

TTK 68 E / TTK 69 E

EN

OPERATING MANUAL
DEHUMIDIFIER



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Notes regarding the operating manual

Symbols



Hazardous electric current!

Warns about hazards from electric current which can lead to injuries or even death.



Danger!

Warns of a hazard which can lead to personal injury.



Caution!

Warns of a hazard which can lead to damage to property.

The current version of the operating manual can be found at:



TTK 68 E



<http://download.trotec.com/?sku=1120000056&id=1>

TTK 69 E



<http://download.trotec.com/?sku=1120000057&id=1>

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Warranty and liability

The device complies with the fundamental health and safety requirements of the applicable EU regulations and was tested at the factory for perfect functionality multiple times. However, if faults in the functionality occur and cannot be remedied with the measures in the chapter Errors and faults, please get in touch with your dealer or distributor.

When making a warranty claim, supply the device number (see the rear of the device).

When manufacturer's instructions or legal regulations have not been followed, or after unauthorised changes to the device are made, the manufacturer is not responsible for the resulting damages. Changes to the device or unauthorised replacement of individual parts can drastically impact the electrical safety of this product and leads to the forfeit of the warranty. Liability does not extend to damages to people or property caused by the device being used other than as described in the instructions in this operating manual. Subject to changes to technical design and model changes as part of constant development and product improvement without prior notice.

No liability is accepted for damages resulting from improper use. In such cases, entitlements to a warranty are then also forfeited.

Safety

Carefully read this manual before starting / using the device and keep it within reach.

- 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.
- Ensure that the air inlet and outlet are not obstructed.
- Ensure that the side of the device where the air inlet is found is kept free of dirt and loose objects.
- Never reach or put objects into the device.
- Do not cover or transport the device during operation.
- Do not use the device with wet or damp hands.
- Ensure that all electric cables outside of the device are protected from damage (e.g. from animals). Never use the device if the cable or power connection is damaged!
- Only use extensions to the connecting cable which are appropriate to the device power consumption, the length of its cable and its use. Completely unroll extension cables. Avoid electrical overload.
- Only transport the device in an upright position with an emptied condensation tank.
- Dispose of the collected condensate. Do not drink it. Health hazard!
- Pull the plug from the socket if the device is not in use.
- Unplug the device from the mains before starting with maintenance, service or repair work.

Intended use

Only use the device TTK 68 E / TTK 69 E for drying and dehumidifying room air, while adhering to and following the technical data.

Intended use comprises:

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

Improper use

Do not place the device TTK 68 E / TTK 69 E on wet or flooded ground. Do not use the device outdoors. Do not place any objects, e.g. wet clothing, on the device for drying.

Any unauthorised changes, modifications or alterations to the device are forbidden.

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.

Residual risks



Hazardous electric current!

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



Hazardous electric current!

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



Danger!

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



Danger!

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



Danger!

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



Caution!

To avoid damages to the device, do not operate the device without an air filter inserted!

Behaviour in the event of an emergency

1. In an emergency, disconnect the device from the mains feed-in: Switch the device off and disconnect it from the mains.
2. Do not reconnect a defective device to the mains.

Information about the device

Description of the device

The device TTK 68 E / TTK 69 E 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 either condensation or rime. The dehumidified, cooled air is slightly warmed 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 condensation tank is not installed correctly, the condensation tank indicator light (see chapter Operating elements) on the control panel will be illuminated immediately. The device switches off. The condensation tank indicator light only goes out again once the emptied condensation tank is reinserted.

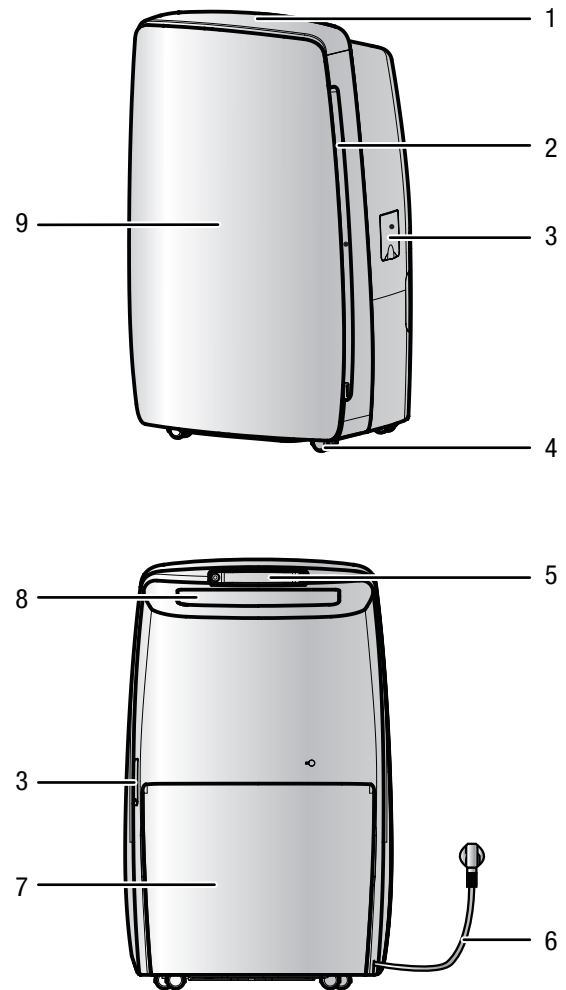
Optionally, the condensed water can be drained by attaching a hose ($\varnothing = 14 \text{ mm}$) at the condensation connection.

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.

