

TTK 165 ECO / TTK 170 ECO / TTK 380 ECO

EN

INSTRUCTIONS
DEHUMIDIFIER



Table of contents

Information on the use of these instructions 2

Safety 2

Information about the device..... 5

Transport and storage..... 7

Assembly and start-up..... 7

Operation 11

Available accessories..... 15

Errors and faults..... 16

Maintenance 17


Technical annex..... 20


Disposal 28


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 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.

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 the instructions and the EU declaration of conformity via the following link:

TTK 165 ECO



<https://hub.trotec.com/?id=40461>

TTK 170 ECO

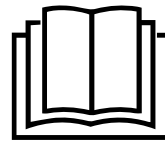


<https://hub.trotec.com/?id=40716>

TTK 380 ECO




<https://hub.trotec.com/?id=42742>



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.
 - Place the device in an upright and stable position on horizontal and stable 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 TTK 165 ECO / TTK 170 ECO in a room measuring more than 11 m².
- Only install, operate and store the device TTK 380 ECO in a room measuring more than 14 m².
- 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 into or burn.
- Do not use any objects other than those authorised by the manufacturer to accelerate 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 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 the device out of doors.
- 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:

- be aware of the dangers that occur when working with electric devices in damp areas.
- 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 Trotec.

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:

TTK 165 ECO / TTK 170 ECO

WARNING • WARNUNG • ATTENTION

DE Das Gerät muss in einem Raum mit einer Grundfläche größer als 11 m² aufgestellt, betrieben und gelagert werden.
EN Appliance shall be installed, operated and stored in a room with floor area larger than 11 m².
FR L'appareil doit être installé, utilisé et entreposé dans une pièce avec une surface supérieure à 11 m².



TTK 380 ECO

WARNING • WARNUNG • ATTENTION

DE Das Gerät muss in einem Raum mit einer Grundfläche größer als 14 m² aufgestellt, betrieben und gelagert werden.
EN Appliance shall be installed, operated and stored in a room with floor area larger than 14 m².
FR L'appareil doit être installé, utilisé et entreposé dans une pièce avec une surface supérieure à 14 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.



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.

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: 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 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.

In case of the device TTK 165 ECO defrosting takes place electronically in air circulation mode.

The devices TTK 170 ECO and TTK 380 ECO come with a hot gas automatic defrost system. Here, the hot gas of the refrigerant circuit is used actively for fast and effective defrosting. This makes the devices TTK 170 ECO and TTK 380 ECO considerably more effective at temperatures below 15 °C.

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 Device depiction) 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.

If required, an external hygrostat can be connected to the devices TTK 170 ECO and TTK 380 ECO for controlling the humidity level. Moreover, an operating hours counter helps you to meet the maintenance deadlines.

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 %.

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

The device is not protected against water (IPX0).

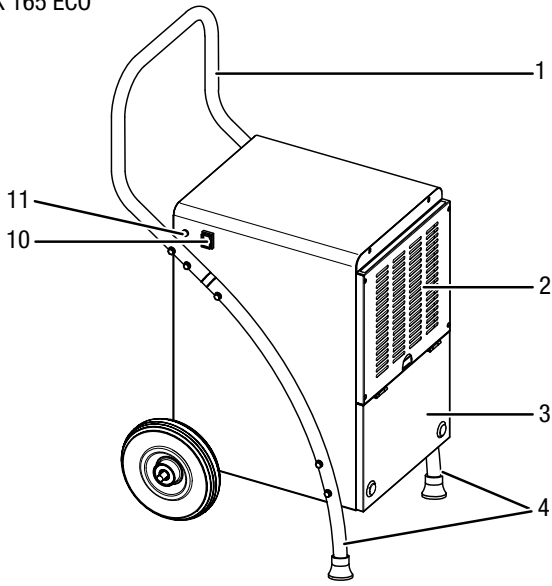


Info

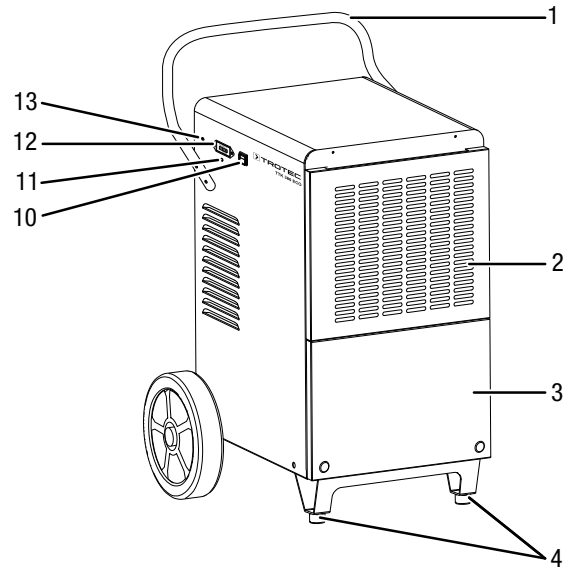
The illustrations in these instructions feature the device TTK 170 ECO by way of example. However, the depicted operating steps and explanations also apply to the devices TTK 165 ECO and TTK 380 ECO unless otherwise mentioned.

Device depiction

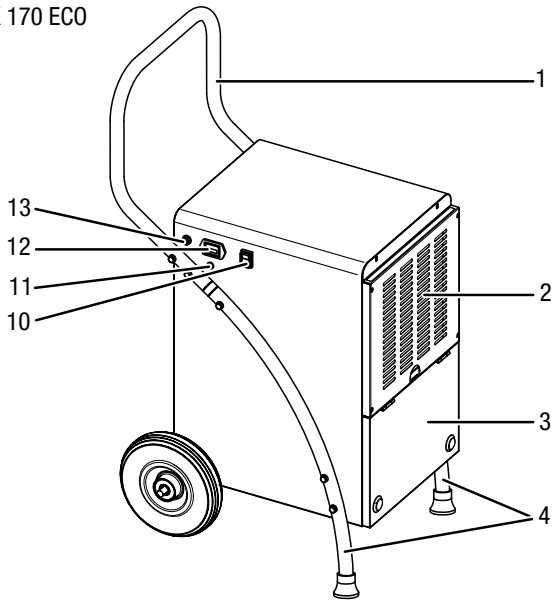
TTK 165 ECO



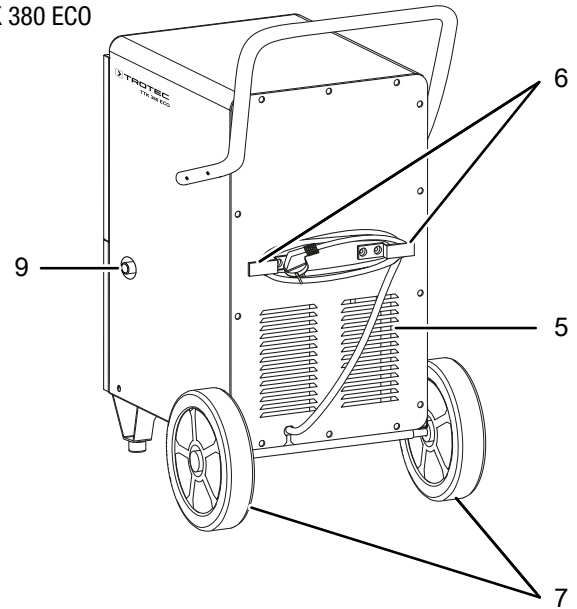
TTK 380 ECO



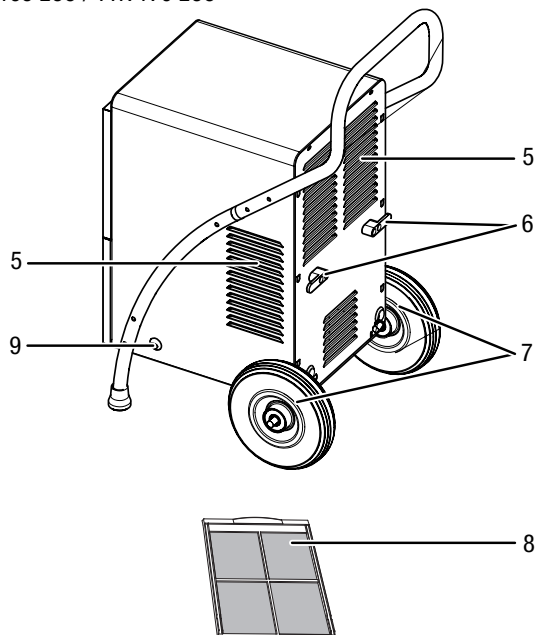
TTK 170 ECO



TTK 380 ECO



TTK 165 ECO / TTK 170 ECO



No.	Designation
1	Transport handle
2	Air inlet with air filter
3	Condensation tank (behind cover)
4	Feet
5	Air outlet
6	Power cable holder
7	Wheels
8	Air filter
9	Condensation drain hose connection
10	On/off switch
11	Condensation tank indicator light
12	Operating hours counter
13	Connection for optional external hygromat

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.

