTK 171 ECO)
4	Transport wheel
5	Feed-through for condensation drain hose
6	Transport wheel with parking brake
7	Air inlet with air filter
8	Air outlet (TTK 171 ECO: with air hose connection)
9	Venting slots
10	Power cable holder
11	Foot
12	Condensation tank

Transport and storage

Notice

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

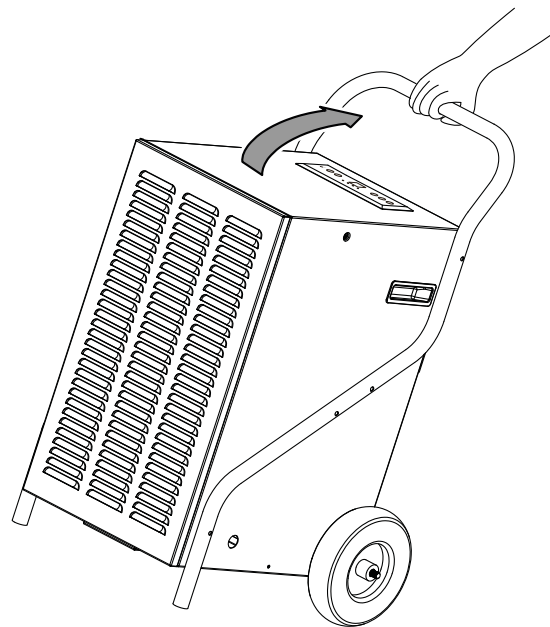
Transport

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 transport handle and wheels.

Before transporting the device, observe the following:

- Switch the device off.
- Disconnect the device from the mains by removing the mains plug from the socket. When doing so, be sure to hold the plug, not the cable.
- 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.

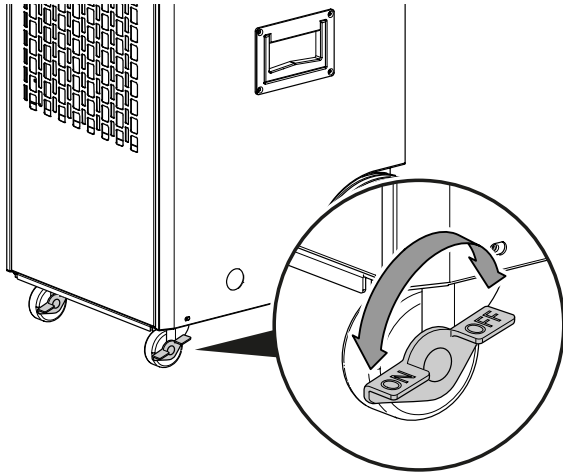


- Only wheel the device on firm and level surfaces.

After transporting the device, proceed as follows:

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

- Apply and lock the parking brakes on the front transport wheels (TTK 167 ECO).



Storage

Before storing the device, observe the following:

- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- Disconnect the device from the mains by removing the mains plug from the socket. When doing so, be sure to hold the plug, not the cable.

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

- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance, an electric heater).
- Store the device in a dry location and protected from frost and heat.
- Store the device 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

TTK 167 ECO

- 1 x Device
- 1 x Condensation drain hose, length: 2 m, diameter: 11 mm
- 2 x Screw
- 1 x Manual

TTK 171 ECO

- 1 x Device
- 1 x Transport handle
- 2 x Foot
- 2 x Transport wheel
- 1 x Condensation drain hose, length: 2 m, diameter: 11 mm
- 12 x Screw
- 4 x Nut
- 8 x Washer
- 1 x Manual

Unpacking the device



Warning

There is a danger of suffocation for children due to packaging material! Keep packaging films and parts away from children. There is a risk of death due to suffocation.

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.

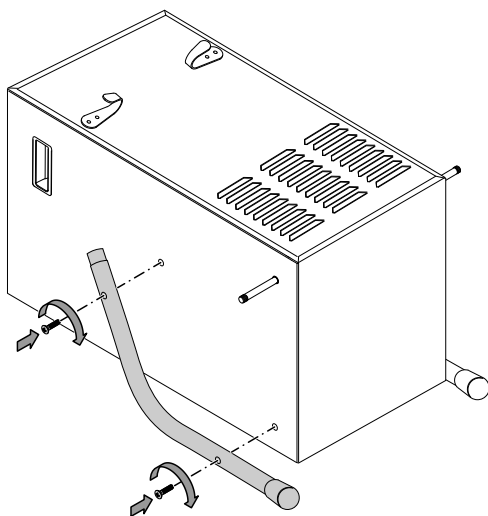
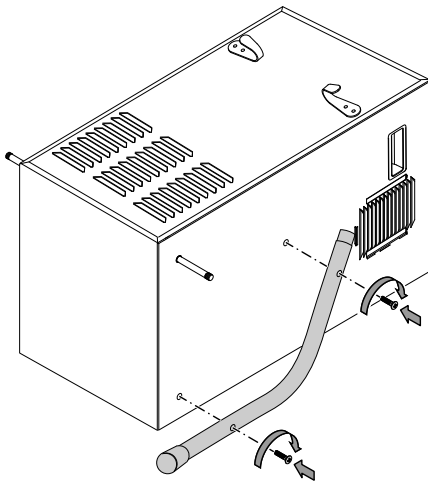
Assembly

Use tools suitable for the intended task.

Mounting the feet (TTK 171 ECO)

Prior to initial start-up, the feet must be attached to the device. To do so, please proceed as follows:

1. Place the device on its front side.
2. Mount the two feet (11) to the device sides using two screws each. The feet must protrude from the bottom side of the device.



