TTK 29 E / TTK 51 E / TTK 70 E



EN

OPERATING MANUAL
DEHUMIDIFIER

TROTEC

TRT-BA-TTK29E/TTK51E/TTK70E-TC2019-33-002-EN

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Notes regarding the operating manual

Symbols

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

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

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

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

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

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

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

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

TTK 29 E

https://hub.trotec.com/?id=39925

TTK 51 E

https://hub.trotec.com/?id=41803

TTK 70 E

https://hub.trotec.com/?id=41850

Safety

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

Warning
Read all safety warnings and all instructions.
Failure to follow the warnings and instructions may result in electric shock, fire and / or serious injury.
Save all warnings and instructions for future reference.
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Set the device up in an upright and stable position.
- Let the device dry out after a wet clean. Do not operate it when wet.

- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover or transport the device during operation.
- Do not sit on the device.
- This appliance is not a toy! Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable.
  If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
  Defective power cables pose a serious health risk!
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that the suction side is kept free of dirt and loose objects.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Only transport the device in an upright position with an emptied condensation tank or drain hose.
- Discharge the collected condensate before transport and storage. Do not drink it. Health hazard!



Safety warnings for dehumidifiers filled with R290

- Only position the device in rooms where potentially leaking refrigerant cannot accumulate.
- Only position the device in rooms where there is no permanent 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.
- Observe the national gas regulations.
- Only install, operate and store the device TTK 29 E / TTK 51 E / TTK 70 E in a room measuring more than 4 m^2.
- Store the device in a way that no mechanical damage can occur.
- Please note that the connected ducts 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.
- Do not drill through or burn.
- Do not use any means other than those recommended by the manufacturer for accelerating the defrosting process.
- Every person working with or at the refrigerant circuit must be able to provide a certificate of qualification issued by a body accredited by the industry, demonstrating their competence in the safe use of refrigerants based on a procedure well-known in the industry.
- Service work may only be carried out in accordance with the manufacturer's specifications. If maintenance and repair work require the support of additional persons, the person trained in handling flammable refrigerants shall continuously supervise the work carried out.
- 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.
- 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 Trotec.

Intended use

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

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

Intended use comprises:

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

Improper use

The device is not intended for industrial use.

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

Personnel qualifications

People who use this device must:

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

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

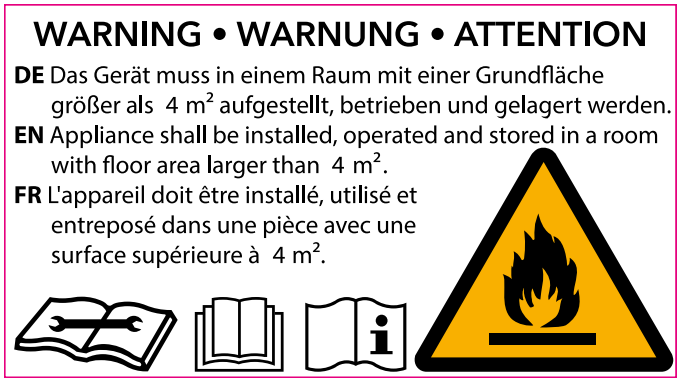
Safety signs and labels on the device

Note

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

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

TTK 29 E / TTK 51 E / TTK 70 E



Follow the manual

This symbol indicates that the operating manual 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

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



Warning

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



Warning

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



Warning

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

Note

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

Behaviour in the event of an emergency

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

Information about the device

Description of the device

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

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

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

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

Once the maximum filling level of the condensation tank is reached or if the tank is not installed correctly, the condensation tank indicator light on the control panel will be illuminated and an error code will be displayed as well (see chapter Operating elements). The device switches off. The indications only disappear once the emptied condensation tank is reinserted.

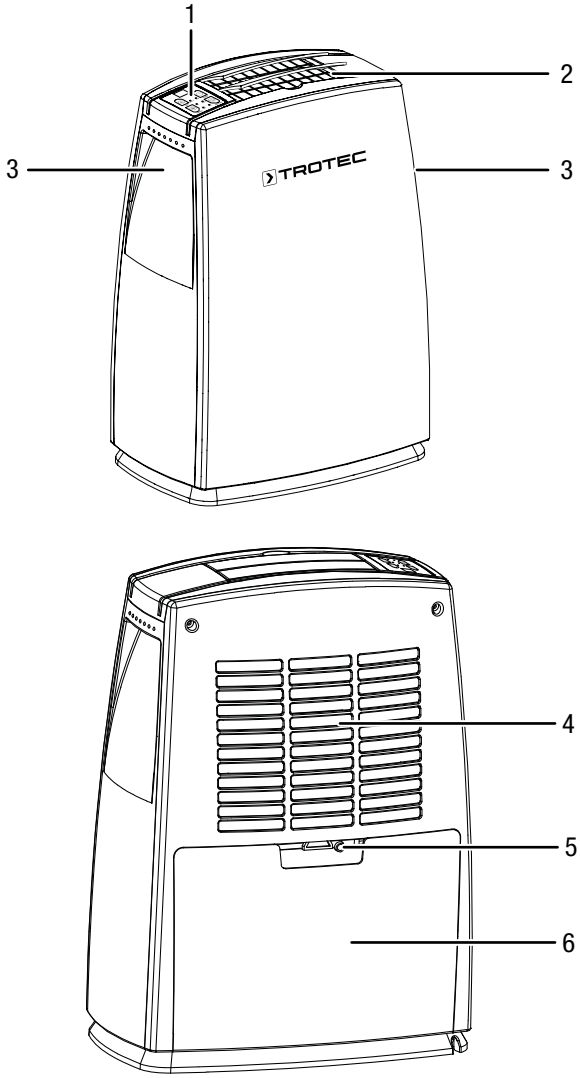
Optionally, the condensed water can be drained by attaching a hose at the condensation connection.

The device can reduce the relative humidity of a room to approx. 35 %.