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 TTK 165 ECO and TTK 170 ECO in a room measuring more than 11 m².
- Only store the device TTK 380 ECO in a room measuring more than 14 m².
- 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 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 165 ECO / TTK 170 ECO

- 1 x Device
- 1 x Air filter
- 2 x Transport wheel
- 1 x Axle
- 2 x Standard split pin
- 2 x Linchpin
- 4 x Washer
- 1 x Transport handle
- 2 x Foot
- 2 x Large screw
- 10 x Small screw
- 1 x Manual

TTK 380 ECO

- 1 x Device
- 1 x Transport handle
- 1 x Air filter
- 4 x Screw
- 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.

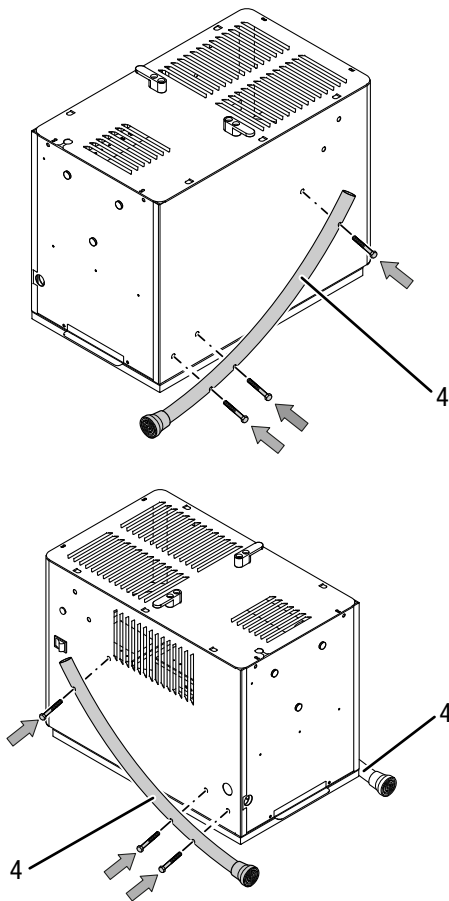
Assembly

Use tools suitable for the intended task.

Mounting the feet TTK 165 ECO / TTK 170 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 (4) to the device sides using six screws. The feet must protrude from the bottom side of the device.

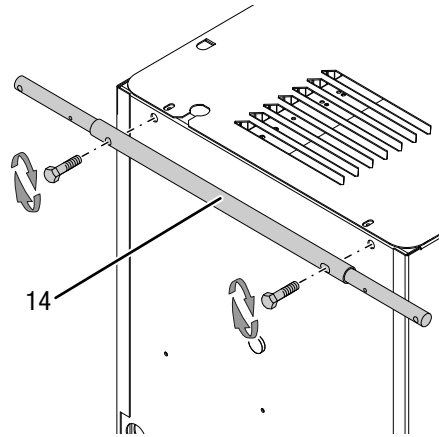


3. Then mount the wheels.

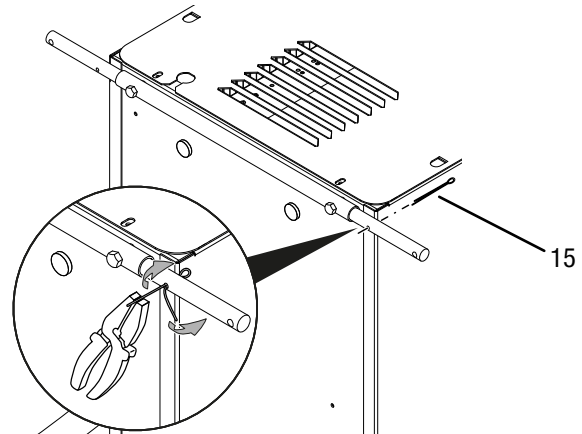
Mounting the wheels TTK 165 ECO / TTK 170 ECO

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. Use two large screws to fasten the axle (14) to the rear bottom side of the device. Ensure tight fit.

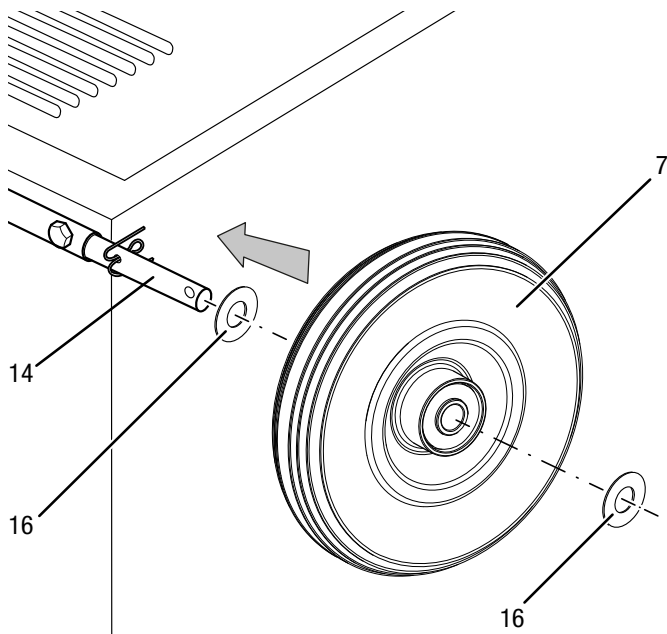


2. Insert a standard split pin (15) into the inner hole of the axle up to the stop. Bend the end of the split pin outwards to fix the split pin.

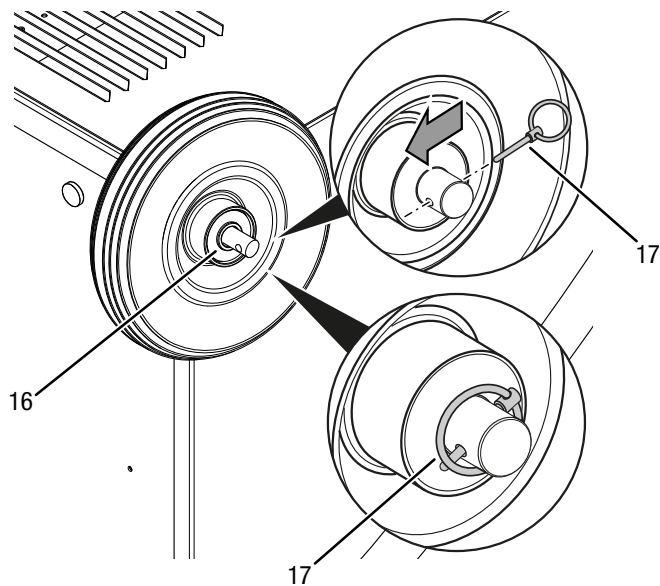


3. Place a washer (16) on the axle (14).
4. Place a wheel (7) in front of the washer (16).

- Place a second washer (16) in front of the wheel (7).



- Insert a linchpin (17) into the hole in front of the washer (16) up to the stop. Turn over the ring of the linchpin (17).



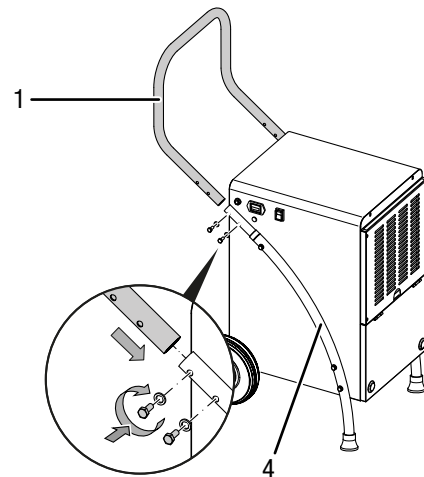
- Repeat this process on the other side of the axle.
- After mounting the wheels and the feet, place the device in an upright position.