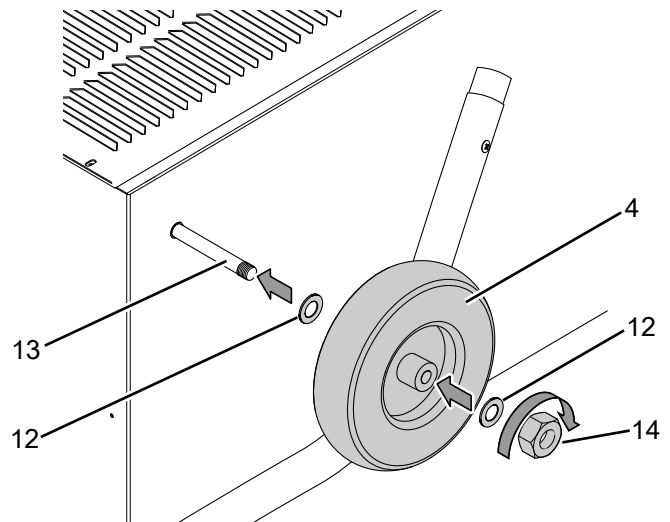
3. Then mount the wheels.

Mounting the wheels (TTK 171 ECO)

Prior to initial start-up, the wheels and the axle must be attached to the device. To do so, please proceed as follows:

- ✓ The device is placed on its front side.

 1. Place a washer (13) on the axle (14).
 2. Place a wheel (4) in front of the washer.
 3. Place a second washer (13) in front of the wheel (4).
 4. Use a nut (4) to secure the wheel (15) on the axle.



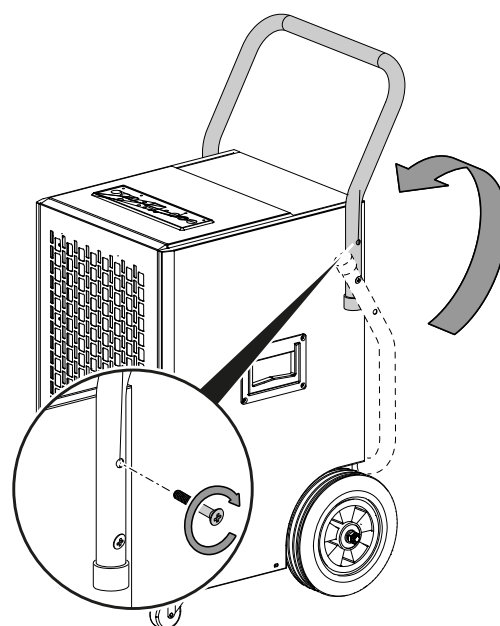
5. Repeat this process on the other side of the axle.
6. After mounting the wheels and the feet, place the device in an upright position.

Mounting the transport handle

Prior to initial start-up, the transport handle must be attached. To do so, please proceed as follows:

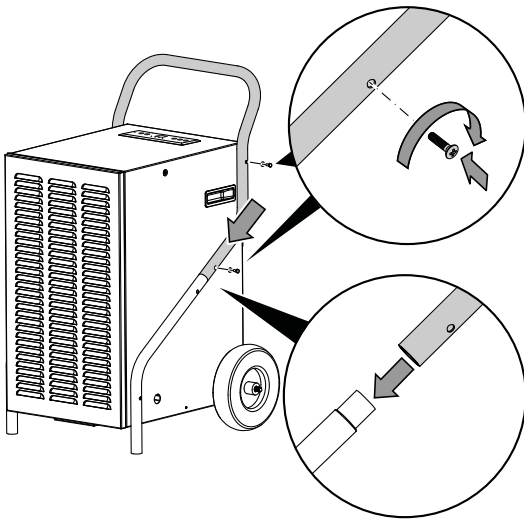
TTK 167 ECO

1. Fold the transport handle upwards (1).
2. Secure the transport handle with two screws on both sides of the device.



TTK 171 ECO

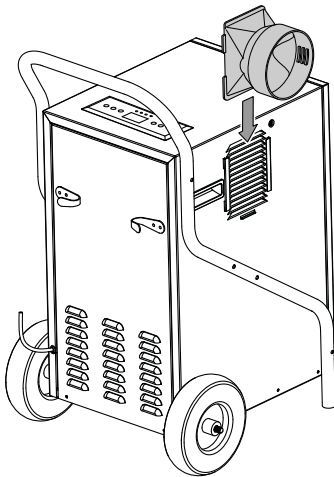
1. Mount the transport handle (1) to both feet (11) using two screws.



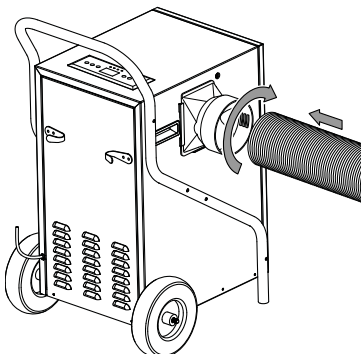
Connecting the air transport hose (optional) (TTK 171 ECO)

For the selective admission of dry air or for drying hollows please connect the optionally available hose adapter and air hose (see chapter Available accessories).