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

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

Device depiction



No.	Designation
1	Control panel
2	Air outlet
3	Handle
4	Air inlet
5	Condensation drain hose connection
6	Condensation tank

Transport and storage

Note

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

Transport

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

Before transporting the device, observe the following:

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

After transporting the device, observe the following:

- Set up the device in an upright position after transport.
- Leave the device to rest for 12 to 24 hours, so the refrigerant can accumulate within the compressor. Wait 12 to 24 hours before switching the device back on! Acting contrary might lead to compressor damage and a malfunctioning device. If so, any warranty claims will be voided.

Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- Hold onto the mains plug while pulling the power cable out of the mains socket.

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

- Only store the device in a room measuring more than 4 m^2.
- dry and protected from frost and heat
- in an upright position where it is protected from dust and direct sunlight
- with a cover to protect it from invasive dust, if necessary
- Place no further devices or objects on top of the device to prevent it from being damaged.

Assembly and installation

Scope of delivery

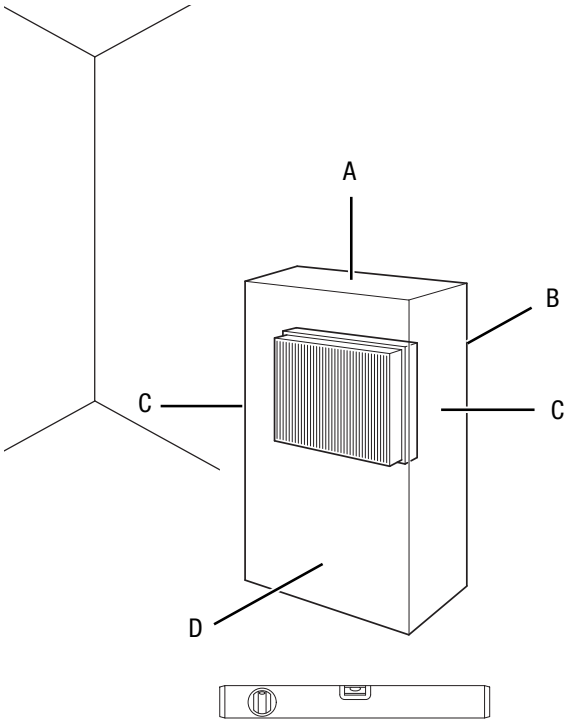
- 1 x Device
- 1 x Air filter
- 1 x Manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Start-up

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



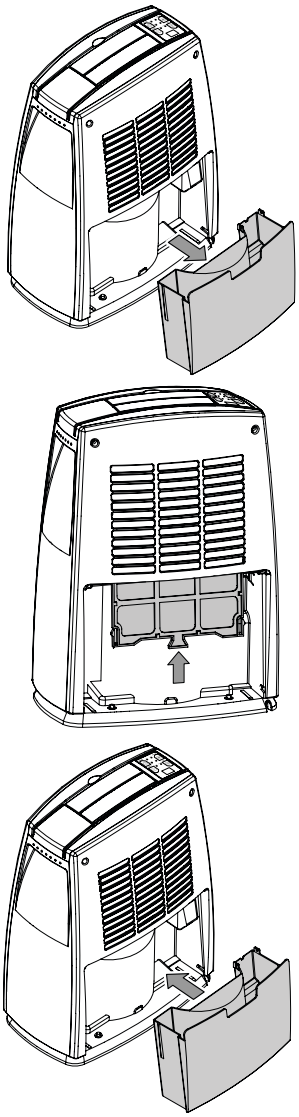
- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only position the device in rooms where potentially leaking refrigerant cannot accumulate.
- Only position the device in rooms where there is no permanent source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- Set the device up in an upright and stable position.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- When positioning the device, keep a sufficient distance to heat sources.
- Make sure that no curtains or other objects interfere with the air flow.
- When positioning the device, particularly in wet areas, secure it locally with an RCD (residual current device) which complies with the respective regulations.

Inserting the air filter

Note

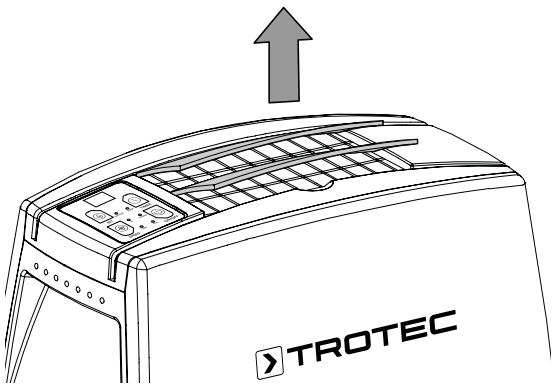
Do not operate the device without an inserted air filter! Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device.

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



Opening the ventilation flaps

1. Prior to switching the device on, open the ventilation flaps at the air outlet.



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

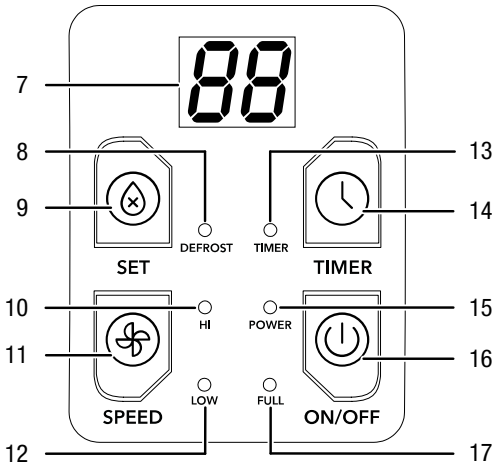
- Insert the mains plug into a properly secured mains socket.

Operation

Notes:

- Avoid open doors and windows.
- After being switched on, the device operates fully automatically.
- The 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
7	Segment display	Indication of the current relative room humidity level Indication of the relative room humidity level during set-up Indication of the number of hours during timer programming Indication of the operating mode
8	*DEFROST* LED	Illuminated when automatic defrosting is in progress.
9	*SET* button	For setting continuous operation *(CO)* For setting the relative humidity level (50 % to 80 % RH in increments of 10 %) For setting comfort mode *(AU)*
10	*HI* LED	High fan speed
11	*SPEED* button	For setting a high or low fan speed
12	*LOW* LED	Low fan speed
13	*TIMER* LED	Illuminated when the timer is activated.
14	*TIMER* button	Switches the timer function on or off.
15	*POWER* LED	Illuminated during operation. Flashes when automatic defrosting is in progress.
16	*ON/OFF* button	Power button: For switching the device on or off
17	*FULL* LED	Illuminated when the condensation tank is full or not installed correctly.