Mounting the transport handle

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

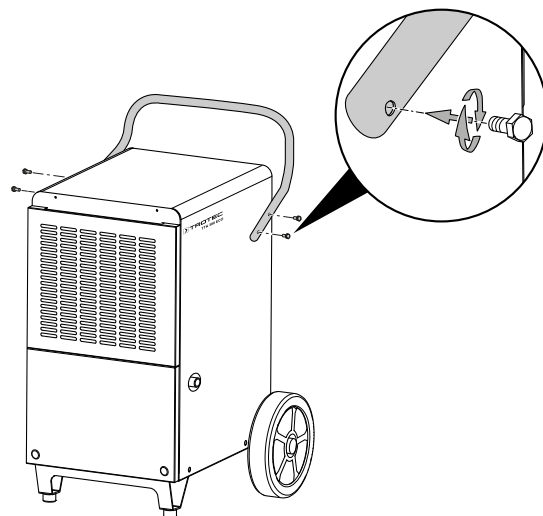
TTK 165 ECO / TTK 170 ECO

- Mount the transport handle (1) to both feet (4) using four screws.



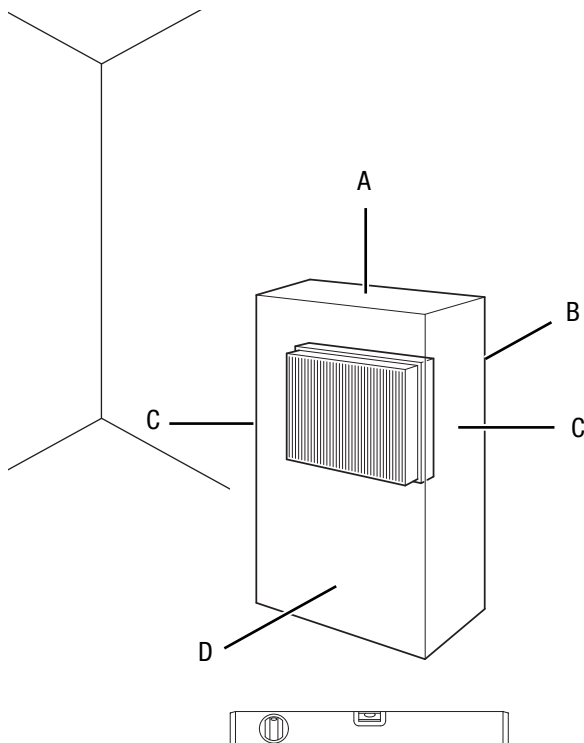
TTK 380 ECO

- Mount the handle (1) on both sides of the device using two hexagon screws each.



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).
- Place the device in an upright and stable position on horizontal and stable 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.

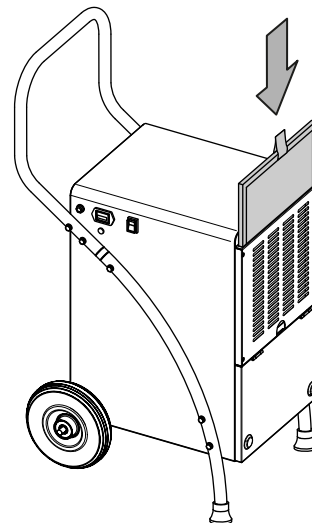
Inserting the air filter

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.

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



Inserting the condensation tank

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

Connecting the power cable

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

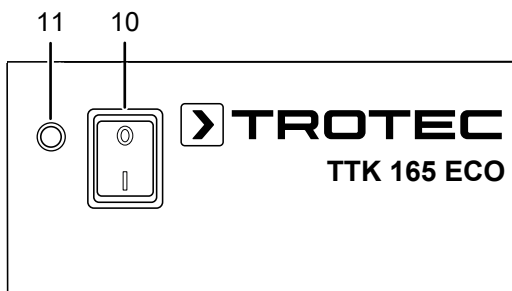
Operation

Notes:

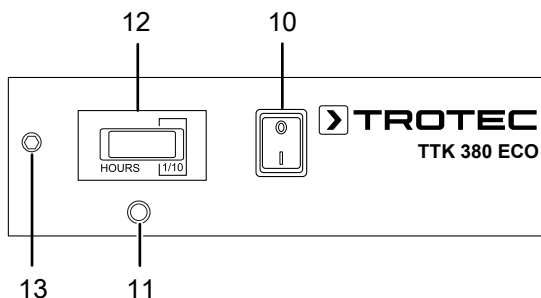
- Avoid open doors and windows.
- After being switched on, the device operates fully automatically.
- The compressor switches on approx. 3 minutes after the device has been switched on.
- The fan permanently runs in dehumidification mode.

Operating elements

TTK 165 ECO



TTK 170 ECO / TTK 380 ECO



No.	Designation	Meaning
10	On/off switch	For switching the device on or off
11	Indicator light	Indication of full condensation tank
12	Operating hours counter	Indication of operating hours
13	Hygrostat connection	Connection for hygrostat operation (optional)



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 on/off switch (10). The device starts to dehumidify in continuous operation.

Notice

Only use the device in an upright position, otherwise the compressor could be damaged.

Memory function

After a power failure during operation the device will switch back on.

Auto stop function

If the condensation tank is full or not inserted correctly, the device will stop automatically.

Operating hours counter

The devices TTK 170 ECO and TTK 380 ECO are equipped with an operating hours counter (12). The hour display has five digits.

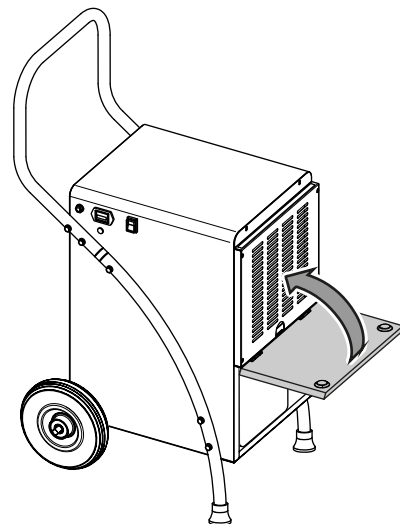
Operation with hose attached to the condensation connection

TTK 165 ECO / TTK 170 ECO

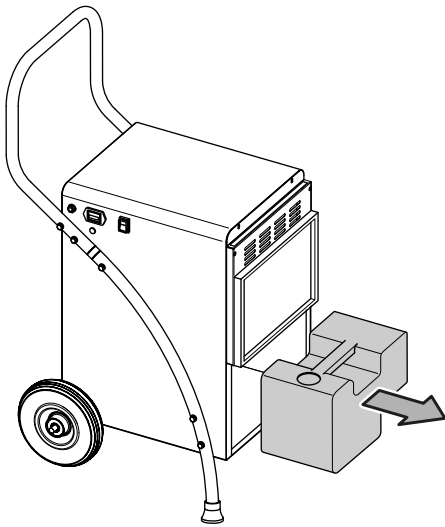
For continuous operation or unattended dehumidification, please connect a suitable condensation drain hose to the device.

- ✓ A suitable hose (diameter: 12 mm) is ready for use.
- ✓ The device is switched off.

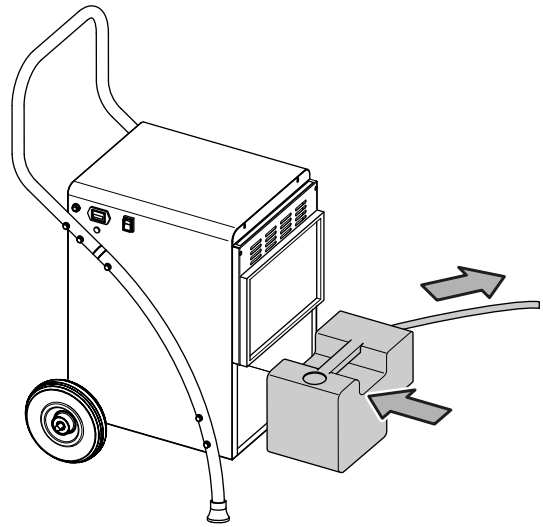
1. Open the front cover.