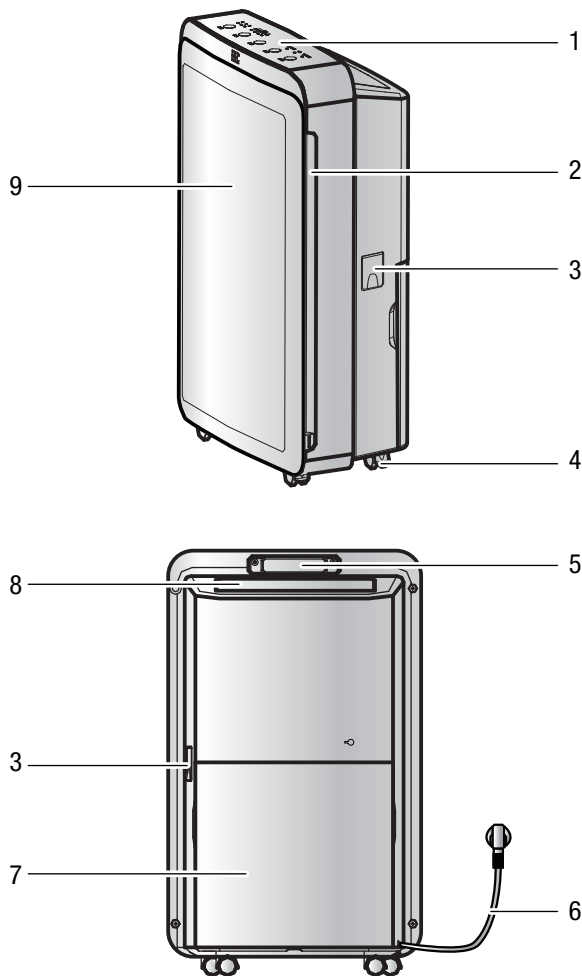
Device depiction

TTK 68 E



No.	Designation
1	Control panel
2	Air inlet
3	Cover of condensation drain hose connection
4	Wheels
5	Transport handle
6	Power cable
7	Condensation tank
8	Air outlet
9	Front cover with air filter

TTK 69 E



Transport and storage

Transport

To make the device easier to transport, it is fitted with wheels.

Before transporting the device, proceed as follows:

1. Pump out any possibly remaining condensate. Check for dripping condensation.
2. Pull the plug from the mains socket. Do not use the power cable to drag the device.
3. Only wheel the device on a level and smooth surface.

Storage

Drain any possibly remaining condensate.

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

- In an upright and stable position.
- Dry.
- Protected from dust and direct sunlight.
- With a cover to protect it from invasive dust, if necessary.

No.	Designation
1	Control panel
2	Air inlet
3	Cover of condensation drain hose connection
4	Wheels
5	Transport handle
6	Power cable
7	Condensation tank
8	Air outlet
9	Front cover with air filter

Set-up and installation

Positioning

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

- Set the device up in a level and stable position.
- When positioning the device, keep a sufficient distance to heat sources.
- When positioning the device, particularly in wet areas, secure it locally with an RCD (residual current device) which complies with the respective regulations.

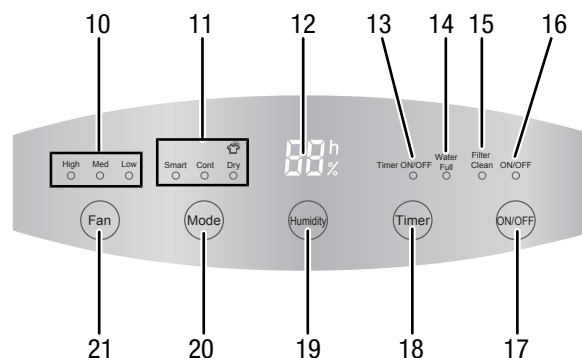
Scope of delivery

- 1 x Dehumidifier
- 1 x Air filter

Operation

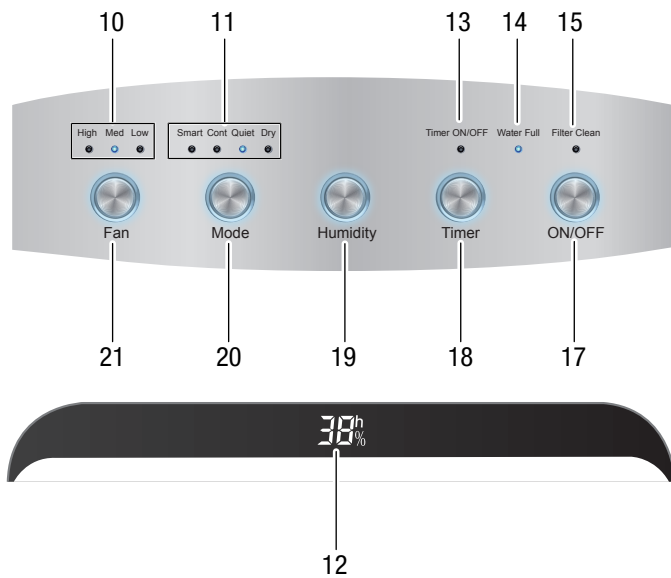
- After being switched on, the device operates fully automatically.
- The fan runs permanently in dehumidification mode until the set nominal value is reached or the device switched off.
- Avoid open doors and windows.

