# TTK QUBE



# EN

ORIGINAL INSTRUCTIONS DEHUMIDIFIER

TRT-BA-TTK-QUBE-TC2021-07-002-EN



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#### Notes regarding the instructions

#### **Symbols**



#### Danger

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



#### 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 instructions must be observed.

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



TTK Qube



https://hub.trotec.com/?id=44931

#### Safety

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



#### Warning

**Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.** 

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- 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 mains connection must correspond to the specifications in the Technical annex.
- 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 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!
- 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.
- 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 devices containing flammable refrigerants

- 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).
- 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 Qube in a room measuring more than 4 m<sup>2</sup>.
- Store the device in a way that no mechanical damage can occur.
- Please note that the connected pipelines must not contain any sources of ignition.
- No part of the cooling circuit may be perforated.
- Observe the maximum refrigerant capacity in the technical data.
- Do not drill through or burn.
- Do not use any means other than those recommended by the manufacturer for accelerating the defrosting process.
- Every person working with or at the refrigerant circuit must be able to provide a certificate of qualification issued by a body accredited by the industry, demonstrating their competence in the safe use of refrigerants based on a procedure well-known in the industry.
- Service work may only be carried out in accordance with the manufacturer's specifications. If maintenance and repair work require the support of additional persons, the person trained in handling flammable refrigerants shall continuously supervise the work carried out.
- 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 airconditioning or by Trotec.

#### 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:
  - 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.

#### Foreseeable misuse

- 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.
- Do not make any unauthorised modifications, alterations or structural changes to the device.
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.

#### **Personnel qualifications**

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the 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

#### 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 Qube

#### WARNING • WARNUNG • ATTENTION

**DE** Das Gerät muss in einem Raum mit einer Grundfläche

- größer als 4 m<sup>2</sup> aufgestellt, betrieben und gelagert werden. EN Appliance shall be installed, operated and stored in a room
- with floor area larger than  $4 \text{ m}^2$ .
- **FR** L'appareil doit être installé, utilisé et entreposé dans une pièce avec une surface supérieure à 4 m<sup>2</sup>.



### Follow the manual

This symbol indicates that the operating manual must be observed.

#### 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.

dehumidifier TTK Qube

#### **Residual risks**



#### Danger

**Refrigerant 2,3,3,3-Tetrafluoropropene (R1234yf)!** 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.

P381 – Eliminate all ignition sources if safe to do so. P403 – 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!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



#### Warning

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



#### Warning

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



#### Warning

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

#### Note

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

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

#### Behaviour in the event of an emergency

- 1. Switch 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.

The device comes 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 device operate effectively even at temperatures below 15  $^{\circ}$ C.

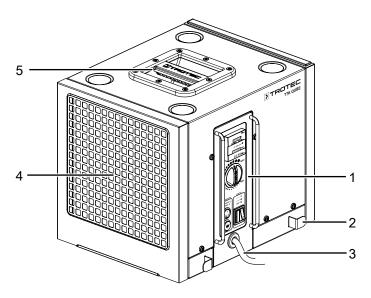
The comfort function allows the device to operate particularly quietly and thus makes it suitable for the use in inhabited surroundings.

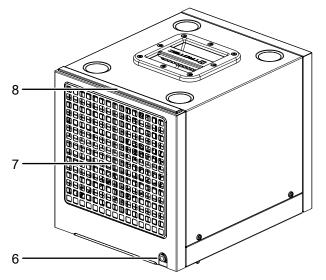
To discharge the condensate, the device is equipped with an integrated condensate pump with automatic switch-off function that is able to operate up to a height of max. 10 m.

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

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

#### **Device depiction**





No.	Designation
1	Control panel
2	Cable holder
3	Power cable
4	Air outlet
5	Carrying handle
6	Condensation drain hose connection
7	Air inlet
8	Air filter

#### **Transport and storage**

#### Note

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

Note the information regarding transport and storage of the device.

#### Transport

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

To make the device easier to transport, it is fitted with a transport 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.
- 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.
- Drain any possibly remaining condensate.