1. Slide the hose adapter onto the connecting rails of the air outlet (8).

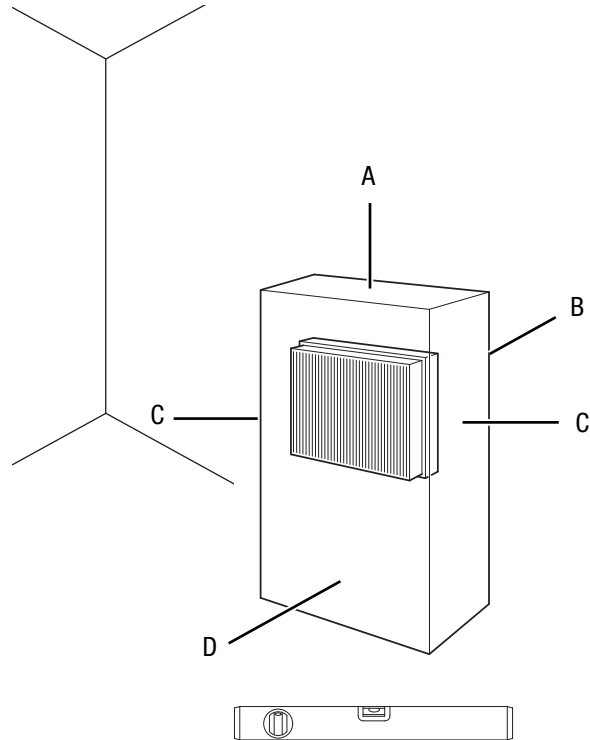


2. Connect the air transport hose.



Start-up

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



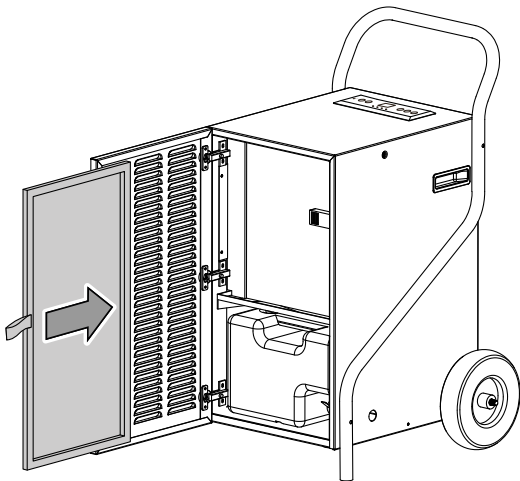
- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only position the device in rooms where potentially leaking refrigerant cannot accumulate.
- Store the appliance in a room without continuously operating open flames (for example an operating gas appliance) or other potential ignition sources (for example an operating electric heater, hot surfaces).
- Place the device in an upright and stable position on a horizontal and stable surface.
- 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.

Inserting the air filter

Notice

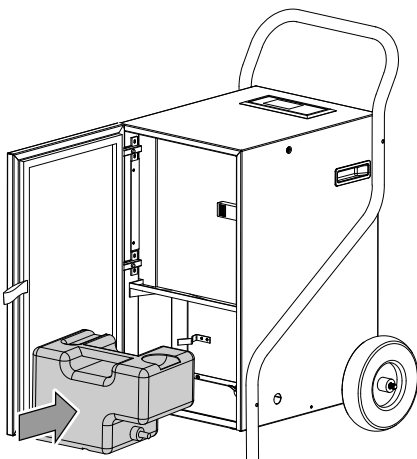
Do not operate the device without an air filter inserted into the air inlet!

Without the air filter, the inside of the device will be heavily contaminated. This can reduce the performance and result in damage to the device.



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.

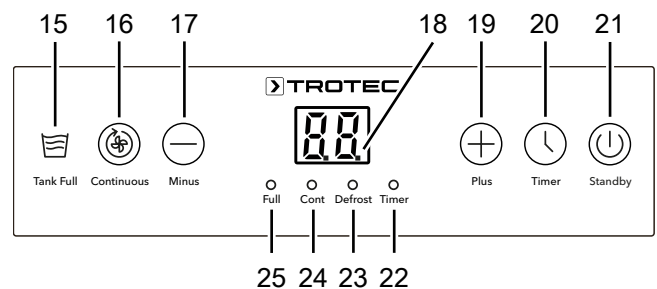


Operation

Notes:

- Avoid open doors and windows.
- After being switched on, the device operates fully automatically.
- The compressor will additionally be switched on after 3 seconds.
- 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	Meaning
15	<i>Tank full</i> LED	Is displayed when the condensation tank is full or not installed correctly
16	<i>Continuous</i> button	Selection button for the operating mode <i>continuous operation</i>
17	<i>Minus</i> button	For reducing the desired relative humidity level (20 % to 90 % in increments of 5 %) For reducing the value of the timer programming in increments of 1 hour (1 h to 24 h)
18	Segment display	Indication of the current room humidity level Indication of the desired room humidity level Indication of the set number of hours during timer programming
19	<i>Plus</i> button	For increasing the desired relative humidity level (20 % to 90 % in increments of 5 %) For increasing the value of the timer programming in increments of 1 hour (1 h to 24 h)
20	<i>Timer</i> button	For enabling or disabling the <i>automatic switch-on</i> timer function For enabling or disabling the <i>automatic switch-off</i> timer function
21	<i>Standby</i> button	Switching the device on or activating standby mode
22	<i>Timer</i> LED	Illuminated when the timer for automatic switch-on or switch-off is activated

No.	Designation	Meaning
23	<i>Defrost</i> LED	Is displayed when automatic defrosting is in progress
24	<i>Continuous</i> LED	Illuminated during <i>continuous operation</i>
25	<i>Full</i> LED	Is displayed when the condensation tank is full or not installed correctly



Warning of electrical voltage

Risk of electric shock!

The device is not protected against water.

There is a risk of electric shock!

Never use the device in areas where dripping, spraying or running water can enter the device! Never immerse the device in water!

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.

- Press the *Standby* button (21).
 - ⇒ The device starts to dehumidify in continuous operation.
 - ⇒ The current room humidity is indicated on the segment display.
- Press the *Standby* button (21) again.
 - ⇒ Then the compressor switches off.
 - ⇒ - - will be indicated on the display.
 - ⇒ The device now switches over into standby mode.
 - ⇒ The fan keeps running for approx. one minute and then switches off.

Continuous operation mode

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

The desired relative room humidity cannot be adjusted in this operating mode.

- Press the *Continuous* button (16).
 - ⇒ The *Continuous* LED (24) is illuminated.
 - ⇒ The segment display (18) indicates the current relative room humidity.
 - ⇒ *Continuous operation* is selected.



Info

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

Setting the desired relative room humidity

The desired relative room humidity can be preselected.

- Press the *Continuous* button (16) to deactivate continuous operation.
 - ⇒ The *Continuous* LED (18) goes out.
- Repeatedly press the buttons *Minus* (17) or *Plus* (19) to select the desired relative humidity value. An acoustic signal will be emitted with every push of a button. You can also press and hold the corresponding button to adjust the relative room humidity as desired. Setting is possible within the range between 20 % and 90 % in steps of 5 %.
 - ⇒ The desired relative humidity level is indicated on the segment display (18) for approx. 5 seconds. The current room humidity will then be indicated again.

The device keeps running until reaching the desired relative room humidity. Once the desired relative room humidity is exceeded, the compressor and fan switch back on.

Memory function

After a power failure during operation the device will automatically be switched back on. The selected settings are saved.