Operating elements TTK 68 E



No.	Designation
10	Fan stage indication
11	Operating mode indication
12	LC display
13	<i>Timer ON/OFF</i> indication - timer switched on
14	<i>Water Full</i> indication - condensation tank full
15	<i>Filter Clean</i> indication - clean the air filter
16	<i>ON/OFF</i> indication - device switched on
17	<i>ON/OFF</i> button for switch-on and -off
18	<i>Timer</i> button for programming the time
19	<i>Humidity</i> button for setting the desired humidity level
20	<i>Mode</i> button for setting the desired operating mode
21	<i>Fan</i> button for setting the desired fan stage

Operating elements TTK 69 E



No.	Designation
10	Fan stage indication
11	Operating mode indication
12	LC display (front of the device)
13	Timer ON/OFF indication - timer switched on
14	Water Full indication - condensation tank full
15	Filter Clean indication - clean the air filter
17	ON/OFF button for switch-on and -off; is illuminated in blue when the device is switched on.
18	Timer button for programming the time
19	Humidity button for setting the desired humidity level
20	Mode button for setting the desired operating mode
21	Fan button for setting the desired fan stage

The LC display of the TTK 69 E is located on the device's front face, directly below the control panel.

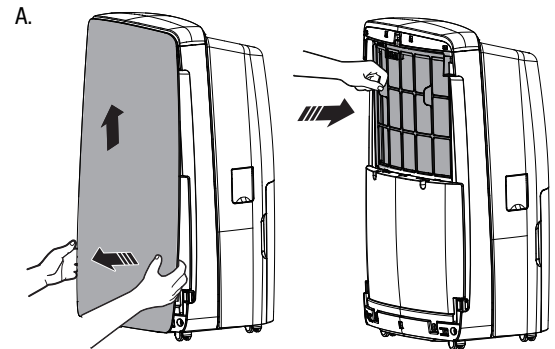
Inserting the air filter

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



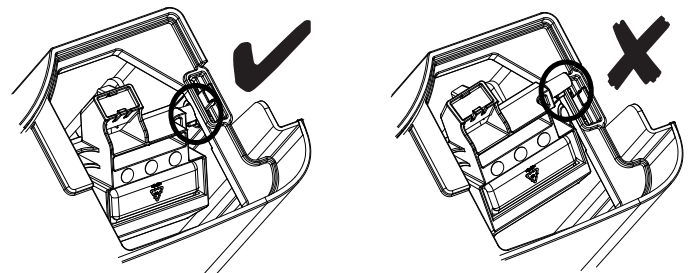
Caution!

To avoid damages to the device, do not operate the device without an air filter inserted!



Switching the device on

1. Ensure that the float is inserted correctly in the condensation tank.



2. Ensure that the condensation tank is empty and inserted correctly.
3. Insert the mains plug into a properly secured mains socket.
 - ⇒ As soon as electrical current flows, the ON/OFF button (17) will be permanently illuminated, even if the device has not been switched on.
4. Press the ON/OFF button (17).

Setting the humidity level

You can adjust the preset humidity level at any time during operation.

1. Press the *Humidity* button in order to set the desired value (ranging from 30 % to 80 % in steps of 10 %).
 - ⇒ The desired humidity level is indicated on the LC display (12) for approx. 5 s.
 - ⇒ The desired humidity level is set.
 - ⇒ The room's current humidity level will be indicated on the LC display (12) again.

Setting the operating mode

Note:

For operating the device in continuous operation mode (*Cont.*), a condensation drain hose must be connected to the device, see chapter Operation with hose attached to the condensation connection.

The devices TTK 68 E and TTK 69 E come with the following operating modes:

- *Smart* (automatic mode)
 - The humidity level is regulated automatically depending on the room temperature. If the room's humidity level is lower than the one set, the device stops automatically.
 - The fan stage can be freely selected.
- *Cont.* (continuous mode)
 - The device dehumidifies the air continuously.
 - The humidity level cannot be set.
 - The fan stage can be freely selected.
- *Dry* (mode for drying laundry)
 - To do so, set up the device near your clothes horse.
 - The device dehumidifies the air continuously.
 - The fan stage and the humidity level cannot be set.

Additionally, the device TTK 69 E comes with the following operating mode:

- *Quiet* (whisper mode)
 - The humidity level is regulated automatically depending on the room's humidity level.
 - The fan runs at the most silent (lowest) stage.
 - The fan stage and the humidity level cannot be set.

1. To select the desired operating mode, press the *Mode* button.

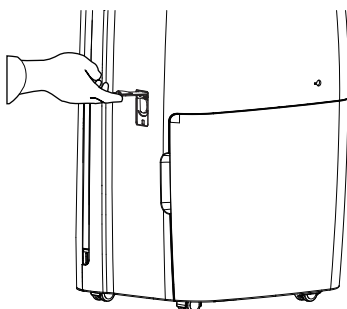
⇒ The corresponding LED (11) lights up.

Operation with hose attached to the condensation connection

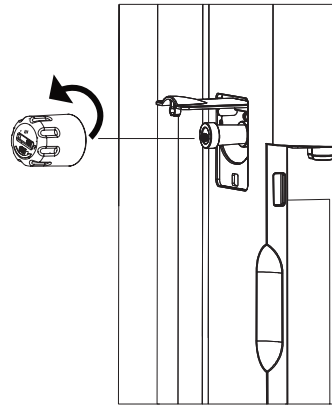
For continuous dehumidification (continuous operation) the condensation drain hose must be connected to the device.

- ✓ A suitable hose ($\varnothing = 14$ mm) is available.
- ✓ A suitable hose adapter is ready.
- ✓ The device is switched off.

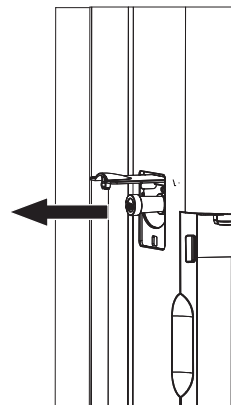
1. Open the cover (3) for the connection of the condensation drain hose.