Switching the device on

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

1. Press the *ON/OFF* button (16).
   ⇨ The device starts in *continuous operation*.
   ⇨ The *POWER* LED (15) is illuminated.

Setting the operating mode

- Dehumidification
- Continuous operation
- Comfort mode
- Laundry drying function

Dehumidification

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

In this operating mode, the desired relative room humidity can be set at any time in increments of 10 % within a setting range of 50 % to 80 %.

Setting the desired relative room humidity

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

1. Repeatedly press the *SET* button (9) to set the room's relative humidity level. Setting is possible in the range between 50 % and 80 % in increments of 10 %.
   ⇨ The desired relative room humidity is indicated in the segment display (7) for approx. 5 seconds. Then the current relative room humidity is displayed again.

Setting the fan speed

Using this function you can choose between a low and a high fan speed. The fan speed can only be adjusted in *dehumidification* mode.

1. Press the *SPEED* button (11) to select the desired fan speed.
   ⇨ The corresponding LED will be illuminated – either *HI* (10) or *LOW* (12).

Continuous operation

The device dehumidifies the air constantly and regardless of the current humidity level. The desired relative room humidity cannot be adjusted in this operating mode.

1. Repeatedly press the *SET* button (9) until *CO* is indicated on the segment display (7).
   ⇨ *Continuous operation* is selected.

Info

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

Comfort mode

Comfort mode ensures an agreeable humidity level ranging between 50 % and 60 %. Depending on the room temperature the device automatically regulates the convenient humidity level choosing a value from 50 % – 55 % – 60 %.

In this operating mode it is not possible to regulate the room's relative humidity level manually.

1. Repeatedly press the *SET* button (9) until *AU* is indicated on the segment display (7).
   ⇨ *Comfort mode* is selected.

Setting the timer

For the device to switch on or off automatically after a predefined number of hours (max. 24 hrs) you can programme the timer.

The timer can be programmed in increments of 1 hour (0 to 24 h).

The timer can be set in all operating modes.

You can activate the function regardless of the device being switched on or off.

Note

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

Automatic switch-on

✓ The device is switched off.

1. Press the *TIMER* button (14) to programme automatic switch-on.
   ⇨ The *TIMER* LED (13) is illuminated.
   ⇨ The segment display (7) indicates the number of hours until automatic switch-on. Standard: *0.0*
2. Repeatedly press the *TIMER* button (14) until the desired number of hours until automatic switch-on has been set.
   ⇨ The number of hours is indicated on the segment display (7) for approx. 5 s. Then the current relative humidity level of the room will be indicated.

⇨ The timer setting equals the desired number of hours.
⇨ After the predefined time, the device switches itself on.

Automatic switch-off

✓ The device is switched on.

1. Press the *TIMER* button (14) to programme automatic switch-off.
   ⇨ The *TIMER* LED (13) is illuminated.
   ⇨ The segment display (7) indicates the number of hours until automatic switch-off. Standard: *0.0*
2. Repeatedly press the *TIMER* button (14) to select the number of hours until automatic switch-off.
   ⇨ The number of hours is indicated on the segment display (7) for approx. 5 s. Then the current relative humidity level of the room will be indicated.
3. The device keeps running until the given switch-off time has expired or until the device is switched off manually.

⇨ The timer setting equals the desired number of hours.
⇨ After the predefined time, the device switches itself off.

Note

You can deactivate automatic switch-on and switch-off by setting the respective number of hours back to 0 or by manually switching the device on or off.
A full condensation tank can cause the device to be switched off before the set number of hours until automatic switch-off have elapsed.

Auto stop function

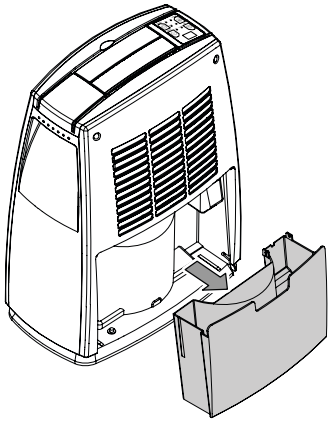
If the condensation tank is full or not inserted correctly, the device will stop automatically.

Operation with hose attached to the condensation connection

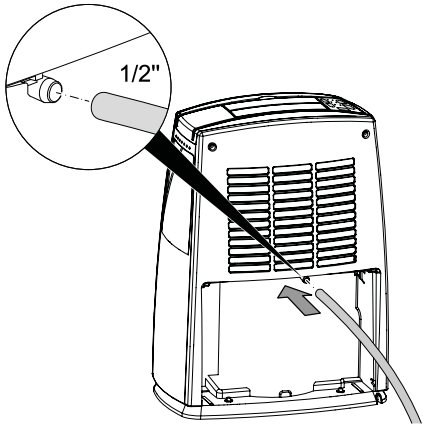
For continuous operation or unattended dehumidification, please connect a suitable condensation drain hose to the device.

✓ A suitable hose (diameter = 1/2") is ready for use.
✓ The device is switched off.

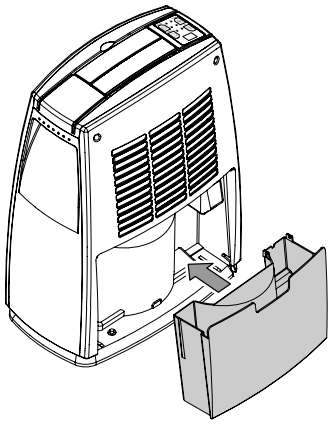
1. Take the condensation tank out of the device.