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

- Only store the device in a room measuring more than 4 m<sup>2</sup>.
- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- 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
- stackable: up to 4 devices may be stacked on top of one another
- Place no further devices or objects on top of the device to prevent it from being damaged.

#### Assembly and installation

#### **Scope of delivery**

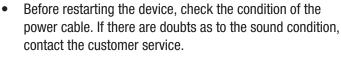
- 1 x Device
- 1 x Air filter
- 1 x Condensation drain hose, length: 5 m, diameter: 8 mm
- 1 x Manual

#### **Unpacking the device**

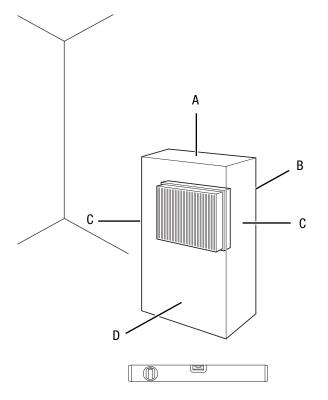
- 1. Open the cardboard box and take the device out.
- 2. Completely remove the packaging.
- 3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

#### Start-up

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



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



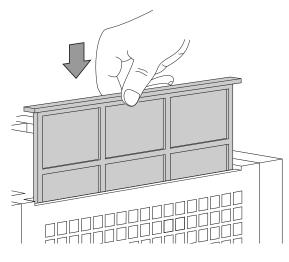
#### Inserting the air filter

#### Note

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

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

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

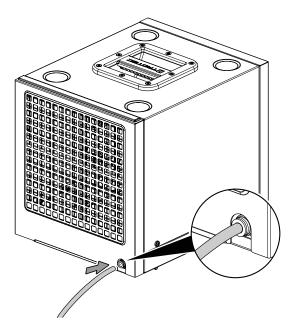


#### Positioning the condensation drain hose

#### Note

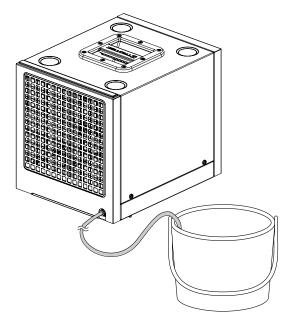
Do not use the device without the condensation drain hose connected!

- ✓ A suitable hose (diameter: 8 mm) is ready for use.
- ✓ The device is switched off.
- 1. Connect the condensation drain hose to the hose connection.

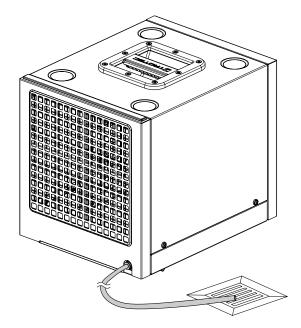


2. Make sure that the condensation drain hose is properly connected to the device and free of damage.

- 3. Depending on the application, position the end of the condensation drain hose as follows:
  - Place a sufficiently dimensioned container (at least 90 litres) near the device and insert the hose end. The device is equipped with a pump and is able to pump the water up to a height of 10 m. Check the filling level of the container regularly.



⇒ Completely unwind the hose and guide the hose end to a water drain. Avoid kinking or pinching the hose. The hose end must not lay in the water!



#### Connecting the power cable

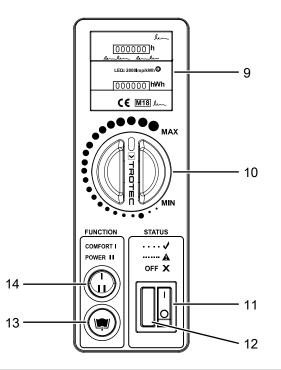
Insert the mains plug into a properly secured mains socket.