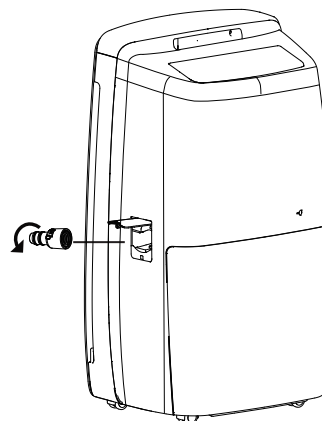
2. Unscrew the sealing cap counter-clockwise.



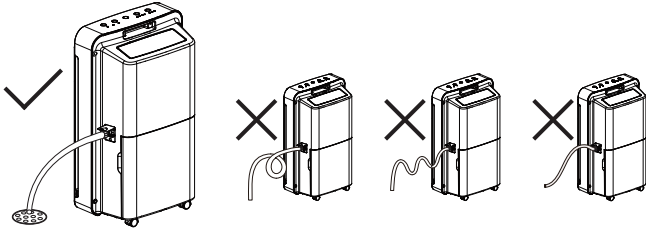
3. Remove the stopper.



4. Screw the hose adapter onto the connection in a clockwise motion.



5. Push one end of the hose onto the hose adapter.
6. Guide the other hose end to a suitable drain or sufficiently dimensioned collection container. Please observe that the hose must not be kinked.



Setting the fan stage

The following fan stages can be selected:

- *High*: highest fan stage
 - *Med*: medium fan stage
 - *Low*: lowest fan stage
1. Press the *Fan* button (21) until the LED for the desired stage lights up.

Setting the timer

The timer can be adjusted in increments of 1 hour to a value between 0 and 24 hours.

Preselecting the switch-on time:

1. Press the Timer button (18) to switch on the timer.
2. Press the Timer button (18) until the desired number of hours until automatic switch-on has been set.
 - ⇒ The number of hours is indicated on the display for approx. 5 s.
 - ⇒ The device switches on after the predefined time.

Preselecting the switch-off time:

- ✓ The device is switched on already.
1. Press the Timer button (18) to activate the timer.
 2. Press the Timer button (18) until the desired number of hours has been set.
 - ⇒ The number of hours is indicated on the display for approx. 5 s.
 - ⇒ The device switches off after the predefined time.

Automatic defrost

At low ambient temperatures the evaporator can freeze up during dehumidification. The device then carries out an automatic defrost. 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.

Memory function

In case of brief power failures the device memorizes the set fan stage and operating mode. The pre-programmed start and stop times for automatic operation are not saved.

Child lock

To deactivate child lock, please proceed as follows:

1. Simultaneously press both buttons Mode (20) and Timer (18) for approx. 1 s.
 - ⇒ Child lock is activated.
 - ⇒ The message *LC* will be indicated on the display whenever a button is pressed.
2. Press the buttons Mode (20) and Timer (18) again for approx. 1 s to deactivate the lock.
 - ⇒ All buttons can be actuated once again.

Auto stop function

If the water tank is full, not inserted correctly or if the humidity level is 5 % lower than the set humidity value, the device stops automatically.

Shutdown

1. Press the *ON/OFF* button (17).



Danger!

- Do not touch the mains plug with wet or damp hands.
2. Remove the mains plug from the mains socket.
 3. If necessary, remove the condensation drain hose and any residual fluid from it.
 4. If necessary, empty the condensation tank and wipe it dry with a clean cloth. Check for dripping condensation.
 5. Clean the device, and especially the air filter, according to the chapter Maintenance.
 6. Store the device according to the chapter Storage.

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.

Note:

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 mains plug for damages.
- Check the condensation tank for correct seating. Check the filling level of the condensation tank and empty it, if necessary. The indicator light must not light up.
- 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 no condensate forms:

- 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.
- 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 your condenser is dirty, have it cleaned by a specialist company or by Trotec.

The device is loud or vibrates; condensate is leaking:

- Check whether the device is standing upright and on an even surface.

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

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

Your device still does not operate correctly after these checks?

Have the device repaired by authorised expert staff or by Trotec.

Maintenance

Activities required before starting maintenance

- Do not touch the mains plug with wet or damp hands.
- Before any work, remove the mains plug!



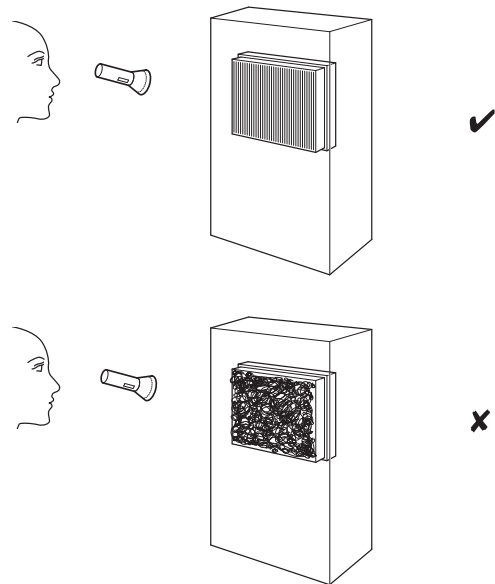
Danger!



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

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. 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.
4. Put the air filter back in.



Cleaning the housing

Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Do not use abrasive cleaners.