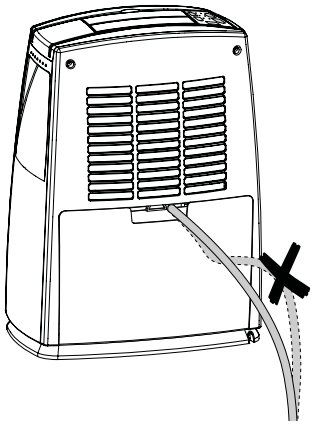
2. Push one end of the hose onto the hose connection.



3. Put the condensation tank back in.



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



Remove the hose if you want to collect the condensate in the condensation tank again. Allow the hose to dry prior to storage.

Automatic defrost

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

The *DEFROST* LED (8) is illuminated.

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.

Drying laundry

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

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

For drying laundry the following values should be selected:

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

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

Shutdown

Warning of electrical voltage
Do not touch the mains plug with wet or damp hands.

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

Errors and faults

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

The device does not start:

- Check the power connection.
- Check the power cable and mains plug for damage.
- Check the on-site fusing.
- Check the filling level of the condensation tank and empty it if necessary. The *FULL* LED (17) 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. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electrics checked by a specialist company or by Trotec.

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

- Check the float in the condensation tank for dirt. If necessary, clean the condensation tank. The float must be able to move freely.
- Check the room temperature. Observe the device's permissible operating range according to the technical data. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- Ensure that the relative room humidity complies with the technical data.
- Check the preselected relative room humidity. The humidity in the room must be above the selected range.
- Check the air filter for dirt. If necessary, clean or replace the air filter.
- Check whether the device is running in *comfort mode*. In this case, the compressor switches off automatically once the relative room humidity is below 50 %.
- From the outside, check the condenser for dirt (see chapter Maintenance). If the condenser is dirty, have it cleaned by a specialist company or by Trotec.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.

The device is loud or vibrates:

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

Condensate is leaking:

- Check the device for leaks.

The compressor does not start:

- Check the room temperature. Observe the device's permissible operating range according to the technical data. Possibly, the device does not start because the ambient temperature is too low (< 5 °C).
- Ensure that the relative room humidity complies with the technical data.
- Check the preselected relative room humidity. The humidity in the room must be above the selected range.
- Check whether the device is running in *comfort mode*. In this case, the compressor switches off automatically once the relative room humidity is below 50 %.
- 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 loses power:

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

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

Your device still does not operate correctly after these checks?

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

Error codes

The following error messages can be displayed on the segment display (7):

Error code	Cause	Remedy
E1	Short circuit at the temperature sensor and printed circuit board.	Please contact the customer service.
E2	Short circuit between the copper tube of the temperature sensor and the PCB wiring.	Please contact the customer service.

Maintenance

Maintenance intervals

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

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

Activities required before starting maintenance

Warning of electrical voltage
Do not touch the mains plug with wet or damp hands.

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

Warning of electrical voltage

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

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 Trotec.

Safety signs and labels on the device

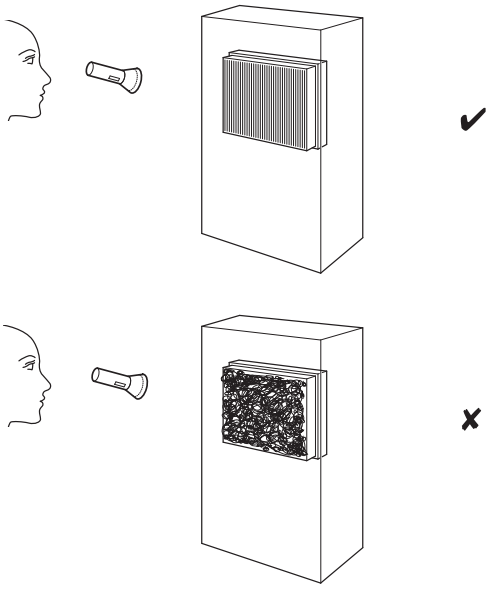
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

Cleaning the housing

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

Visual inspection of the inside of the device for dirt

1. Remove the air filter.
2. Use a torch to illuminate the openings of the device.
3. Check the inside of the device for dirt.
4. If you see a thick layer of dust, have the inside of the device cleaned by a specialist company for cooling and air-conditioning or by Trotec.
5. Put the air filter back in.



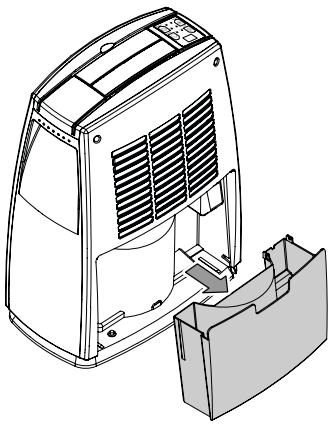
Cleaning the air filter

Note

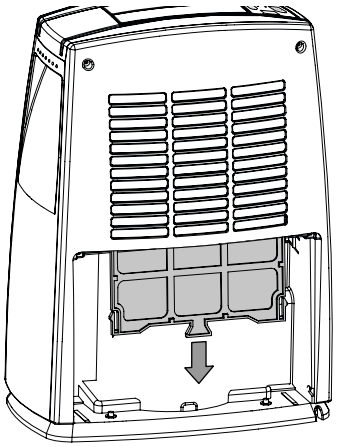
Ensure that the air filters are neither worn nor damaged. The corners and edges of the air filters must not be deformed or rounded. Before reinserting the air filters, make sure that they are undamaged and dry!

The air filters have to be cleaned as soon as they are dirty. This is brought to light e.g. by a reduced capacity (see chapter Errors and faults).

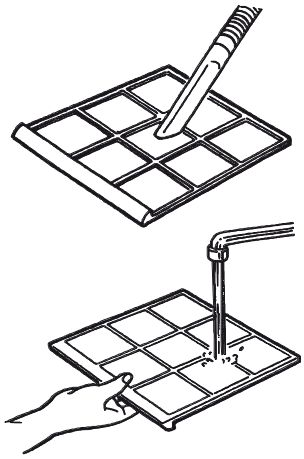
1. Take the condensation tank out of the device.