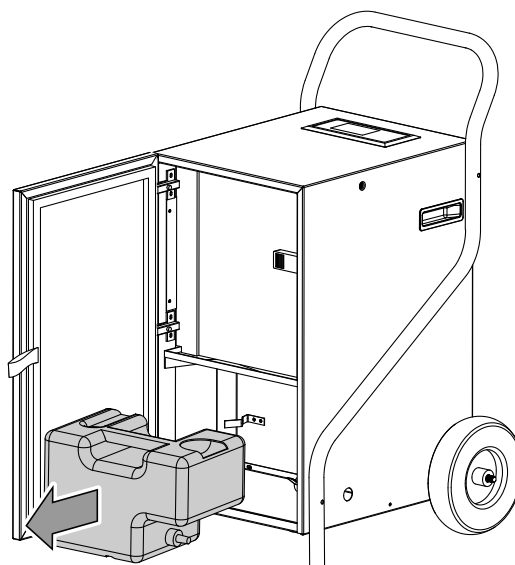
Auto stop function

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

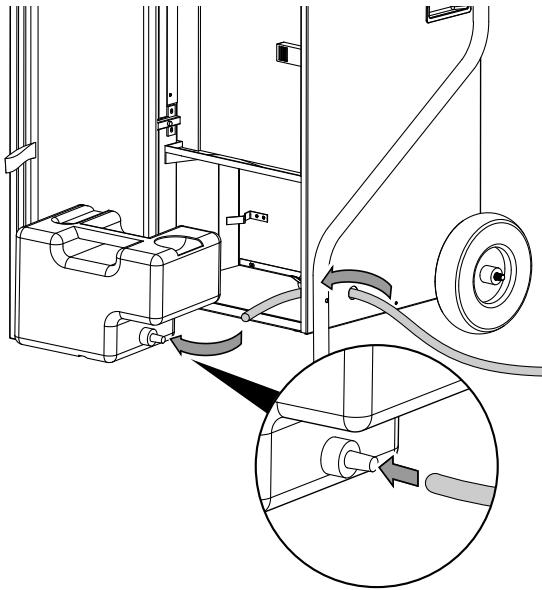
Operation with hose attached to the condensation connection

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

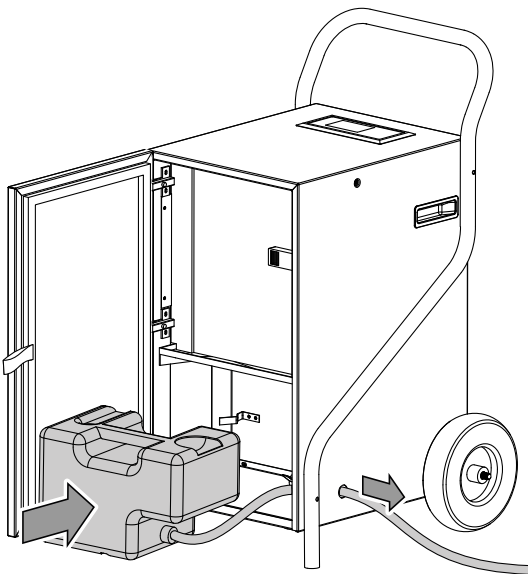
- ✓ The supplied hose is ready for use.
 - ✓ The device is switched off.
- Open the air inlet (11).
 - Remove the water tank from the device.



3. Push the condensation drain hose through the feed-through opening (5) and connect one end to the hose connection.



4. Refit the water tank in the device and close the air inlet (11).



5. 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 and seal the hose connection off with the plug 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 defrosting

At low ambient temperatures, ice may form at the vaporizer during dehumidification. The device will then perform automatic defrosting. Dehumidification is briefly interrupted during defrosting. The fan keeps running.

The *Defrost* LED (23) is illuminated.

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

Setting 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 all operating modes and also during stand-by.

The number of hours can be set in hourly increments to a value between 1 and 24 hours.

Notice

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

✓ **Automatic switch-on:** The device is switched off.

✓ **Automatic switch-off:** The device is switched on.

1. Press the *Timer* button (20).

⇒ The *Timer* LED (22) is illuminated.

2. Use the *Minus* (17) and *Plus* (19) buttons to set the desired number of hours.

⇒ The number of hours will be indicated for 5 seconds on the segment display (18).

⇒ The timer setting equals the desired number of hours.

⇒ After the predefined time, the device switches itself on or off.

The timer is deactivated in the following cases:

- If the device is disconnected from the power supply, all settings for automatic switch-on are deleted.
- Manually switching the device on disables the automatic switch-on function.
- If you select **0** hours, the timer will be off.
- Pressing the *Standby* button (21) deactivates the automatic switch-off function.

Temperature indication

In addition to the humidity level, the segment display (18) can also indicate the current room temperature. To do so, please proceed as follows:

1. Press and hold the *Timer* button (20) for 5 seconds.
 - ⇒ The current room temperature is indicated on the segment display (18).
2. Wait for 10 seconds.
 - ⇒ The current relative room humidity will be indicated on the segment display (18).

Shutdown



Warning of electrical voltage

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

- Press the *Standby* button (21) to activate the standby mode.
- Disconnect the device from the mains by removing the mains plug from the socket. When doing so, be sure to hold the plug, not the cable.
- If necessary, remove the condensation drain hose and any residual fluid from it.
- Empty the condensation tank/tray if necessary.
- If required, 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 instructions.

Using insertion tools or accessories other than those specified in the instructions may cause a risk of injury.

Designation	Article number
Air filter (filter fleece) (TTK 167 ECO only)	7.710.000.098
Air filter (filter fleece) (TTK 171 ECO only)	7.710.000.826
External condensate pump	6.100.003.020
Hose adapter (TTK 171 ECO only)	7.331.001.160
Air transport hose (TTK 171 ECO only)	6.100.001.125

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.

Notice

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

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 LEDs *Tank Full* (15) and *Full* (25) must not light up.
- Check the condensation tank for correct seating.
- Check the room temperature. Observe the device's permissible operating range according to the technical data.
- If the device is not starting, have the electrics checked by a specialist company or by the manufacturer.

The device is running, but there is no formation of condensate:

- Check whether the condensation drain hose is positioned correctly.
- 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 air filter for dirt. If necessary, clean or replace the air filter.
- 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 the manufacturer.
- When using the condensate pump: Check the condensation tank and hoses for dirt.