#### 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.

#### **Control panel**



No.	Designation	Meaning
9	Dual counter	Indication of operating hours and energy consumption
10	Rotary switch	Selection of relative room humidity (hygrostat)
11	Mains switch	Switching the device on and off; Is illuminated when the device is switched on
12	<i>Status</i> lamp	Flashes slowly during operation; Flashes quickly in the event of a fault
13	<i>Condensate outlet</i> button	Manual activation of the condensate pump Is illuminated if the condensate pump is in operation
14	<i>FUNCTION</i> flip switch	Selecting the comfort or power function

The device comes equipped with a dual counter. The dual counter registers both the operating hours and the energy consumption and is certified according to the MID (Measuring Instruments Directive 2004/22/EC). The kWh display is factory-calibrated and may be used for accounting purposes. Contact your Trotec customer service.

#### Switching the device on

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

- 1. Switch the device on by setting the mains switch (11) to position **I**.
- 2. Make sure that the mains switch button (11) is illuminated and that the *status* lamp (12) flashes slowly.
- 3. Adjust the room humidity level with the rotary switch (10).
- Once condensate forms, the condensate pump is activated automatically. To activate the condensate pump manually, press the *condensate outlet* button (13). When the condensate pump is activated, the *condensate outlet* button (13) is illuminated.

#### **Continuous operation**

In continuous operation mode, the device dehumidifies the air constantly, regardless of the humidity. To start continuous operation mode, set the rotary switch (10) to Max.

#### Adjusting the room humidity level

- 1. Set the desired humidity level via the rotary switch (10) of the hygrostat.
- 2. After approx. 24 hours, check the humidity with a thermohygrometer.
  - ⇒ If the air is too dry (insufficient humidity level), turn the rotary switch (10) slightly towards MIN.
  - ⇒ If the air is too humid, turn the rotary switch (10) slightly towards MAX.
- 3. Wait 24 hours every time you have changed the hygrostat setting and repeat the process until the desired room humidity is reached.
  - ⇒ Once the set room humidity is reached, the compressor and the fan of the device switch off automatically.
  - ⇒ If the set room humidity is exceeded, the compressor and the fan switch back on automatically. The room air is dehumidified.

#### **Comfort function**

The device operates particularly quietly in comfort mode. To activate the comfort function, set the FUNCTION flip switch (14) to I. To return to the power function, set the FUNCTION flip switch (14) to II.

#### Automatic defrost

At low ambient temperatures, ice may form at the evaporator during dehumidification. The device carries out an automatic defrost by means of the hot gas feed. Here, a hot cooling agent is led into the iced evaporator for its surfaces to defrost.

The hot gas automatic defrost system integrated in the device automatically switches on the defrost cycle at regular intervals.

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.

#### **Temperature limitation (overheating protection)**

The device comes with a temperature limitation. It serves to protect e.g. the compressor from overheating.

- Upper temperature limit: +35 °C +/- 2 °C ٠
- Lower temperature limit: -3 °C +/- 2 °C

If the ambient temperature exceeds or falls below these limits, the device automatically switches off the compressor; only the fan will keep running. This feature protects the device from overloading since high temperatures and high humidity levels expose the device to extreme stresses. Moreover, drying is no longer economical at such high temperatures and also poses dangers for the inventory of the room to be dried. Please note that the switch-off function works with a switch-on hysteresis of -2 °C.



#### Info

The compressor always starts with a delay. This protects the compressor and thus increases its lifetime. When you switch on the device, the compressor will switch on with a delay of approx. 3 min. This delay is also enabled in hygrostat operation. If the room humidity exceeds the setting of the selection switch, the compressor will only switch back on after a delay.

#### Shutdown



#### Warning of electrical voltage

- Do not touch the mains plug with wet or damp hands.
- Press the condensate outlet button (13) to drain the residual water.
- Switch the device off by setting the mains switch to position **0**.
- 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.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and storage chapter.

#### **Available accessories**



#### Warning

Only use accessories and additional equipment specified in the instructions.

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

Designation	Article number
Air filter for TTK Qube	7.160.000.014
Condensation drain hose	7.331.000.474

#### **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 room temperature. Observe the device's permissible operating range according to the technical data.

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

- 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 Trotec.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.
- Check whether the condensation drain hose is connected, connect it if necessary. If the condensation drain hose has already been connected, check it for tightness.