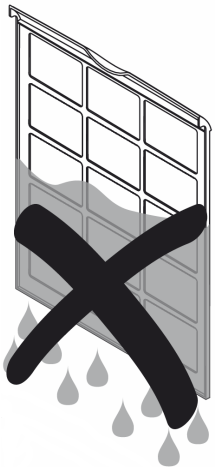


2. Remove the air filter from the device.

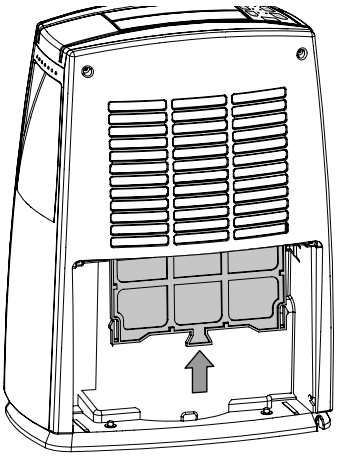


3. Clean the filter using a slightly damp, soft, lint-free cloth. If the filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.

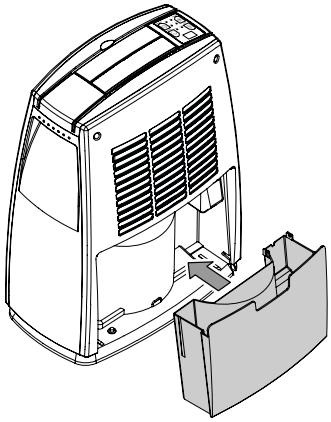




4. Allow the filter to dry completely. Do not insert a wet filter into the device!
5. Reinsert the air filter into the device.



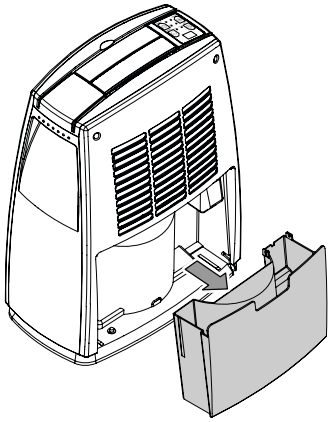
6. Refit the condensation tank into the device.
   Make sure not to damage the float when inserting or removing the condensation tank. In doing so, make sure that the float is positioned correctly.
   In doing so, make sure that the condensation tank is inserted correctly, for otherwise the device cannot be switched back on.



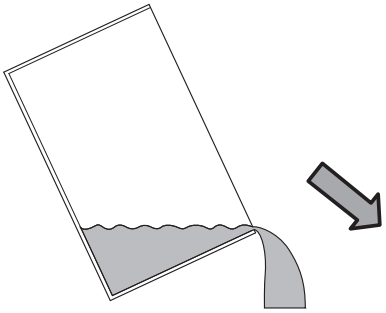
Emptying the condensation tank

When the condensation tank is full or not inserted correctly, the device stops dehumidification operation and switches itself off. The *FULL* LED (17) is illuminated.

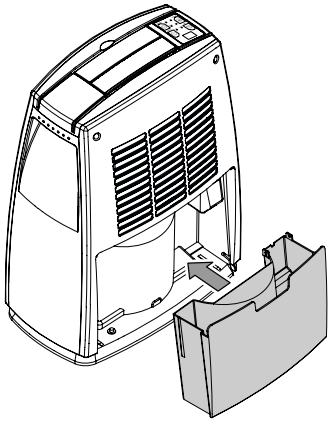
1. Take the condensation tank out of the device.



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



3. Rinse the tank with clear water. Clean the tank regularly using a mild cleaning agent (no detergent!).
4. Refit the condensation tank into the device. Make sure not to damage the float when inserting or removing the condensation tank.
   ⇨ In doing so, make sure that the float is positioned correctly.
   ⇨ In doing so, make sure that the condensation tank is inserted correctly, for otherwise the device cannot be switched back on.



Activities required after maintenance

If you want to continue using the device:

- Leave the device to rest for 12 to 24 hours, so the refrigerant can accumulate within the compressor. Wait 12 to 24 hours before switching the device back on! Acting contrary might lead to compressor damage and a malfunctioning device. If so, any warranty claims will be voided.
- Reconnect the device to the mains.

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

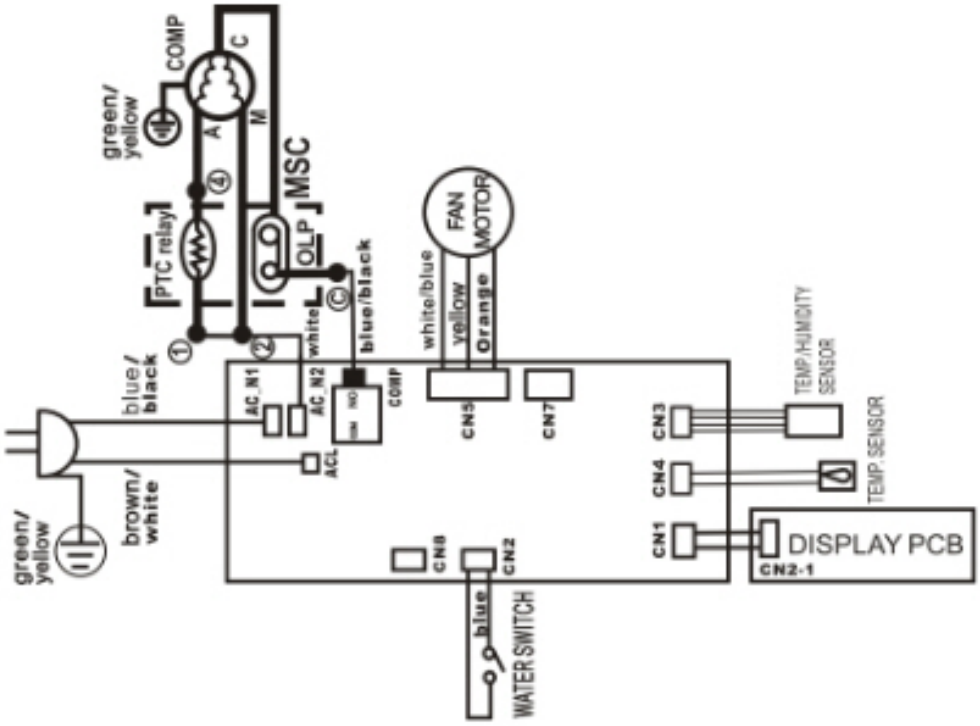
- Store the device according to the Storage chapter.