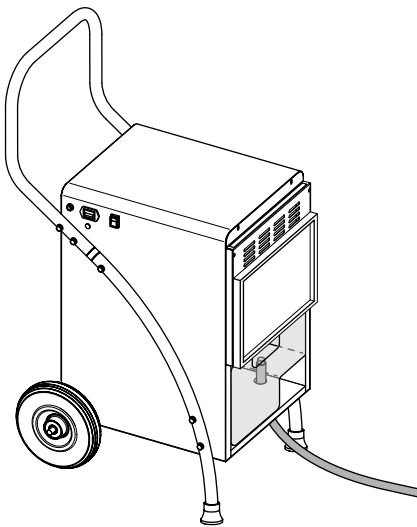
2. Remove the condensation tank.



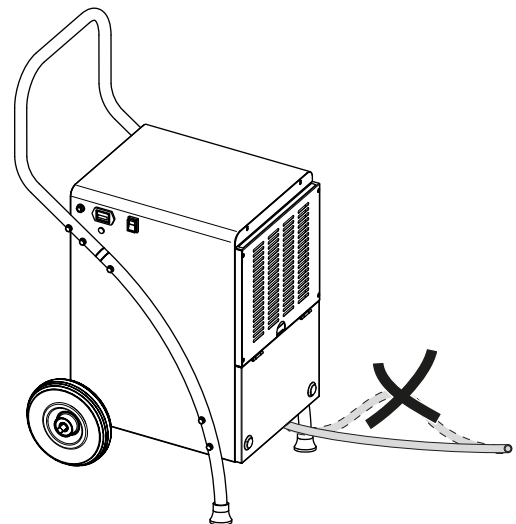
5. Refit the condensation tank into the device. Guide the other hose end to a suitable drain or sufficiently dimensioned collection container.



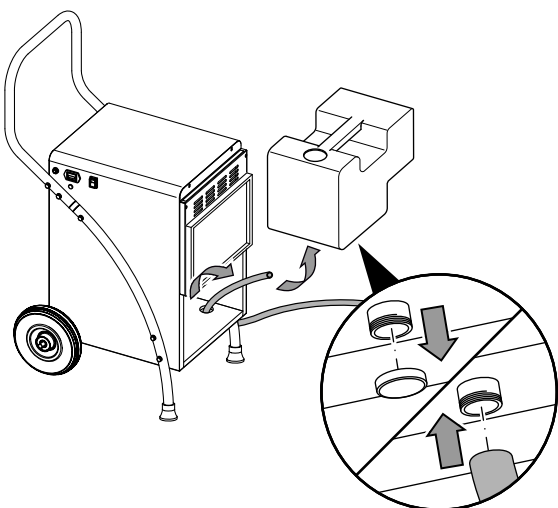
3. Guide the condensation drain hose through the hole in the device's bottom panel.



6. Please note that the hose must not be kinked.



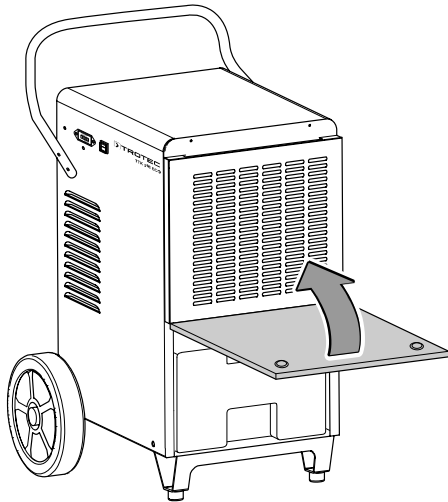
4. Push one end of the hose onto the hose connection at the condensation tank.



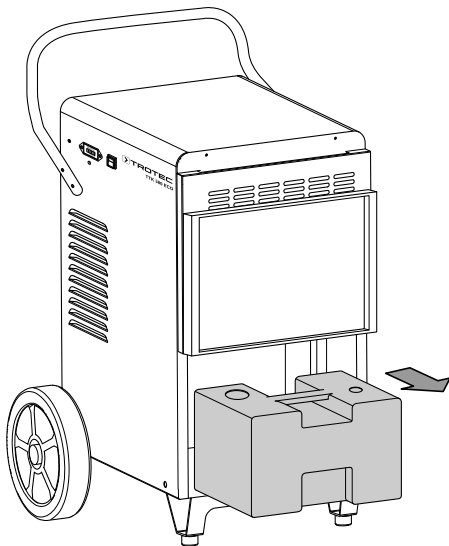
TTK 380 ECO

- ✓ A suitable hose (diameter: 16 mm) is ready for use.
- ✓ The device is switched off.

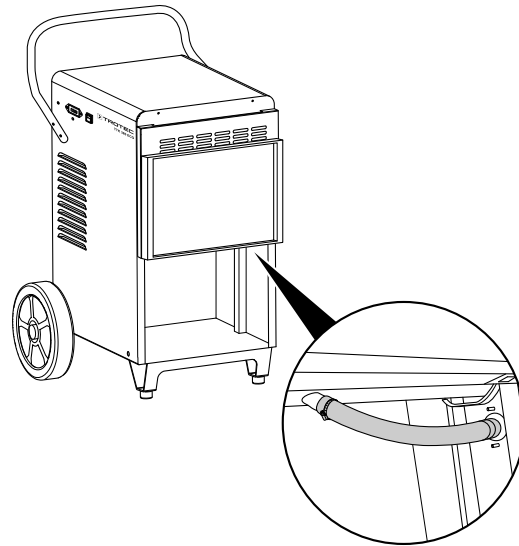
1. Open the front cover.



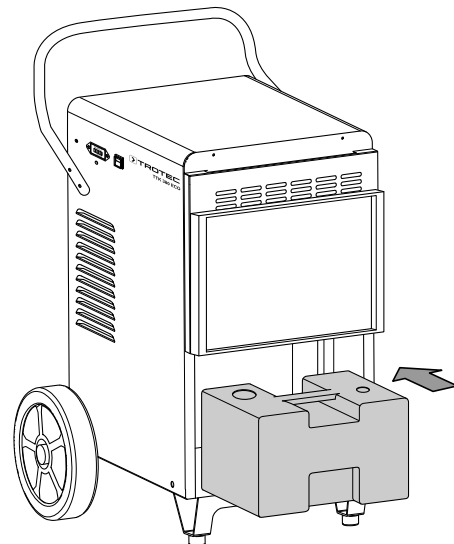
2. Remove the condensation tank.



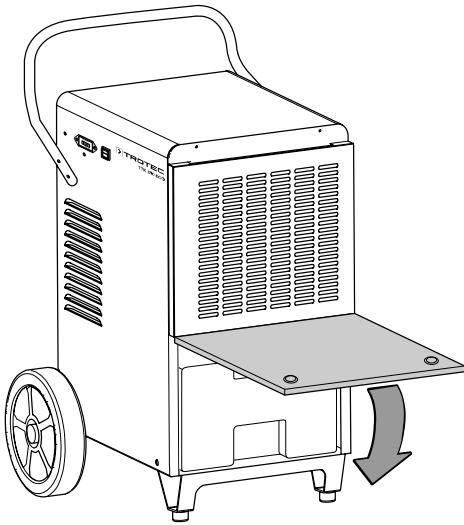
3. Connect the condensation drain hose to the connection inside the housing.



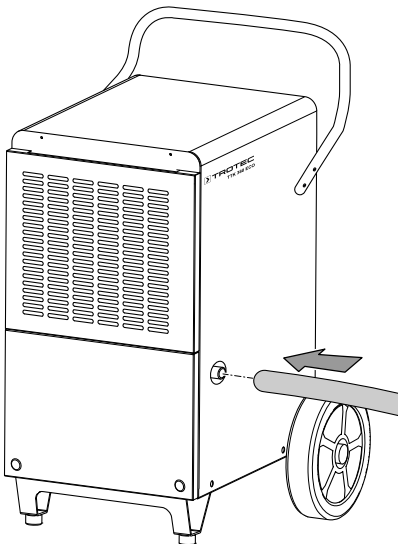
4. Refit the condensation tank into the device.