#### 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.
- Check whether the overheating protection of the compressor has tripped. Disconnect the device from the mains and let it cool down for approx. 10 minutes before reconnecting it.
- The device might carry out an automatic defrost. During automatic defrost, the device does not dehumidify.

### The device gets very warm, is loud or is losing performance:

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

### The device still does not operate correctly after these checks:

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

#### Maintenance

#### **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
Cleaning the condensate pump		Х				
Check air inlets and outlets for dirt and foreign objects and clean if necessary	Х			Х		
Clean the exterior		Х				Х
Visually check the inside of the device for dirt		X		Х		
Clean the inside with compressed air		Х				Х
Check air inlet grid and air filter for dirt and foreign objects and clean or replace if necessary	X		X			
Clean the air filter, replace if necessary		X			Х	
Check for damage	Х					
Check the attachment screws		Х				Х
Test run						Х

#### 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 Cleaning the condensate pump 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 Clean the inside with compressed air Check air inlet grid and air filter for dirt and foreign objects and clean or replace if necessary Clean the air filter, replace if necessary Check for damage Check the attachment screws Test run Remarks: 1. Date: ..... 2. Date: ..... 3. Date: ..... 4. Date: ..... Signature: ..... Signature: ...... Signature: ..... Signature: ..... 5. Date: ..... 6. Date: 7. Date: ..... 8. Date: .... Signature: ..... Signature: ......Signature: ..... Signature: ..... 10. Date: ..... 12. Date: ..... 9. Date: ..... . 11. Date: ..... Signature: .....Signature: ..... Signature: Signature: ..... 13. Date: ..... 14. Date: ..... 15. Date: ..... 16. Date: .....

Signature: .....

Signature: ......Signature: .....

Signature: .....

#### Activities required before starting maintenance



#### Warning of electrical voltage

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

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



#### Warning of electrical voltage

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

#### **Running capacitor**

Note

Replace the running capacitor after 10,000 operating hours!

#### **Refrigerant circuit**



#### Danger

#### **Refrigerant 2,3,3,3-Tetrafluoropropene (R1234yf)!** 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.

P381 – Eliminate all ignition sources if safe to do so. P403 – Store in a well-ventilated place.

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

#### Safety signs and labels on the device

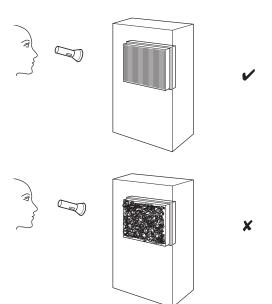
Check the safety signs and labels attached to the device at regular intervals. Replace illegible safety signs!

#### **Cleaning the housing**

Clean the housing with a soft, damp and lint-free cloth. 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.



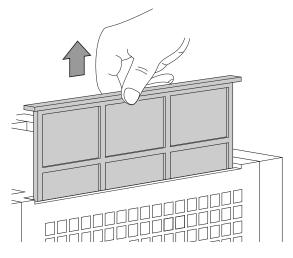
#### **Cleaning the air filter**

#### Note

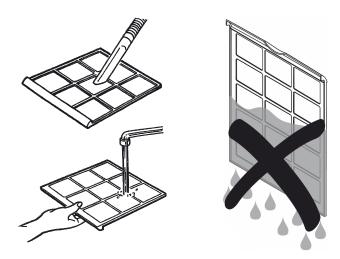
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

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.

#### Cleaning the inside with compressed air

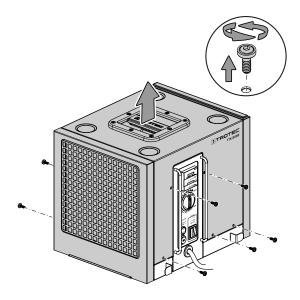


#### Warning

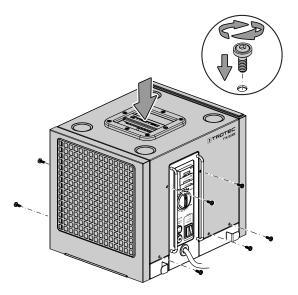
Risk of injury caused by ejected compressed air upon activation of the compressed air supply. Hold the compressed-air hose away from your body. Pointing the compressed-air hose at another person is prohibited.