Technical annex

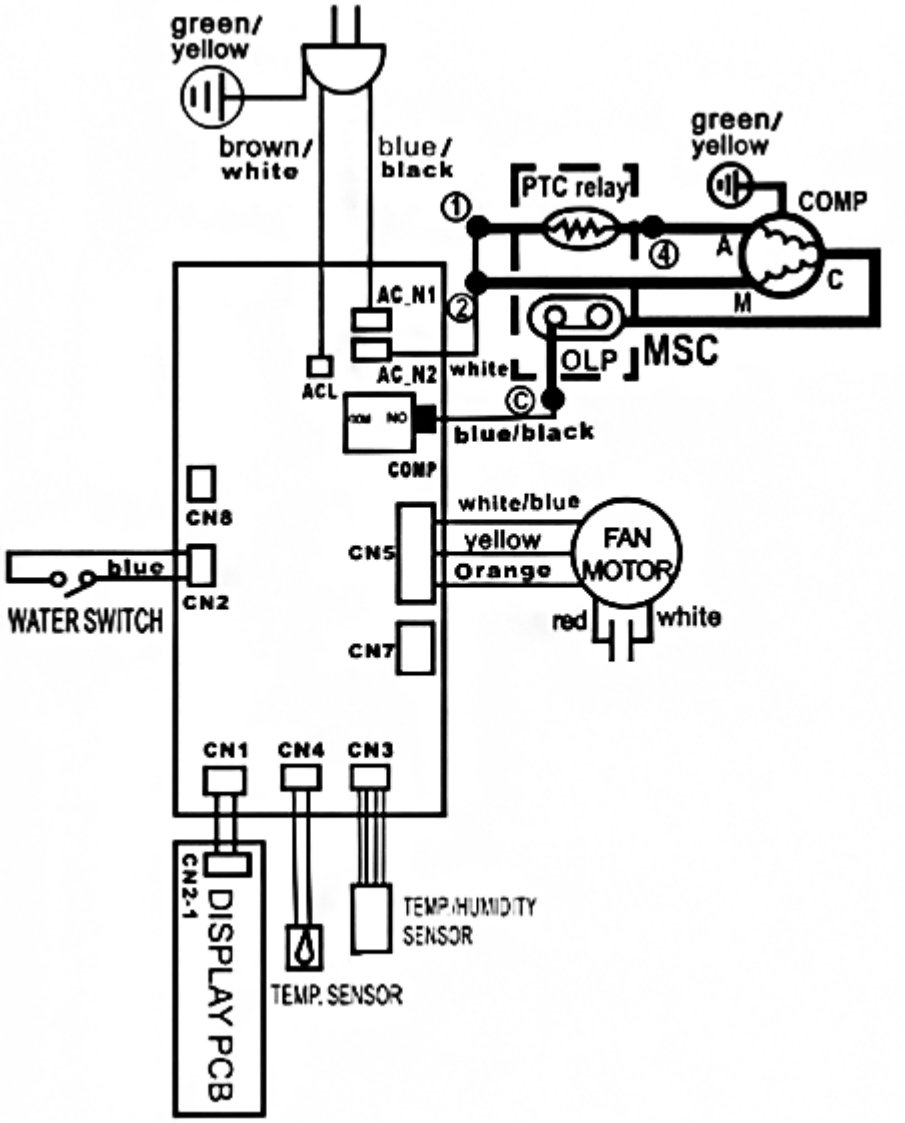
Technical data

Parameter	Value		
Model	**TTK 29 E**	**TTK 51 E**	**TTK 70 E**
Dehumidifying capacity, max.	10 l / 24 h	16 l / 24 h	20 l / 24 h
Air flow rate	110 m^3/h	126 m^3/h	135 m^3/h
Operating range (temperature)	5 °C to 35 °C	5 °C to 35 °C	5 °C to 35 °C
Pressure suction side	0.6 MPa	0.6 MPa	0.6 MPa
Pressure outlet side	2.5 MPa	2.5 MPa	2.5 MPa
Max. permissible pressure	4 MPa	4 MPa	4 MPa
Mains connection	220–240 V / 50 Hz	220–240 V / 50 Hz	220–240 V / 50 Hz
Max. power input	190 W	340 W	420 W
Nominal current	0.83 A	1.9 A	1.8 A
Refrigerant	R-290	R-290	R-290
Amount of refrigerant	45 g	52 g	68 g
GWP factor	3	3	3
CO_2 equivalent	0.000135 t	0.000156 t	0.000204 t
Condensation tank capacity	2.3 l	2.3 l	2.3 l
Sound pressure level (at a distance of 1 m)	42 dB(A)	44 dB(A)	46 dB(A)
Dimensions (length x width x height)	220 x 365 x 490 mm	220 x 365 x 490 mm	220 x 365 x 490 mm
Minimum distance to walls and other objects A: top: B: rear: C: side: D: front:	 50 cm 50 cm 50 cm 50 cm	 50 cm 50 cm 50 cm 50 cm	 50 cm 50 cm 50 cm 50 cm
Weight	11 kg	12 kg	12.5 kg