Refrigerant circuit

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

Cleaning the air filter

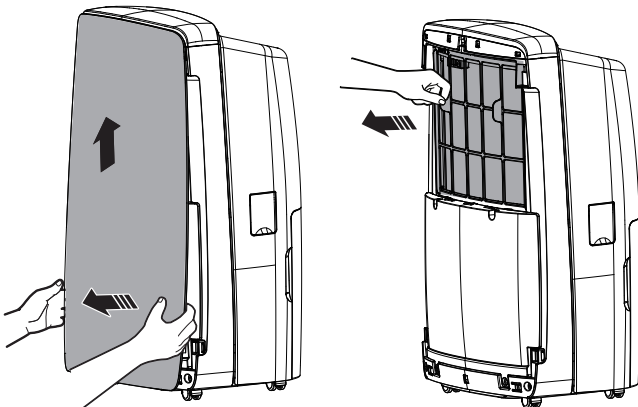
The air filter must be cleaned when it is dirty or when the *Filter Clean* indication (15) is illuminated. This is brought to light e.g. by a reduced cooling capacity (see chapter Errors and faults).



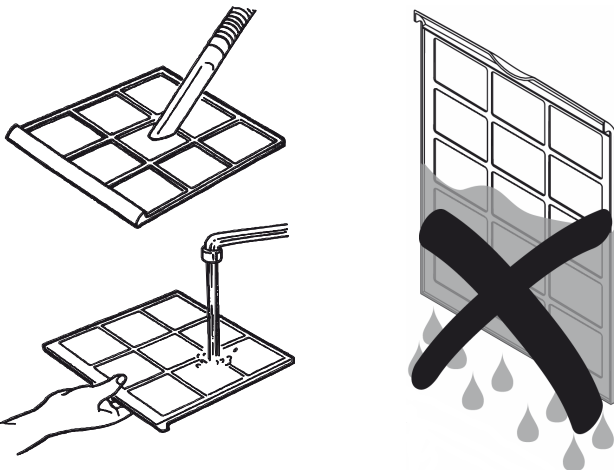
Caution!

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 device is switched off and disconnected from the mains.
- 1. Press the lateral holders of the front part in the lower section of the device inwards.
- 2. Carefully pull the front part off at the bottom and remove it by pushing it upwards



- 3. Pull the fastenings of the air filter outwards to remove the filter.
- 4. Clean the filter by means of a soft, lint-free, slightly moistened cloth. Should the filter be heavily soiled, clean it using warm water and a neutral detergent.



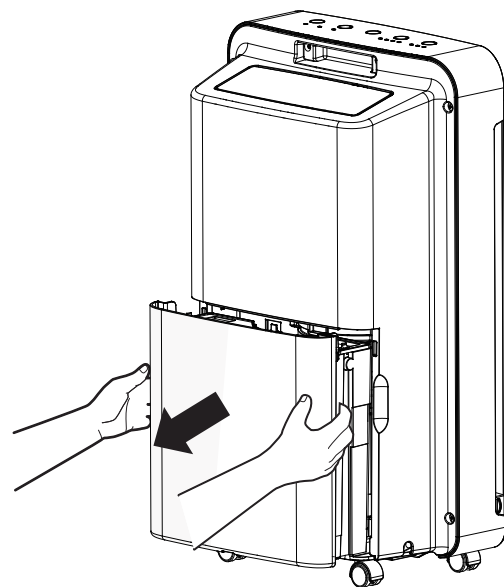
- 5. Allow the filter to dry completely. Never insert a wet filter in the device.

- 6. Reinsert the filter and push the air filter down until it clicks into place.
- 7. Reattach the housing's front section.
- 8. To carry out a filter reset, press the buttons *Fan* (21) and *Humidity* (19) simultaneously.
⇒ The *Filter Clean* indication (15) disappears.

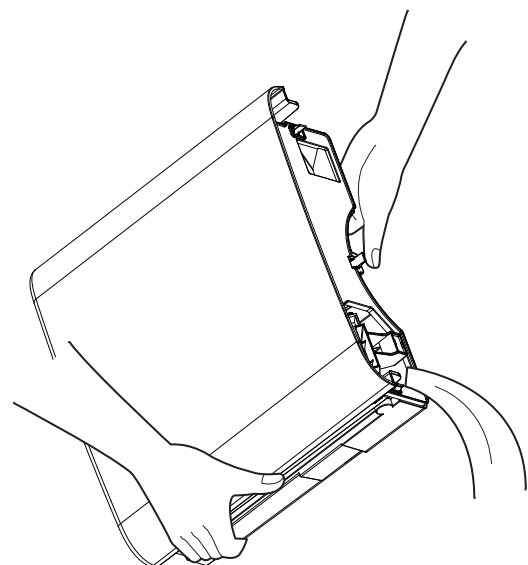
Emptying the condensation tank

Once the condensation tank is full, the device stops the dehumidification operation and switches itself off. The *Water Full* indication (14) is illuminated.

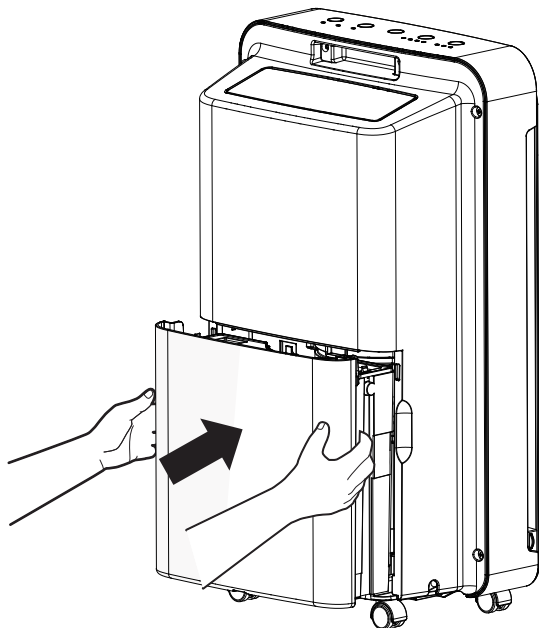
- 1. Take the condensation tank out of the device.