The housing has to be removed in order to perform cleaning and maintenance tasks inside the device.

- ✓ The device is switched off and disconnected from the mains.
- 1. Loosen and remove the screws on both sides of the device. Keep the screws safe for later use.
- 2. Lift the housing off the base frame and the cooling system by the carrying handle.



- 3. Carefully set the housing aside.
- 4. Clean the interior of the device by means of compressed air.
- 5. Reassemble the housing on base frame and cooling system. Finally retighten all screws.



#### Activities required after maintenance

If you want to continue using the device:

• Reconnect the device to the mains.

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

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

#### **Technical annex**

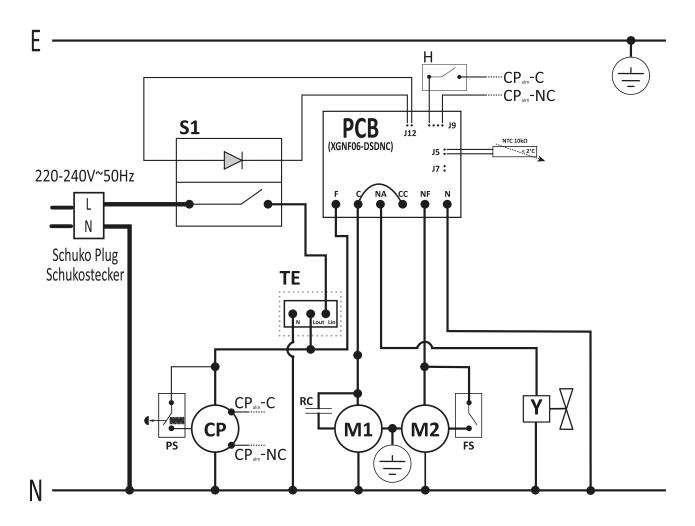
#### **Technical data**

Parameter	Value
Model	TTK Qube
Dehumidification performance, max.	20 I / 24 h
Operating range (temperature)	5 – 35 °C
Operating range (relative humidity)	50 % – 90 % RH
Max. permissible pressure	1.8 MPa
Pressure suction side	0.3 MPa
Pressure outlet side	1.6 MPa
Air volume flow	283 m³/h
Mains connection	220 – 240 V / 50 Hz
Power consumption, max.	362 W
Nominal current	1.7 A
Pump height condensate pump	10 m
Refrigerant	R1234yf
Amount of refrigerant	0.140 kg
GWP factor	4
CO <sub>2</sub> equivalent	0.00056 t
Sound pressure level LpA (1 m; complies with DIN 45635-01-KL3)	53 dB(A)
Dimensions (length x width x height)	315 x 382 x 340 mm
Minimum distance to walls and other objects	
A: top:	
B: rear:	
C: side:	
D: front:	50 cm
Weight	16 kg