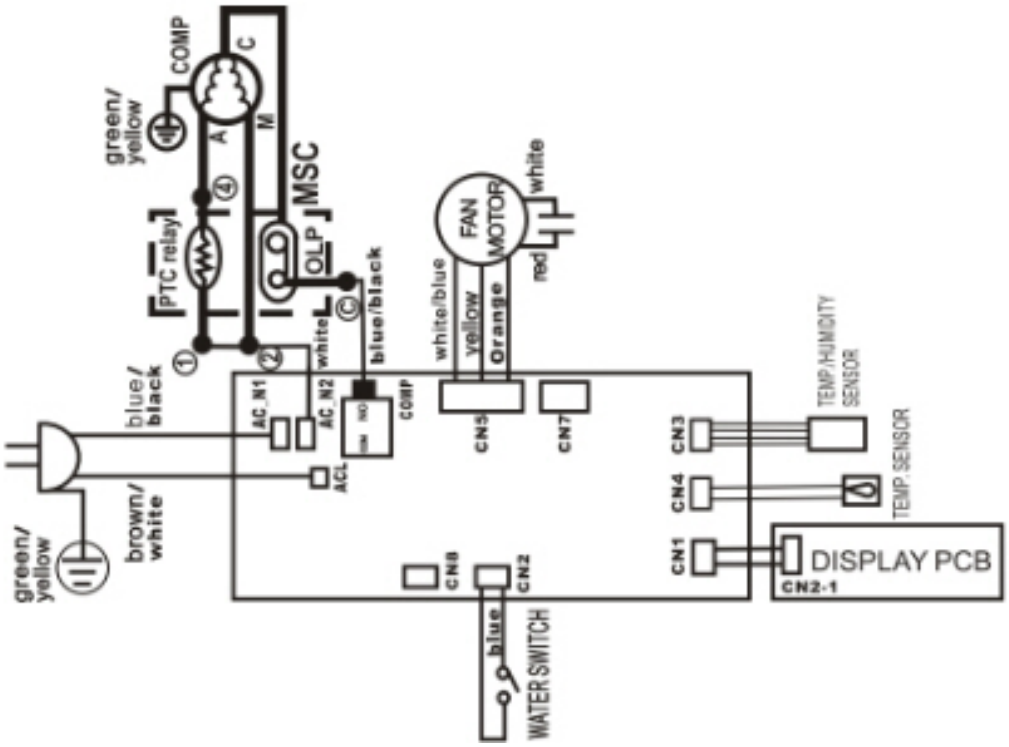
Circuit diagram TTK 29 E



Circuit diagram TTK 51 E

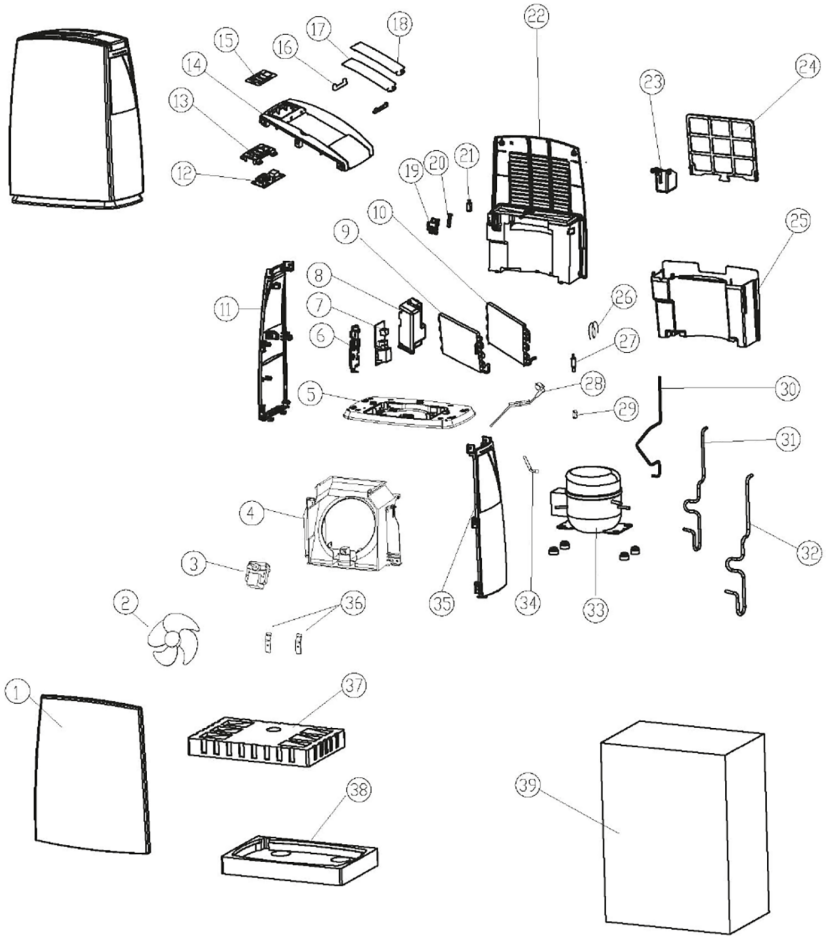


Circuit diagram TTK 70 E



Overview of spare parts TTK 29 E

Note: The position numbers of the spare parts differ from those describing the positions of other parts mentioned in this operating manual.