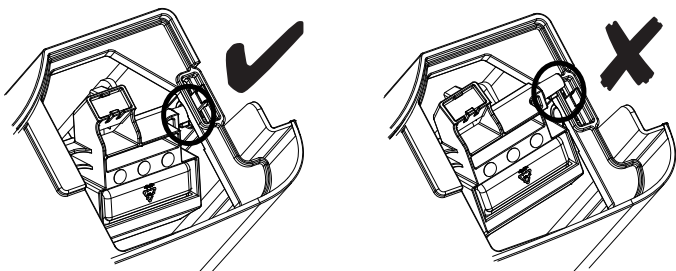
- 2. Empty the condensation tank over a drain or sink.



3. Clean the condensation tank under running water.
4. Refit the condensation tank into the device.



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



⇒ Make sure that the condensation tank is inserted correctly, otherwise the device cannot be switched back on.

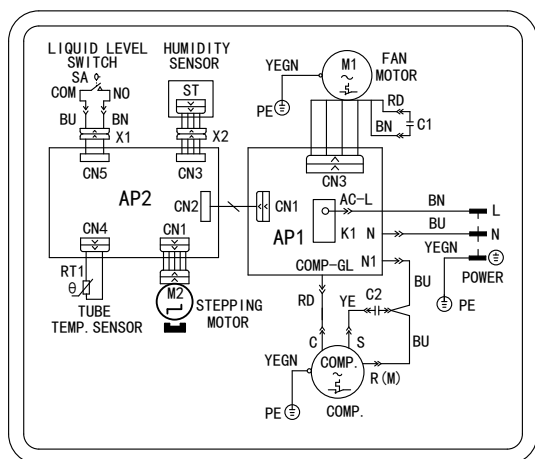
Technical annex

Technical data

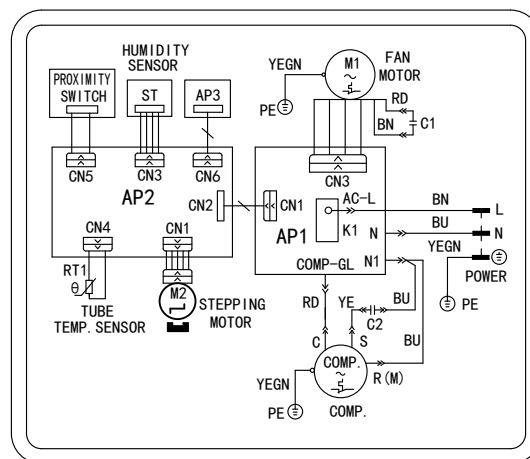
Parameter	Value	
Model	TTK 68 E	TTK 69 E
Max. dehumidification performance	20 l / 24 h	20 l / 24 h
Dehumidification performance @ 30 °C and 80 % RH	18.7 l / 24 h	18.7 l / 24 h
Air volume [m³/h]	105 - 115 - 130	105 - 115 - 130
Ambient temperature	5 °C to 35 °C	5 °C to 35 °C
Operating range relative humidity	30 % to 80 % RH	30 % to 80 % RH
Mains connection	1/N/PE~230 V / 50 Hz	1/N/PE~230 V / 50 Hz
Power consumption	340 W	350 W
Nominal current	1.9 A	1.9 A
Refrigerant	R134a	R134a
Amount of refrigerant	185 g	185 g
Condensation tank	4 l	4 l
Sound pressure level	43 dB(A)	43 dB(A)
Dimensions (length x width x height)	246 x 367 x 582 (mm)	210 x 345 x 575 (mm)
Minimum distance to walls and other objects	above: 50 cm minimum in front: 20 cm minimum behind: 20 cm minimum	above: 50 cm minimum in front: 20 cm minimum behind: 20 cm minimum
Weight	15 kg	14 kg