### TROTEC

#### Wiring diagram

With operating hours counter and MID-compliant energy meter



- E Earthing / Erdung
- N Common Line / Neutralleiter
- L Line / Phase

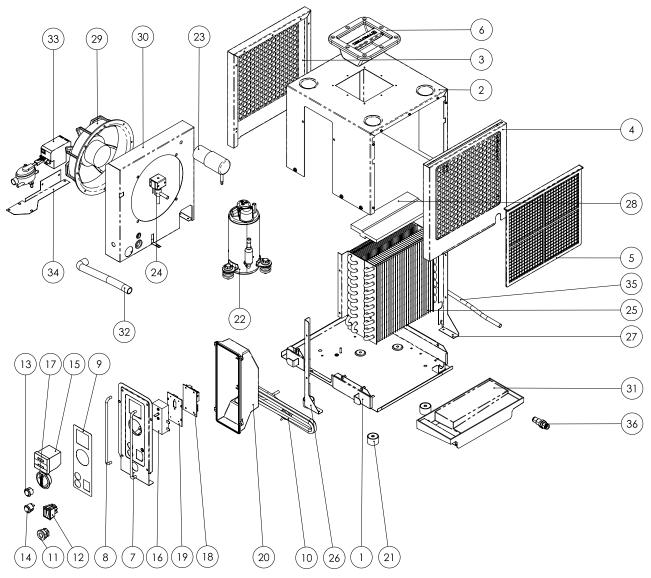
16

- S1 On-Off Switch + Status LED / An/Ausschalter + LED Betriebsanzeige
- H Humidistat / Hygrostat
- M1 Compressor / Kompressor
- M2 Fan Motor / Lüftermotor
- FS Fan Speed Switch / Schalter Lüftergeschwindigkeit
- Y Defrost Valve / Abtauventil
- RC Running Capacitor / Betriebskondensator
- TE Time + Energy Counter (Optional) / Dualzähler (Zusätzliche)
- **CP** Condensates Pump / Kondensatpumpe
- PS Water Pump Purge Switch / Schalter Kondensatpumpe

#### Exploded assembly drawing



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



#### List of spare parts for TTK Qube

No.	Spare part	No.	Spare part	No.	Spare part
1	Baseplate	13	Fan Speed Switch	25	Finned Pack Heat Exchanger
2	Housing	14	Condensates Pump Purge switch	26	Heat Exchanger Left Support
3	Air Outlet Grille	15	Hours + Energy Counter	27	Heat Exchanger Right Support
4	Air Inlet Grille	16	Humidistat	28	Insulating Foam Plate
5	Air Inlet Filter	17	Humidistat Knob	29	Fan
6	Plastic Grip	18	PCB	30	Fan plate
7	Control Panel	19	PCB Holder	31	Water Pan
8	Controls' Protection Bars	20	Controls Protection Box	32	Water Pan to Condensates Pump Hose
9	Controls' Sticker	21	Non-Marking Rubber Feet	33	Condensates Pump
10	Supply Cable	22	Compressor	34	Condensates Pump baseplate
11	Cable Retainer	23	Running Capacitor	35	Condensates Pump to Fitting Hose
12	I/0 Main Switch + Status LED	24	Defrost Valve	36	Condensates Outlet Fitting

#### **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. 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.

The device is operated with fluorinated greenhouse gas which can be dangerous for the environment and contribute to global warming when emitted to the atmosphere.

Further information is provided on the nameplate.

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

#### **Declaration of conformity**

The text below sets out the contents of the declaration of conformity. The signed declaration of conformity can be found at https://hub.trotec.com/?id=44931.

Declaration of conformity

in accordance with the EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A

Herewith, we – Trotec GmbH– declare that the machinery designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / Product: TTK Qube
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Product type: dehumidifier

Year of manufacture as of: 2021

#### **Relevant EU directives:**

- 2011/65/EU: 01/07/ 2011
- 2012/19/EU: 24/07/2012
- 2014/30/EU: 29/03/2014
- 2015/863/EU: 31/03/2015

#### Applied harmonised standards:

- EN 55014-1:2017
- EN 60335-2-40:2003/A11:2004
- EN 60335-2-40:2003/A12:2005
- EN 60335-2-40:2003/A1:2006
- EN 60335-2-40:2003/A2:2009
- EN 60335-2-40:2003/A13:2012
- EN 60335-2-40:2003/AC:2006
- EN 60335-2-40:2003/AC:2010
- EN 60335-2-40:2003/AC:2013

#### Applied national standards and technical specifications:

- Regulation (EC) 1907/2006
- EN 55014-2:2015
- EN 61000-3-3:2013/A1:2019
- EN 60335-1:2012/A1:2019
- EN 60335-1:2012/A2:2019
- EN 60335-1:2012/A14:2019
- IEC 60335-2-40:2018
- EN IEC 61000-3-2:2019

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Place and date of issue: Heinsberg, 04.01.2021

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