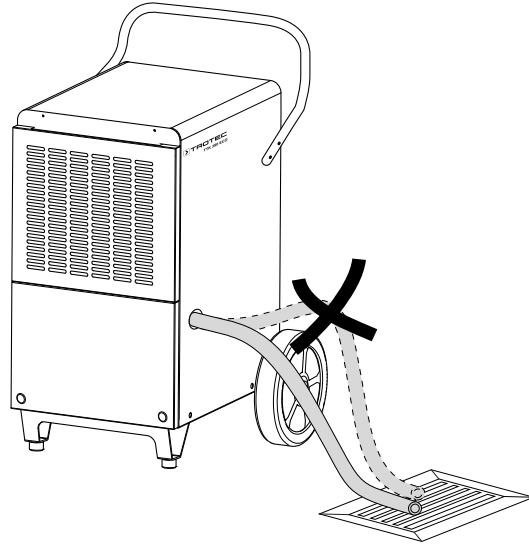
5. Close the front cover.



6. Push one end of the hose onto the hose connection on the outside of the housing.



7. Guide the other hose end to a suitable drain or sufficiently dimensioned collection container. Please note that the hose must not be kinked.



8. Make sure that the condensation drain hose is installed with a continuous decline.

Remove the hose if you want to collect the condensate in the condensation tank again. 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.

In case of the device TTK 165 ECO defrosting takes place electronically in air circulation mode. In defrost mode, the compressor switches off while the fan keeps running and circulates the compressor's waste heat around the evaporator for defrosting.

The devices TTK 170 ECO and TTK 380 ECO come with a hot gas automatic defrost system based on the bypass procedure. Here, the hot gas of the refrigerant circuit is used actively for fast and effective defrosting. As soon as ice starts to form, a special valve opens automatically, redirects the hot gas to the evaporator, and closes again after defrosting is completed so that drying operation can be continued via the regular refrigerant circuit. Unlike air circulation defrosting, hot gas automatic defrosting allows for considerably shorter defrost phases, which is an essential requirement for effective dehumidification in low-temperature surroundings (below 15 °C) such as unheated rooms. After all, the actual dehumidification process only takes place when defrosting is not in progress.

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.

External hygrostat (optional)

The devices TTK 170 ECO and TTK 380 ECO allow for connection of the external hygrostat HG 110. The desired humidity can be regulated by use of a hygrostat. The external hygrostat is connected to the connection for the external hygrostat (13).

Shutdown



Warning of electrical voltage

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

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- If necessary, remove the condensation drain hose and any residual fluid from it.
- Empty the condensation tank, if need be.
- 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.

TTK 170 ECO / TTK 380 ECO

Designation	Article number
Air filter TTK 165 ECO / TTK 170 ECO	7.710.000.827
Air filter TTK 380 ECO	7.710.000.851
External condensate pump	6.100.003.020
Hygrostat HG 110 with jack plug (TTK 170 ECO and TTK 380 ECO)	6.100.002.044

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 condensation tank indicator light (I1) 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.
- Check the float in the condensation tank for dirt. If necessary, clean the condensation tank. The float must be able to move freely.

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.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.
- 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 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 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.
- 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 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

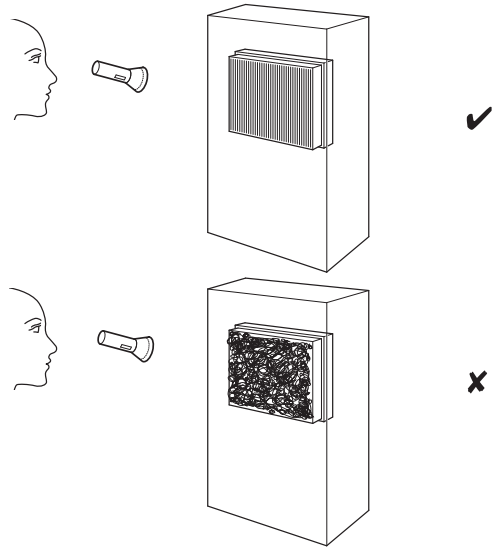
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

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.



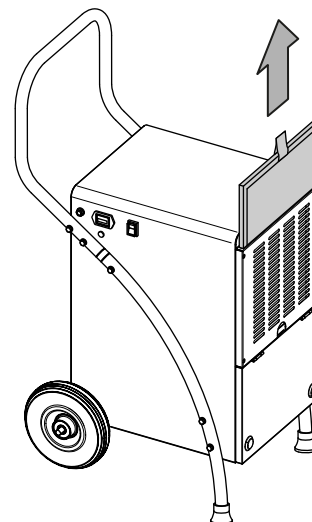
Cleaning the air filter

Notice

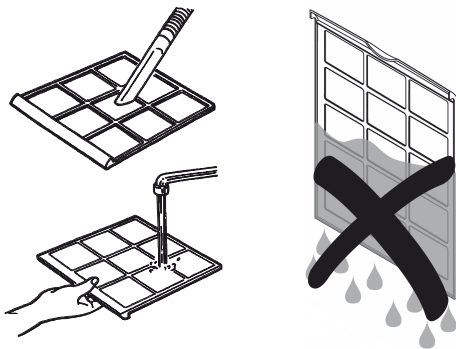
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

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).

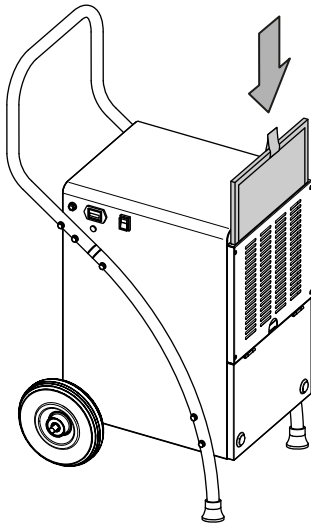
1. Remove the air filter from the device.



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



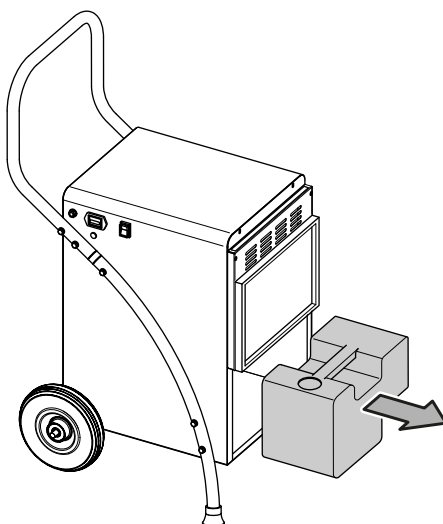
3. Allow the filter to dry completely. Do not insert a wet filter into the device!
4. Reinsert the air filter into the device.



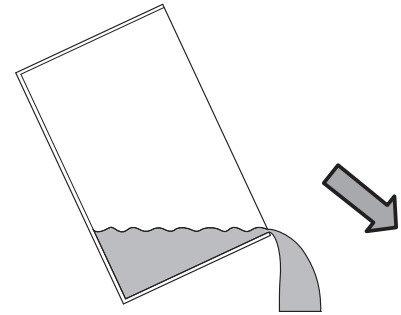
Emptying the condensation tank

If the condensation tank is full or not installed correctly, the condensation tank indicator light (11) will be illuminated. The compressor and fan will switch off.

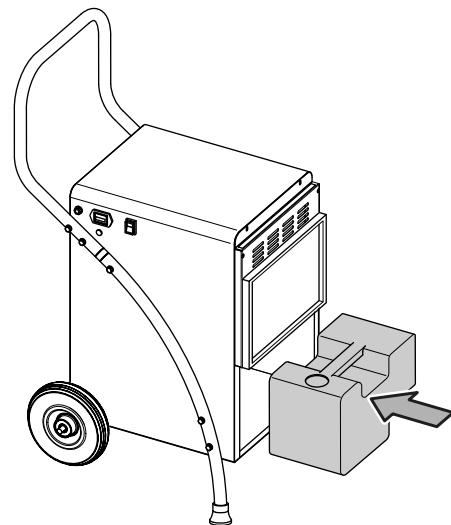
1. Take the condensation tank out of the device.