Wiring diagram

TTK 68 E



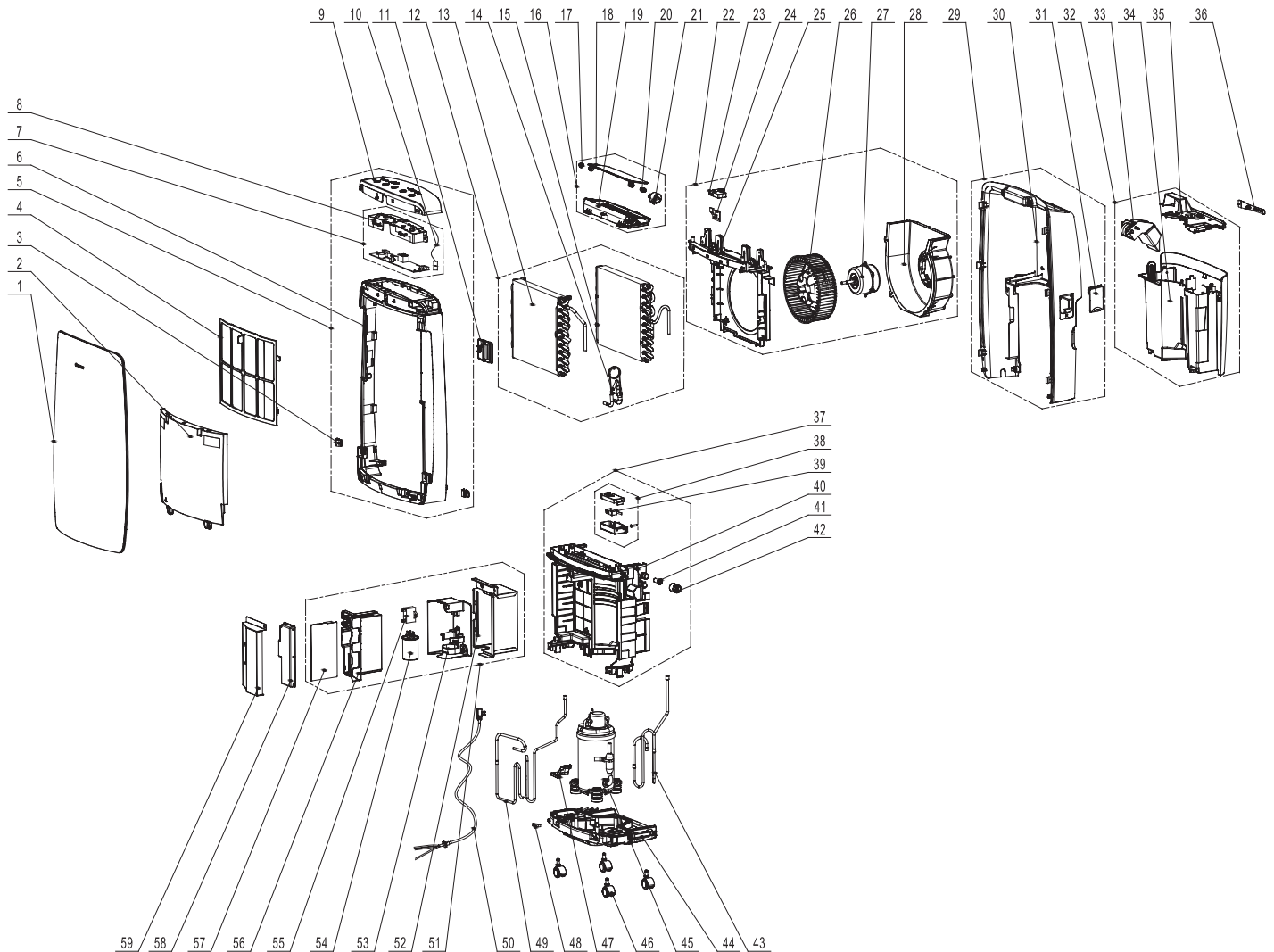
TTK 69 E



Exploded assembly drawing TTK 68 E

Note!