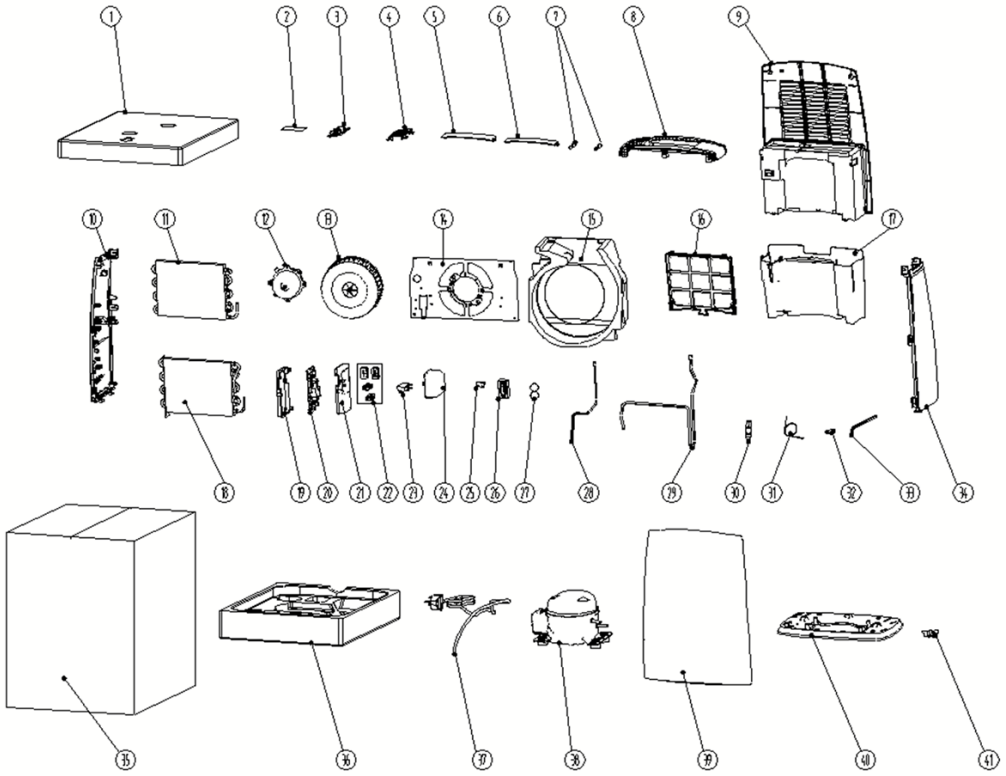


Spare parts list TTK 29 E

NO.	SPARE PART	NO.	SPARE PART
1	Front panel	21	Microswitch
2	Blade	22	Back panel
3	Fan motor	23	Float
4	Air duct	24	Filter
5	Base	25	Water tank
6	Fender	26	Capillary
7	Main PCB	27	Strainer
8	Control box	28	Power cord
9	Condensor	29	Power cord Clip
10	Evaporator	30	High pressure tube
11	Left panel	31	Low pressure tube
12	Display PCB	32	Foam tube
13	Control Panel	33	Compressor
14	Top panel	34	Work tube
15	Control panel	35	Right panel
16	Connection plate	36	Axial fan motor bracket
17	Rear blade	37	Upper poly foam
18	Front blade	38	Down poly foam
19	Micro switch frame	39	Carton
20	Micro switch handle		Temperature humidity head

Overview of spare parts TTK 51 E

Note: The position numbers of the spare parts differ from those describing the positions of other parts mentioned in this operating manual.

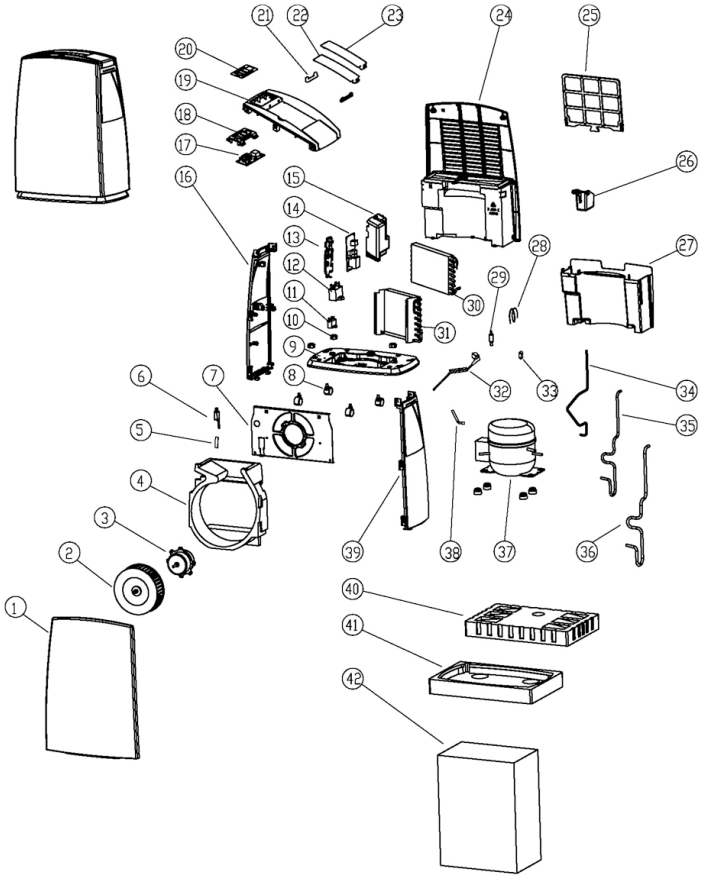


Spare parts list TTK 51 E

NO.	SPARE PART	NO.	SPARE PART
1	Upper poly foam	22	Silicone sheath
2	Control panel	23	Capacitor
3	Display PCB	24	Capacitor cover
4	Control panel	25	Magnetic induction switch
5	Front blade	26	Float holder
6	Back panel	27	Foam mold Float
7	Connection panel	28	High pressure tube
8	Top panel	29	Low pressure tube
9	Back panel	30	Strainer
10	Left panel	31	Capillary
11	Evaporator	32	Power cord clip
12	Motor	33	Work tube
13	Rear blower	34	Right panel
14	Motor bracket	35	Gift panel
15	Air-Duct poly foam	36	Down poly foam
16	Filter	37	Power cord
17	Water tank	38	Compressor
18	Condensor	39	Front panel
19	Electrical box base	40	Base
20	Main PCB	41	Dam-board
21	Electrical box		

Overview of spare parts TTK 70 E

Note: The position numbers of the spare parts differ from those describing the positions of other parts mentioned in this operating manual.



Spare parts list TTK 70 E

NO.	SPARE PART	NO.	SPARE PART
1	Front panel	22	Rear blade
2	Rear blower	23	Front blade
3	Motor	24	Back panel
4	Air-Duct poly foam	25	Filter
5	Micro switch baffle	26	Float
6	Micro switch	27	Water tank
7	Motor bracket	28	Capillary
8	Wheel	29	Strainer
9	Base	30	Evaporator
10	Nut	31	Condensor
11	Capacitor	32	Power cord
12	Capacitor	33	Power cord clip
13	Fender	34	High pressure tube
14	Main PCB	35	Low pressure tube
15	Control box	36	Foam tube
16	Left panel	37	Compressor
17	Display PCB	38	Work tube
18	Control panel	39	Right panel
19	Top panel	40	Upper poly foam
20	Control panel	41	Down poly foam
21	Connection panel	42	Carton

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website www.trotec24.com.

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

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

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