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:

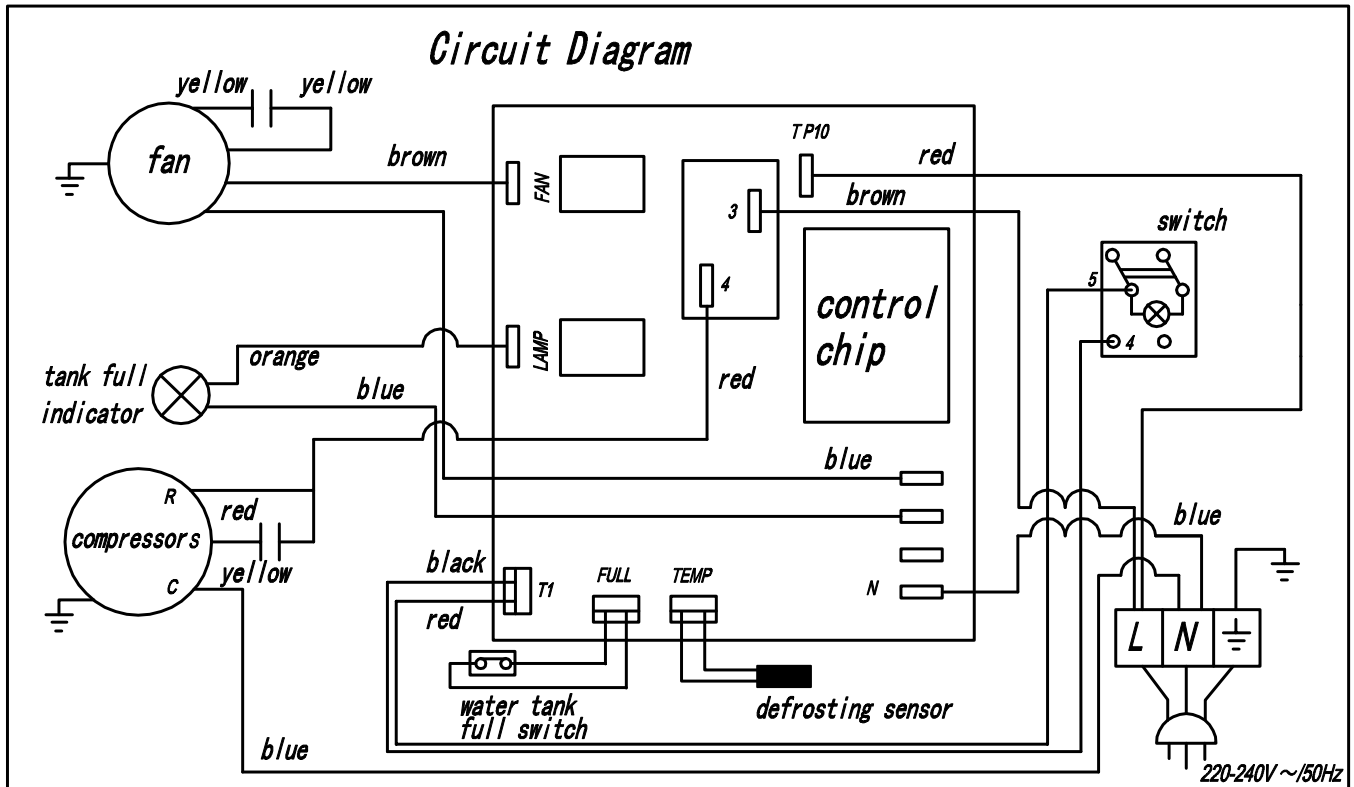
- Store the device according to the Transport and storage chapter.

Technical annex
Technical data

Model	TTK 165 ECO	TTK 170 ECO	TTK 380 ECO
Max. dehumidification performance	52 l / 24 h	52 l / 24 h	80 l / 24 h
Dehumidification performance @ 30 °C and 80 % RH	50 l / 24 h	50 l / 24 h	79 l / 24 h
Air flow rate	350 m ³ /h	350 m ³ /h	950 m ³ /h
Operating range (temperature)	5 °C to 32 °C	5 °C to 32 °C	5 °C to 32 °C
Operating range (relative humidity)	30 % to 90 % RH	30 % to 90 % RH	30 % to 90 % RH
Max. permissible pressure	2.5 MPa	2.5 MPa	2.5 MPa
Pressure suction side	1.0 MPa	1.0 MPa	1.0 MPa
Pressure outlet side	2.5 MPa	2.5 MPa	2.5 MPa
Input voltage	230 V ~ 50 Hz	230 V ~ 50 Hz	220–240 V / 50 Hz
Max. power input	820 W	820 W	945 W
Max. nominal current	3.7 A	3.7 A	4.2 A
Fusing 	10 A (slow-blowing)	10 A (slow-blowing)	10 A (slow-blowing)
Type of protection	IPX0	IPX0	IPX0
Refrigerant	R290	R290	R290
Amount of refrigerant	230 g	230 g	300 g
GWP factor	3	3	3
CO ₂ equivalent	0.00069 t	0.00069 t	0.0009 t
Water tank	5 l	5 l	9.5 l
Sound pressure level (1 m distance)	56 dB (A)	56 dB (A)	65 dB (A)
Dimensions (length x width x height)	495 x 455 x 900 mm	495 x 455 x 900 mm	530 x 575 x 1060 mm
Minimum distance to walls and other objects	top (A): 50 cm rear (B): 50 cm sides (C): 50 cm front (D): 50 cm	50 cm 50 cm 50 cm 50 cm	50 cm 50 cm 50 cm 50 cm
Weight	31 kg	31 kg	50 kg