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



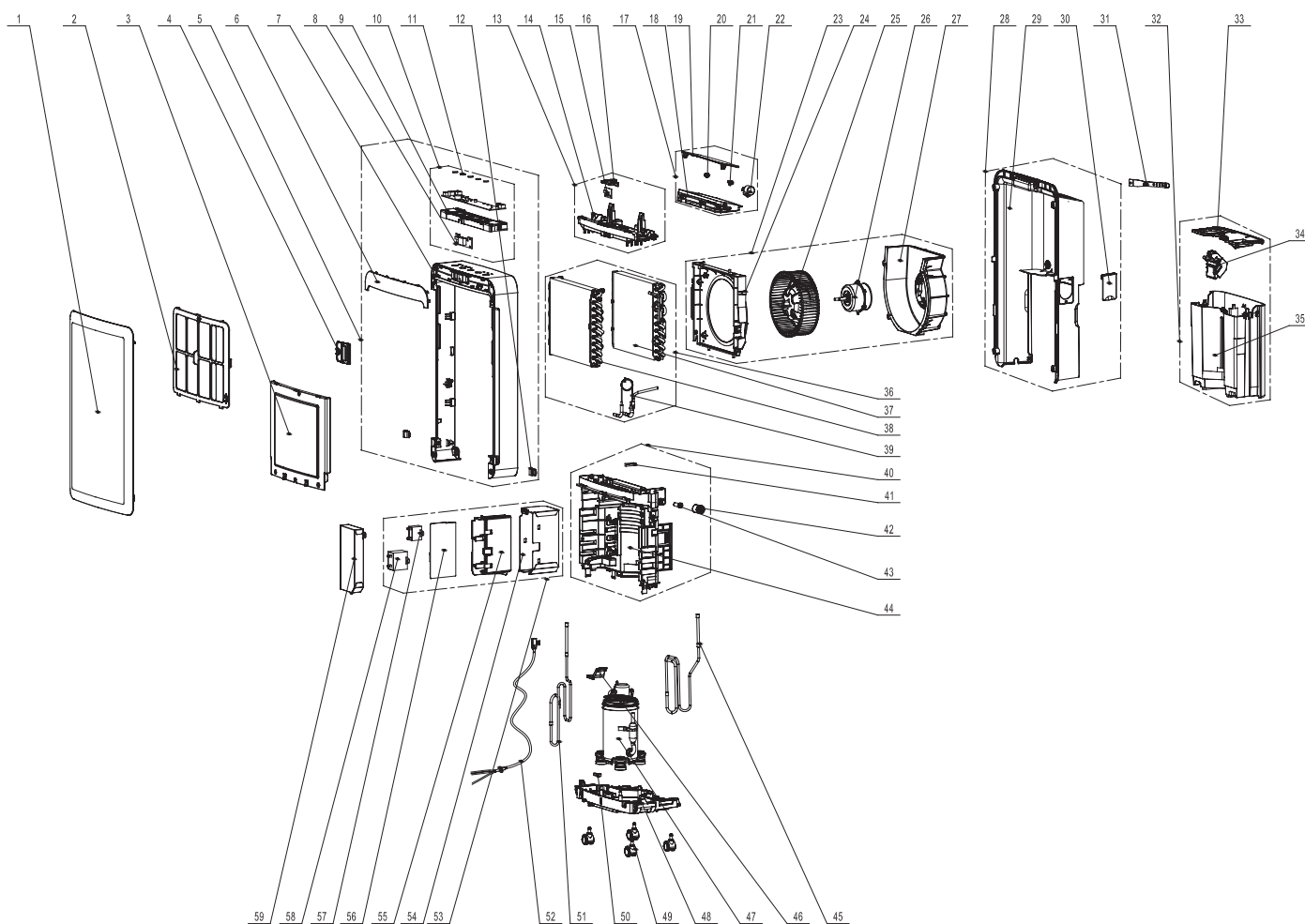
Spare parts list TTK 68 E

No.	Spare part	No.	Spare part	No.	Spare part
1	Front Panel	21	Stepping Motor	41	Rubber Plug
2	Lower Sealplate	22	Air Flue Assy	42	Cover of drainage hole
3	Front Panel Clip	23	Cover Plate (Temperature & Humidity Sensor)	43	Inhalation Tube Sub-assy
4	Filter Sub-Assay	24	Detecting Plate	44	Chassis Sub-Assy
5	Front Case Assy	25	Cover Plate	45	Compressor and Fittings
6	Front Case Sub-assy	26	Centrifugal Fan	46	Castor
7	Display Board	27	Fan Motor	47	Baffle Plate
8	Display Box	28	Propeller Housing	48	Cable Clamp
9	Top Cover	29	Rear Cover Assy	49	Discharge Tube Sub-Assy
10	Temperature Sensor	30	Rear Cover	50	Power Cord
11	Baffle Plate	31	Cover of drainage hole	51	Electric Box Assy
12	Heat-exchange Equipment	32	Water Tank Assy	52	Electric Box Sub-Assy
13	Evaporator Sub-Assy	33	Float Meter Sub-Assy	53	Insatallation Box
14	Capillary Sub-Assy	34	Water Tank	54	Capacitor CBB65
15	Condenser Sub-Assy	35	Water Tank Cover	55	Capacitor CBB61S
16	Front Grill Assy	36	Tieline of Power Cord	56	Electric Controller Box
17	Air Guide Bushing	37	Water Tray Assy	57	Main Board
18	Guide Louver	38	Liquid Level Switch Sub-assy	58	Seal Cover
19	Front Grill	39	Liquid Level Switch	59	Electric Box Cover
20	Crank	40	Water Tray		

Exploded assembly drawing TTK 69 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 69 E

No.	Spare part	No.	Spare part	No.	Spare part
1	Front Panel	21	Crank	41	Proximity Switch
2	Filter Sub-Assy	22	Stepping Motor	42	Cover of drainage hole
3	Lower Sealplate	23	Air Flue Assy	43	Rubber Plug
4	Baffle Plate	24	Diversion Circle	44	Water Tray
5	Front Case Assy	25	Centrifugal Fan	45	Discharge Tube Sub-Assy
6	Light Penetrating Board	26	Fan Motor	46	Baffle Plate
7	Front Case	27	Propeller Housing	47	Compressor and Fittings
8	PCB	28	Rear Cover Assy	48	Chassis Sub-Assy
9	Display Box	29	Rear Cover	49	Castor
10	Display Board	30	Cover of drainage hole	50	Cable Clamp
11	Button	31	Tieline of Power Cord	51	Inhalation Tube Sub-assy
12	Front Panel Clip	32	Water Tank Assy	52	Power Cord
13	Cover Plate Assy	33	Water Tank Cover	53	Electric Box Assy
14	Cover Plate	34	Float Meter Sub-Assy	54	Electric Box
15	Detecting Plate	35	Water Tank	55	Insatallation Box(Main Board)
16	Baffle Plate (Temperature & Humidity Sensor)	36	Heat-exchange Equipment	56	Main Board
17	Front Grill Sub-assy	37	Condenser Sub-Assy	57	Capacitor
18	Front Grill	38	Evaporator Sub-Assy	58	Capacitor CBB61
19	Guide Louver	39	Capillary Sub-Assy	59	Electric Box Cover
20	Air Guide Bushing	40	Water Tray Assy		

Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE). At the end of its life, please dispose of this device according to the valid legal requirements.

The device uses an environmentally and ozone-neutral cooling agent (see Technical Data).

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

Declaration of conformity

in accordance with the EC Low Voltage Directive 2006/95/EC and the EC Directive 2004/108/EC about electromagnetic compatibility.

Herewith, we declare that the device TTK 68 E / TTK 69 E was developed, constructed and produced in compliance with the named EC directives.

Applied standards:

EN 60335-1:2012

EN 60335-2-40:2003 + A11:2014 + A12:2005 + A1:2006 + A2:2009 + A13:2012

EN 62233:2008

The **CE** marking is found on the rear of the device.

Manufacturer:

Trotec GmbH & Co. KG

Grebbeener Straße 7

D-52525 Heinsberg

Phone: +49 2452 962-400

Fax: +49 2452 962-200

E-mail: info@trotec.com

Heinsberg, 01.09.2015



Detlef von der Lieck

Managing Director

Trotec GmbH & Co. KG

Grebbener Str. 7
D-52525 Heinsberg

☎ +49 2452 962-400

☎ +49 2452 962-200

info@trotec.com

www.trotec.com