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 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 power:

- Check the air inlet and air filter 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 air-conditioning or by the manufacturer.

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 the manufacturer for repair.

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

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.
- Disconnect the device from the mains by removing the mains plug from the socket. When doing so, be sure to hold the plug, not the cable.



Warning of electrical voltage

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

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 air-conditioning or by the manufacturer.

Safety signs and labels on the device

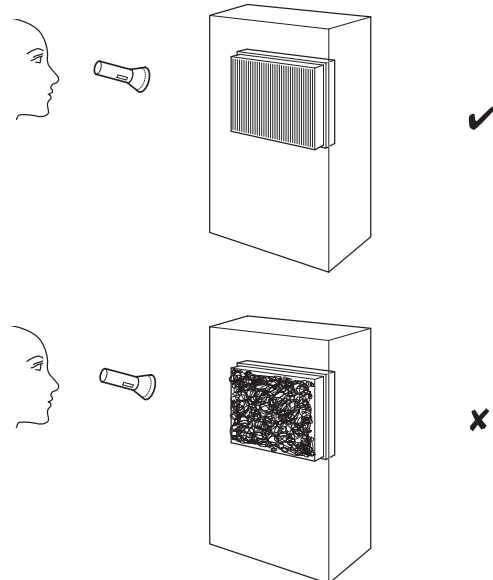
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

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 the manufacturer.
5. Put the air filter back in.



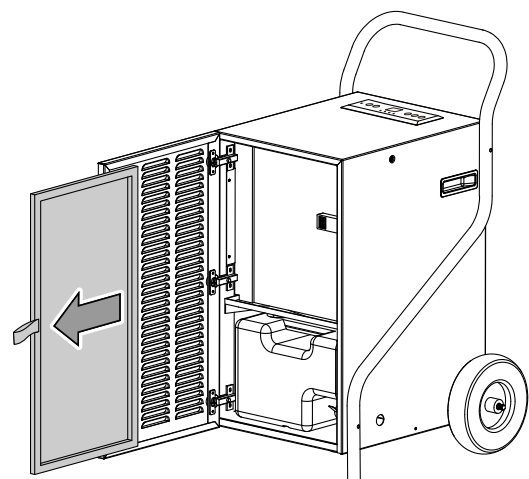
Cleaning the air filter

Notice

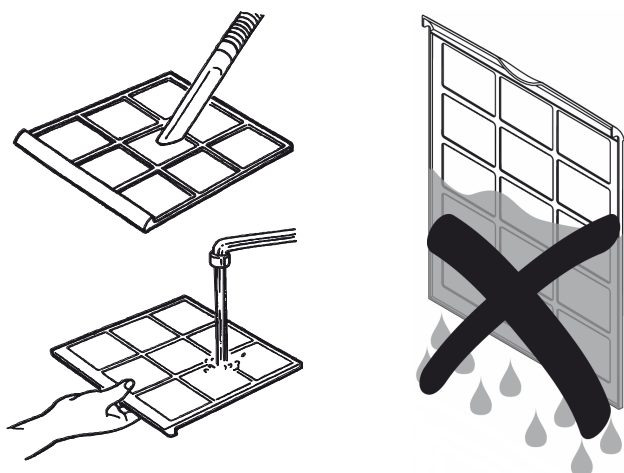
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

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).

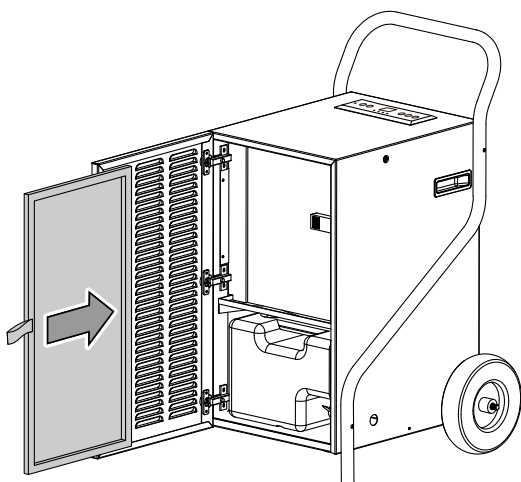
1. Remove the air filter from the device.



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



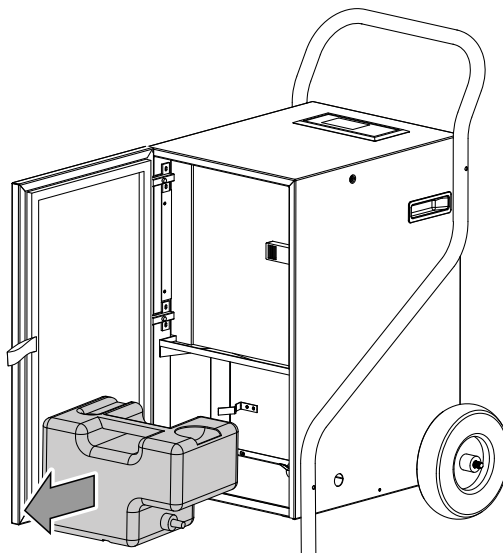
3. Allow the filter to dry completely. Do not insert a wet filter into the device!
4. Reinsert the air filter into the device.



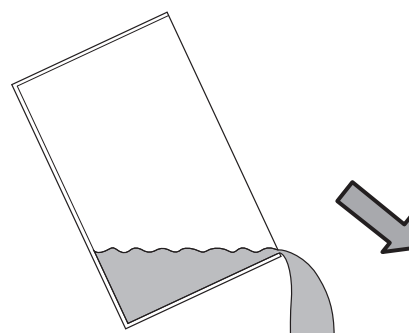
Emptying the condensation tank

If the condensation tank is full or not installed correctly, the LEDs *Tank Full* (15) and *Full* (25) will be illuminated. The compressor and fan will switch off.