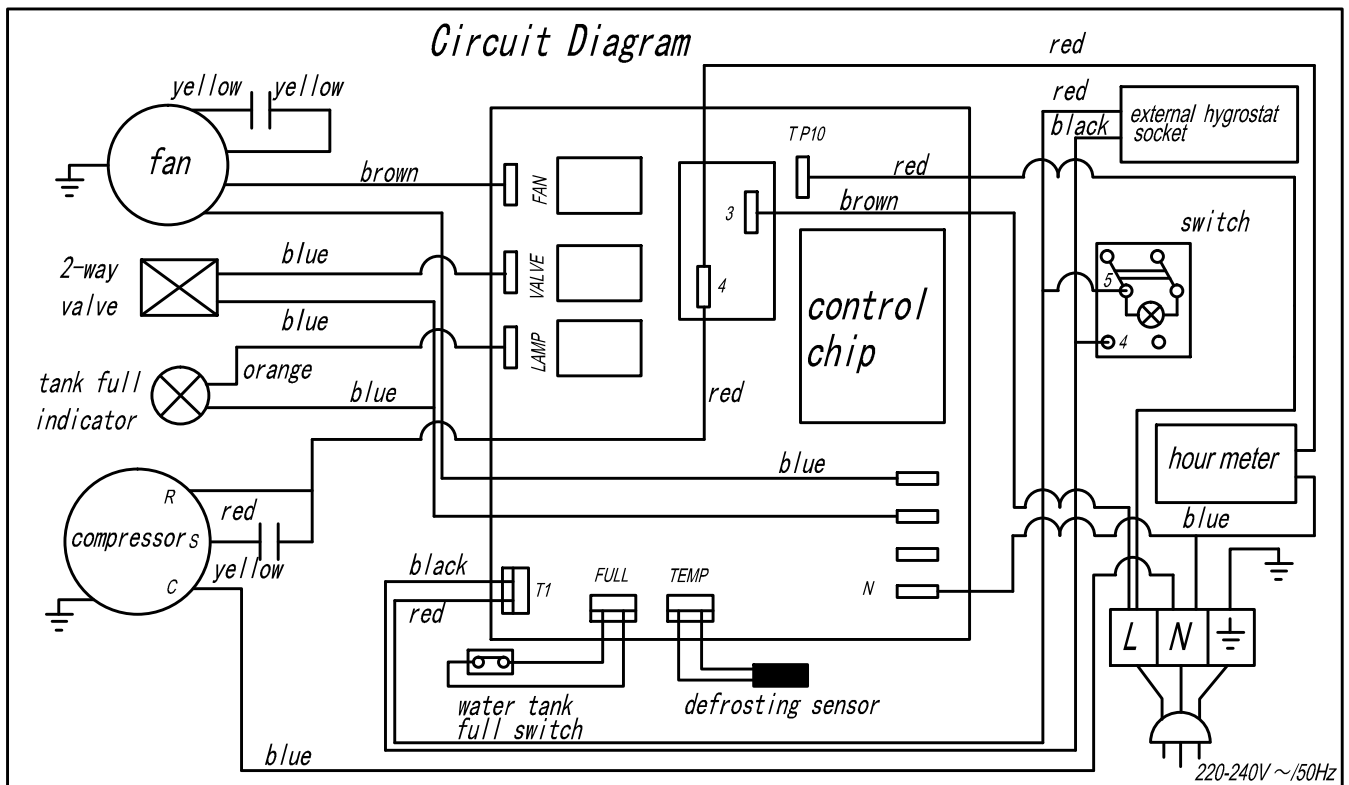
Wiring diagram

TTK 165 ECO



Wiring diagram

TTK 170 ECO / TTK 380 ECO

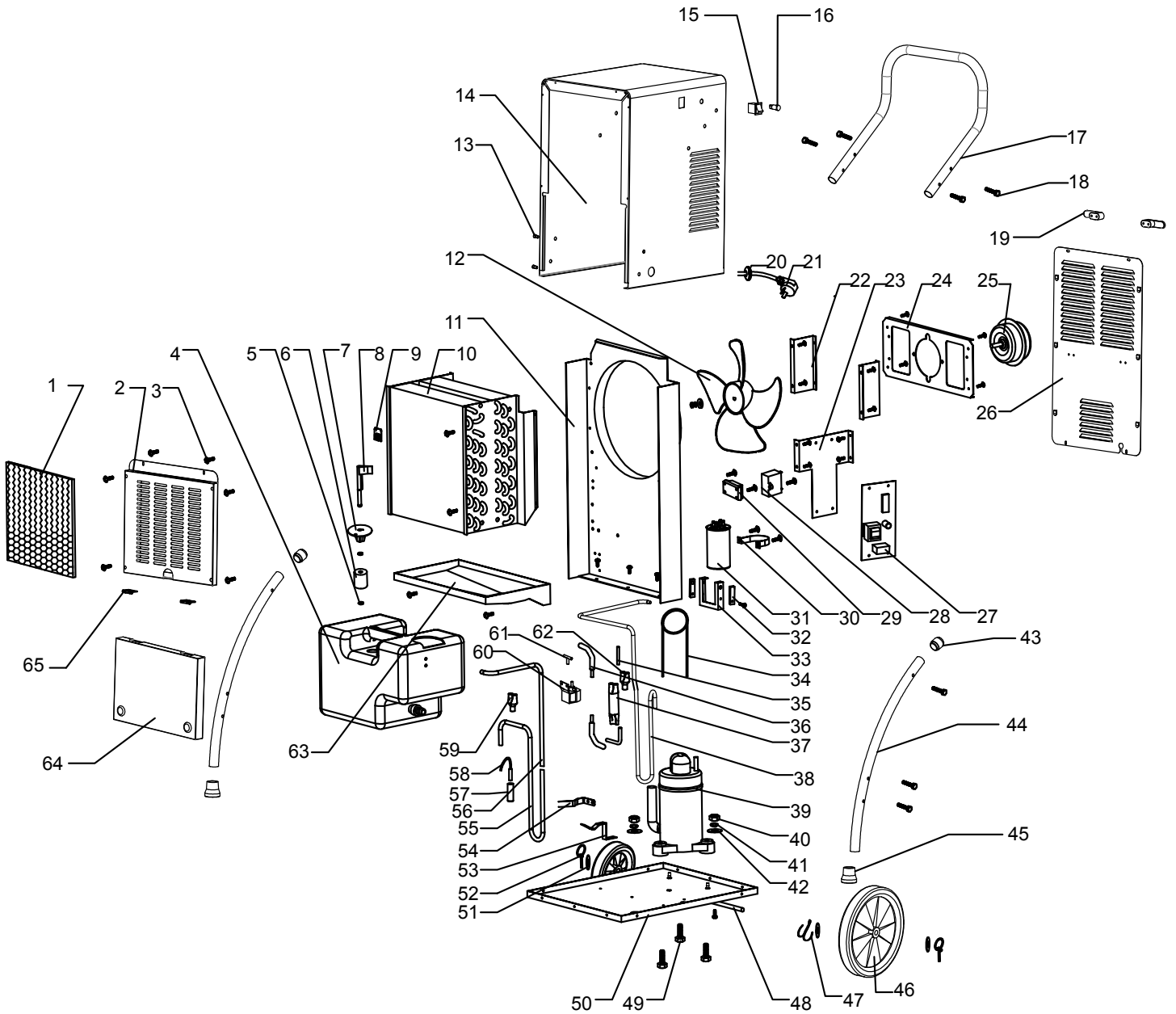


Overview of spare parts and spare parts list – TTK 165 ECO



Info

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



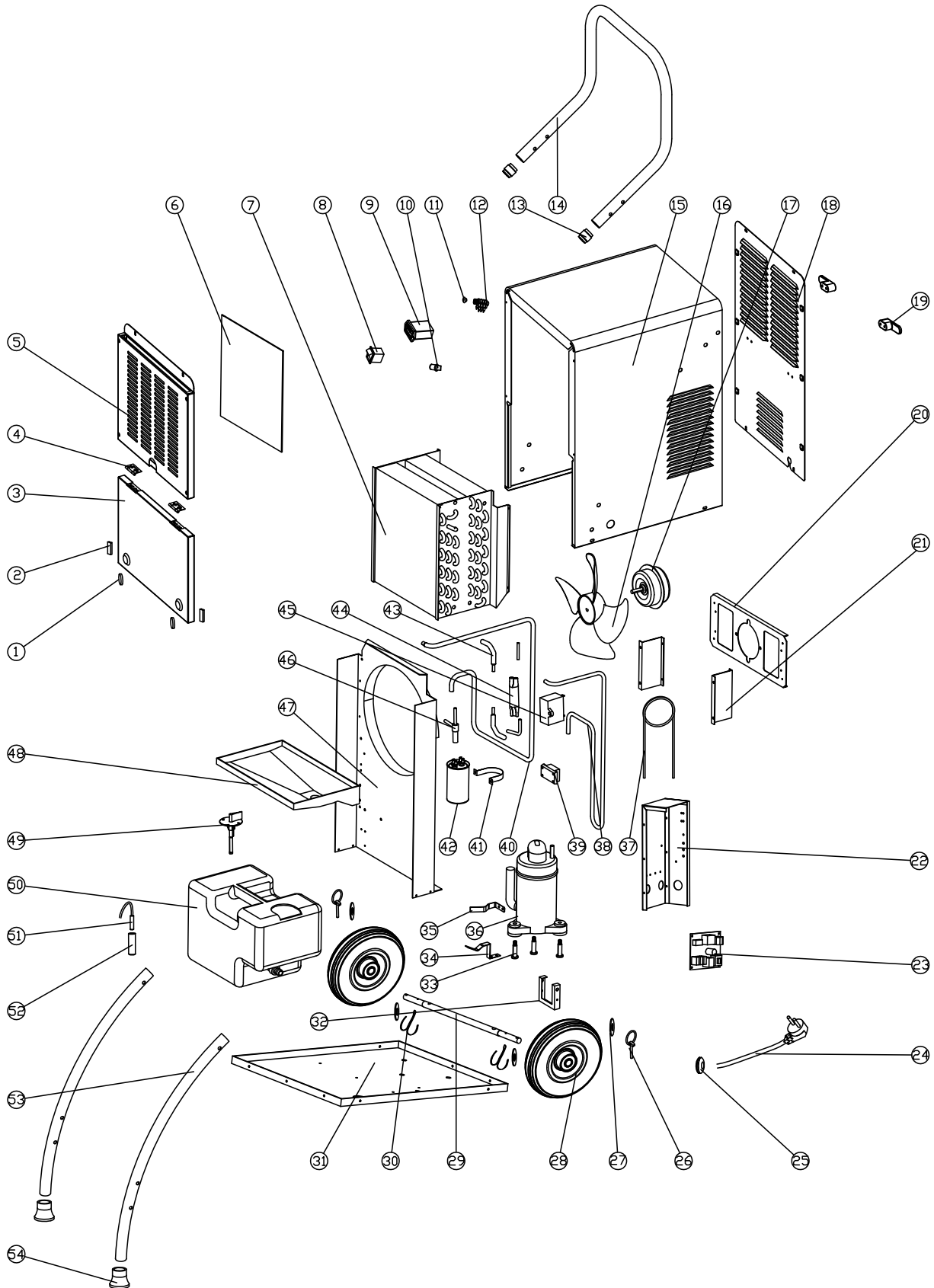
No.	Spare part	No.	Spare part	No.	Spare part
1	Filter	23	PCB board fixing plate	45	Feet cap
2	Front grill	24	Fan bracket	46	8-inch PU wheel
3	ST4*10 cross self-drilling screw	25	Motor	47	Cotter
4	Water tank	26	Rear plate	48	Wheel axiel
5	Floater switch block-ring	27	Mainboard	49	Compressor feet bolt
6	Floater	28	Fan capacitor	50	Base plate
7	Infrad dock	29	3-pose wire connect dock	51	Wheel axiel wash
8	Infrad rod	30	Capacitor hoop	52	Safety pin
9	Humidity sensor	31	Compressor capacitor	53	Water-tank pressing pin
10	Heat-exchanger	32	Infrad	54	Water-tank blocking pin
11	Middle bracket	33	Infrad fixing bracket	55	High pressure tube 1
12	Blade	34	Capillary	56	High pressure tube 2
13	M6 rivet-nut	35	Craftmanship tube	57	Storage tube
14	Housing	36	Fluid in-take tube	58	Defrost sensor
15	Boat-shape switch	37	Filtering device	59	3-way tube 1
16	Tank-full switch	38	Low-pressure tube	60	Solenoid
17	Handle	39	Compressor	61	T-shape 3-way tube
18	M6 Hex stainless-steel screw	40	M6 nut	62	3-way tube 2
19	Cable holder	41	M6 bouncing-wash	63	Water pan
20	Ø12 wire protectiong ring	42	M6 flat-wash	64	Door
21	Power cord	43	Connect axiel	65	Hinge
22	Fan bracket connection plate	44	Handle 2		