1. Take the condensation tank out of the device.

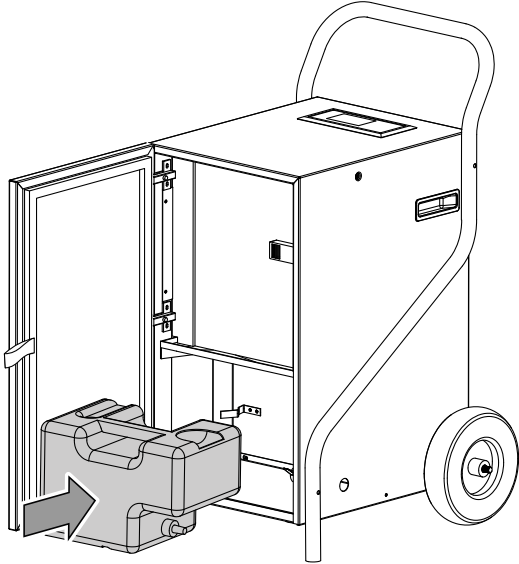


2. Empty the condensation tank over a drain or sink.



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.
Also make sure that the condensation tank is inserted correctly, 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.

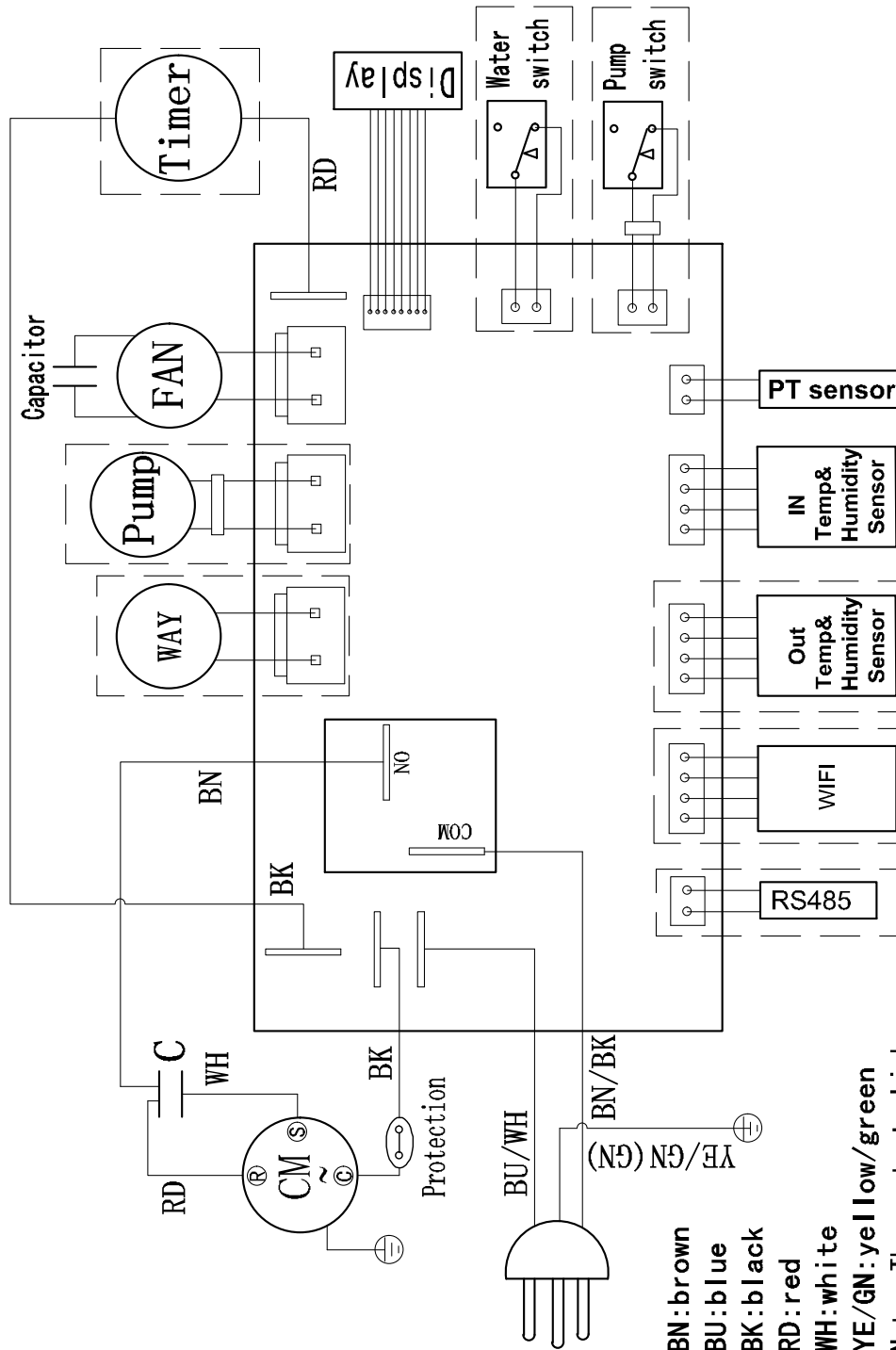
If you do not intend to use the device for a considerable time:

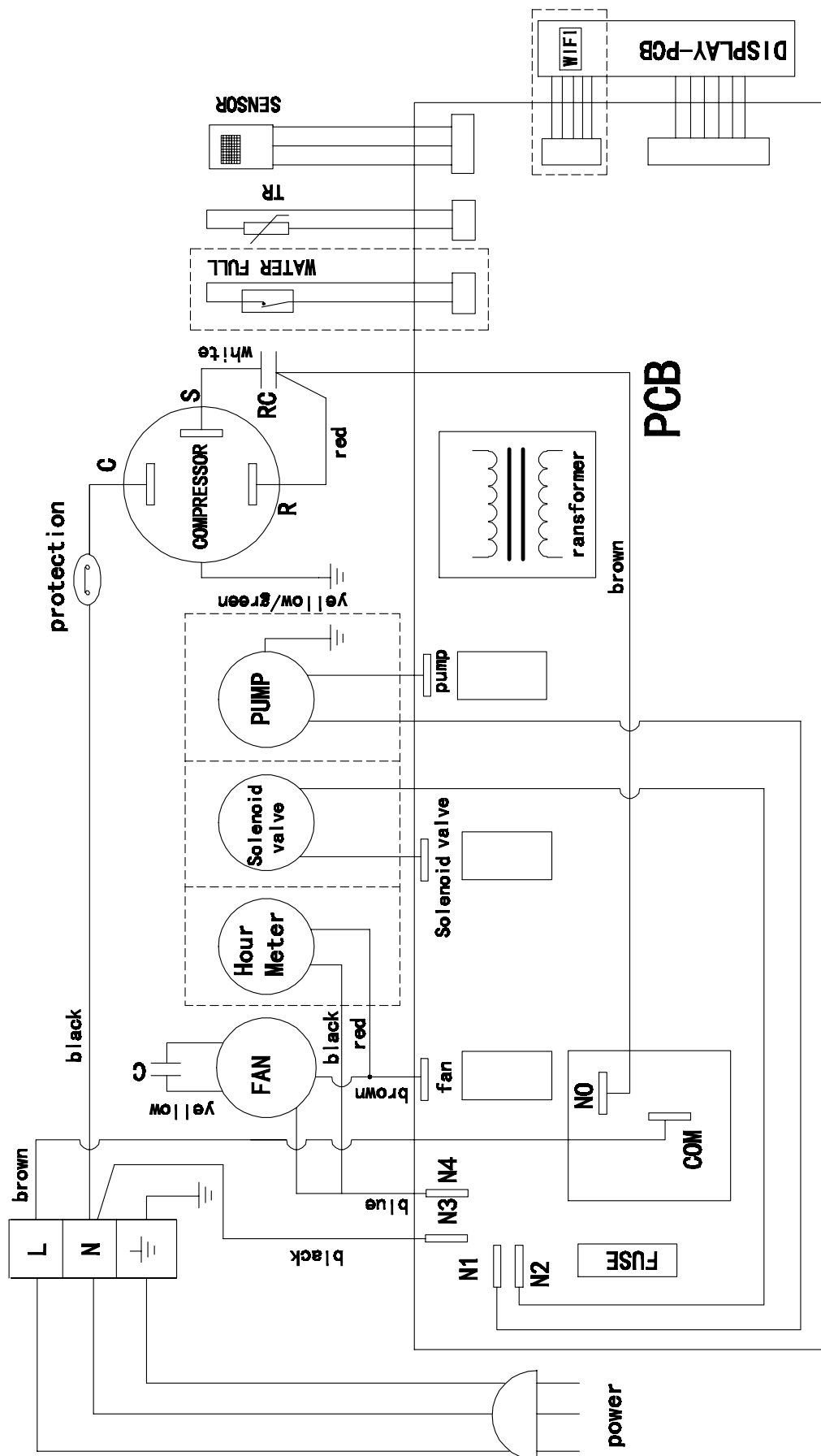
- Store the device according to the Transport and storage chapter.

Technical annex
Technical data

Parameter	Value	
Model	TTK 167 ECO	TTK 171 ECO
Dehumidification performance @ 30 °C and 80 % RH	50 l / 24 h	51 l / 24 h
Air flow rate	450 m ³ /h	450 m ³ /h
Operating range (temperature)	5 °C to 35 °C	5 °C to 30 °C
Operating range (relative humidity)	20 % to 90 % RH	20 % to 90 % RH
Suction side pressure	0.7 MPa	0.7 MPa
Discharge side pressure	3.2 MPa	3.2 MPa
Max. permissible pressure	3.2 MPa	3.2 MPa
Mains connection	220 – 240 V / 50 Hz	220 – 240 V / 50 Hz
Max. power consumption	725 W	650 W
Nominal current	3.1 A	2.7 A
Fusing 	T/F 3.15 A / 250 V AC	T 3.15 A / 250 V AC
Type of protection	IPX0	IPX0
Refrigerant	R290	R290
Amount of refrigerant	120 g	230 g
GWP factor	3	3
CO ₂ equivalent	0.0036 t	0.00069 t
Water tank	5.5 l	5.5 l
Sound pressure level	52 dB(A)	52 dB(A)
Dimensions (length x width x height)	495 x 412 x 862 mm	525 x 490 x 900 mm
Minimum distance to walls and other objects	A: top 50 cm B: rear 50 cm C: side 50 cm D: front 50 cm	50 cm 50 cm 50 cm 50 cm
Weight	36 kg	40 kg

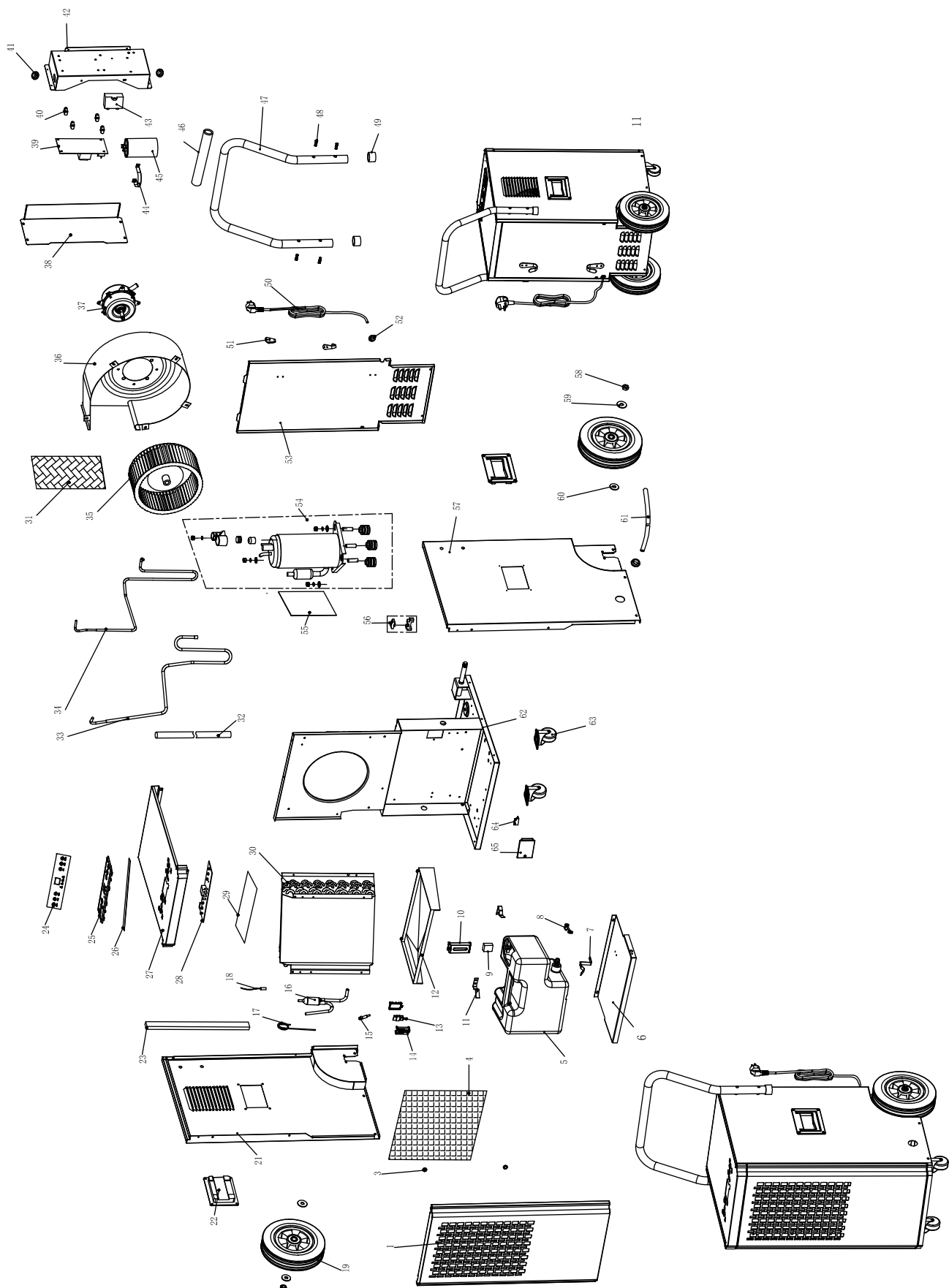
Wiring diagram TTK 167 ECO





Overview of spare parts and spare parts list TTK 167 ECO

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



NO.	SPARE PART	QTY.	NO.	SPARE PART	QTY.
1	Front nether panel	1	35	Fan	1
3	Magnet	2	36	Air duct	1
4	Filter	1	37	Motor	1
5	Water tank	1	38	Electric Box cover plate	1
6	Water tank tray	1	39	Main PCB	1
7	Positioning card under the water tank	1	40	Support Frame	4
8	Rubber water stop plug	1	41	Partition of wire	2
9	Magnetic floating ball	1	42	Electric control box	1
10	Float fixed bracket	1	43	Capacitor for fan motor	1
11	Water tank positioning card	2	44	Hoop of capacitor	1
12	Water pan	1	45	Capacitor for compressor	1
13	Humidity sensor	1	46	Pushing handle foam	2
14	Humidity sensor box	1	47	Pushing handle	1
15	Charging pipe	1	48	Screw	4
16	3-way pipe	1	49	Rubber sleeve	2
17	Capillary tube	1	50	Power cord	1
18	Temperature sensor	1	51	Stainless steel hook	2
19	Wheel	2	52	Partition of power cord	2
21	Left panel	1	53	Back panel	1
22	Built-in handle	2	54	Compressor	1
23	Ventilated foam	1	55	Foam for liquid reservoir	1
24	Control panel sticker	1	56	Wire pressing block	1
25	Plastic Control panel	1	57	Right panel	1
26	waterproof foam	1	58	Anti-slip nut	2
27	Top cover plate	1	59	Gasket	2
28	Display PCB	1	60	Gasket	2
29	Cover plate for Condenser & Evaporator	1	61	Drainage Hose	1
30	Condenser & Evaporator	1	62	Chassis	1
31	Filter	1	63	Universal caster	2
32	Insulation pipe	1	64	Magnet switch wire	1
33	Low pressure pipe	1	65	Magnetic switch fixing plate	1
34	High pressure pipe	1			



NO.	SPARE PART	NO.	SPARE PART	NO.	SPARE PART
101	Plastic Water Tray	202	Motor	315	Volute
102	Water Tank	203	PCB Board	316	Hinge
103	Sensor Cover	204	Display Board	317	Big Wheel
104	Sensor Bottom Plate	205	Humidity Sensor	318	Hook
105	Recessed Handle	206	Temperature Sensor	401	Exchanger
106	Pressing Block Cover	207	Compressor Capacitor	402	High Voltage Tube
107	Pressing Block Bottom	208	Motor Capacitor	403	Low Voltage Tube
108	Ø 10 Protective Ring	209	Float	404	Liquid Inlet Tube
109	Ø 30 Protective Ring	210	Magnetic Switch	405	Triplet Filter
110	Hose	301	Side Plate	406	Fill Up Tube
112	Filter	302	Front Plate	407	Capillary
113	Plastic Control Panel	303	Back Plate	408	Discharge Pipe
114	Rubber Pipe Sleeve	304	Base Plate	501	Power Cord
115	Fixed Metal	305B	PCB Box	601	Heat Insulation Sleeve
116	Float Fixing Bracket	305T	PCB Cover	602	Reservoir Foam
117	Rubber cover	306	Water Tank Pallet	603	Sealness Foam
201	Compressor	307	Wheel Axle	604	Water-proof Foam
201A	Overload	308	Transport Handle	605	Air Outlet
201B	Cover	309	Side Bracket	701	M6 Cross Bolt
201C	Crash Pad	310	Bottom Plate	801	PE Foam Package Up
201D	Cover Spacer	311	Locator Card	802	PE Foam Package Down
201E	Spring Washer	312	Locator Card Of Bottom Tank	803	Carton
201F	Nut	313	Capacitor Clip	804	Bottom Of Carton
201G	Nut Spacer	314	Centrifugal Fan	805	Soft Control Panel

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 wheeled bin indicates that this device and any associated components must not be disposed of with household waste at the end of their life, in accordance with the Waste Electrical and Electronic Equipment Directive (2012/19/EU) and national laws.

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.

Trotec GmbH

Grebbener Str. 7
52525 Heinsberg
Germany

☎ +49 2452 962-0

☎ +49 2452 962-200

online@trotec.com

www.trotec.com