Overview of spare parts and spare parts list – TTK 170 ECO



Info

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



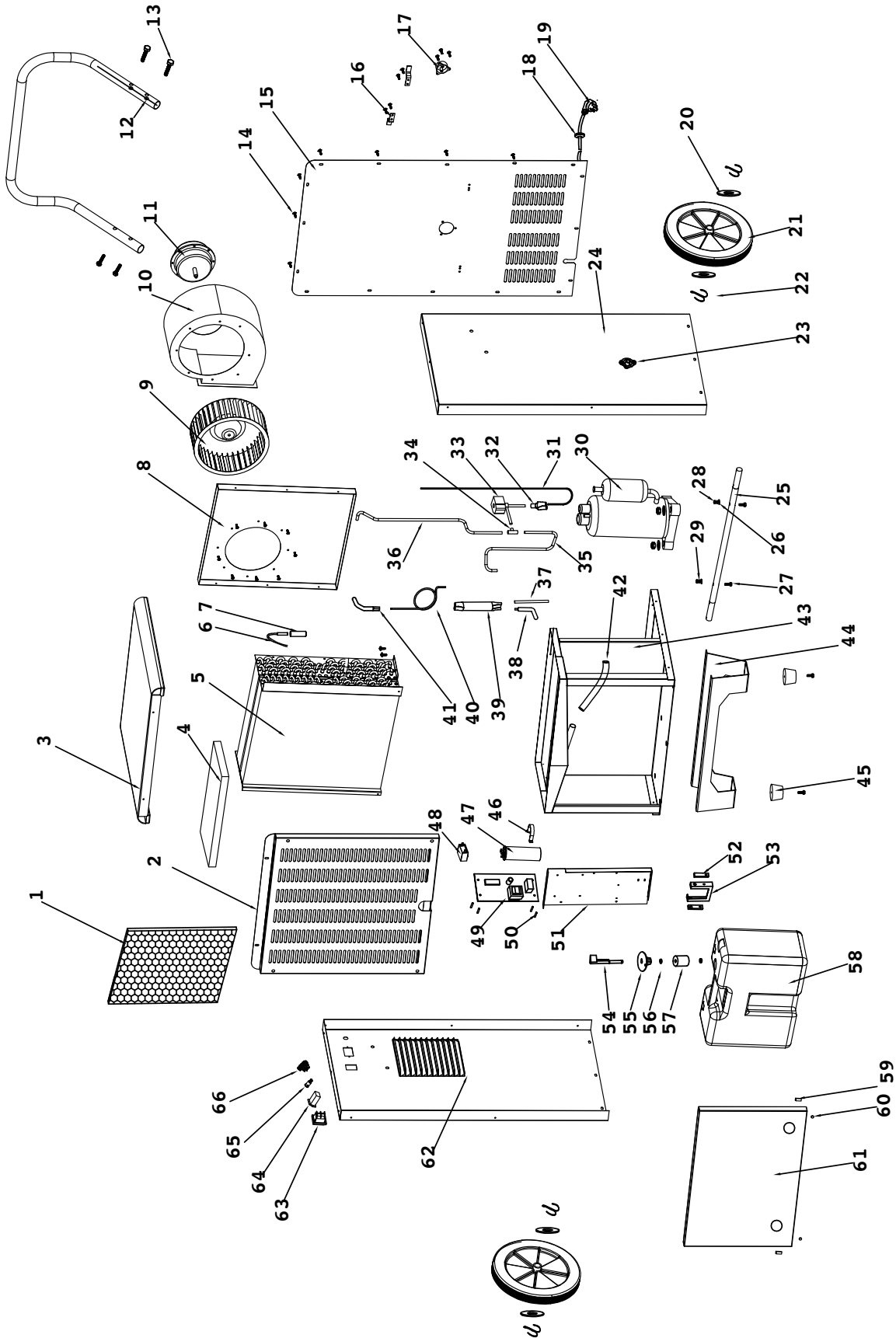
No.	Spare part	No.	Spare part	No.	Spare part
1	Magnet III	19	Reel	37	Capillarity tube
2	Magnet IV	20	Fan bracket	38	High pressure tube
3	Door	21	Fan frame connector	39	Connector
4	Dual hinge	22	Appliance box	40	Low voltage tube
5	Front panel	23	Main board	41	Capacitance hoop
6	Air filter	24	Power cord	42	Capacitance I
7	Heat exchanger	25	To protect the coil	43	Tube
8	Switch	26	Retaining ring	44	Filter
9	Timer	27	Gasket	45	Capacitance II
10	Indicator light	28	Wheel	46	Magnetic valve
11	Waterproof plug	29	Shaft	47	Plate
12	External humidity sensor socket	30	Split pin	48	Collection tray
13	Connecting shaft	31	Base	49	Tank float assembly
14	Handle I	32	Infrared	50	Tank
15	Housing	33	Screw	51	Temperature sensor
16	Blades	34	Tank tablet I	52	Heat storage tube
17	Motor	35	Tank tablet II	53	Handle II
18	Back panel	36	Compressor	54	Foot set

Overview of spare parts and spare parts list – TTK 380 ECO



Info

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



No.	Spare part	No.	Spare part	No.	Spare part
1	Filter	23	Drain	45	Rubbert feet
2	Front grill	24	Right-side plate	46	Capacitor cliper
3	Top cover	25	Shaft	47	Compressor capacitor
4	Adhesive to Heat-exchanger	26	Ø6 flat washer	48	Fan capacitor
5	Heat-exchanger set	27	M6*40 screw rod	49	Mainboard
6	Defrost sensor	28	M6 nut	50	Button-type hexagon isolation column
7	Stock tube	29	Ø6 spring washer	51	Electronic board
8	Air path plate	30	Compressor	52	Infrad water-full switch
9	Blade	31	Defrost Capillary	53	Infrad bracket
10	Fan volute	32	700 3-way tube	54	Infrad rod
11	Motor	33	Solenoid	55	Infrad dock
12	Handle	34	T-shape	56	Floater pin
13	Outer hexagon M6*40 stainless screw	35	HP tube 1	57	Floater
14	ST4*12 self-tapping screw	36	HP tube 2	58	Water-tank
15	Rear plate	37	Filling tube	59	18*9*4,5 magnet
16	Cable holder	38	Liquid exit tube	60	Ø15*5 magnet
17	EU plug	39	Dry filtering device	61	Door
18	Ø12 coil protect	40	Capillary	62	Left-side plate
19	EU cable	41	Liquid filled-in tube	63	Boat-shape switch
20	Ø26 flat washer	42	Water-pipe	64	Timer
21	Wheels	43	Bottom plate set	65	Water-full indicator
22	Cotter pin	44	Feet	66	External humidity sensor

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.

Trotec GmbH

Grebener Str. 7
D-52525 Heinsberg

☎ +49 2452 962-400

☎ +49 2452 962-200

✉ info@trotec.com

www.trotec.com