DH 120

EN

ORIGINAL INSTRUCTIONS
DEHUMIDIFIER



TROTEC

TRT-BA-DH120-TC230905TTRT02-004-EN

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Information on the use of these instructions

Symbols

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

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

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

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

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

DH 120

https://hub.trotec.com/?id=47430

Safety

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

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

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in an aggressive atmosphere.
- Place the device in an upright and stable position on horizontal and stable ground.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Do not cover the device during operation.
- Do not sit on the device.
- This appliance is not a toy. Keep away from children and animals.
- Check the device occasionally 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.
- 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.
- Insert the mains plug into a properly fused mains socket.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the power cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Disconnect the power cable from the mains socket when the device is not in use.
- Observe the storage and operating conditions (see Technical data).
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that the suction side is kept free of dirt and loose objects.
- Never insert any objects or limbs into the device.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Only transport the device in an upright position with an emptied condensation tank/tray or drain hose.
- Discharge the collected condensate before transport and storage. Do not drink it. Health hazard!
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.
- Only install the device in compliance with the national installation regulations.
- Only install, operate and store the device in a room measuring more than 4 m^2.
- Store the device in a way that no mechanical damage can occur.
- The entire refrigerant circuit is a maintenance-free, hermetically sealed system and may only be maintained or repaired by specialist companies for cooling and air-conditioning or by the manufacturer.

Safety instructions for servicing the refrigerant circuit:

- 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.
- Do not use any means other than those recommended by the manufacturer for accelerating the defrosting process.
- Do not drill into or burn.
- Please note that the refrigerant is odourless.
- Observe the national regulations for gas installations.
- Observe the maximum refrigerant capacity in the technical data.

Intended use

Only use the device as a stationary industrial dryer for drying and dehumidifying room air whilst adhering to the technical data and safety instructions.

Intended use comprises:

- drying and dehumidifying:
  - production plants, underground rooms
  - store rooms, archives, laboratories, swimming pool halls, clothes drying rooms
  - rooms and areas after water damage caused by burst pipes or flooding
- keeping dry of:
  - instruments, devices, files
  - moisture-sensitive goods, loads, etc.

Observe the local provisions when installing and using the device in the previously mentioned environments (e.g. indoor swimming pools).

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

Reasonably foreseeable misuse

- Do not place any objects, e.g. clothing, on the device.
- Do not use the device out of doors.
- Do not use the device in the immediate vicinity of swimming pools, bathtubs and showers.
- Never immerse the device in water.
- Never use a defective connection cable or a defective or incorrectly connected cable.
- Do not make any unauthorised modifications, alterations or structural changes to the device.

Personnel qualification

People who use this device must:

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

Installation work which requires the housing to be opened must only be carried out by plumbers as well as by specialists in cooling and air-conditioning and by qualified electricians.

Installation and maintenance work on the electrical system must only be carried out by a qualified electrician.

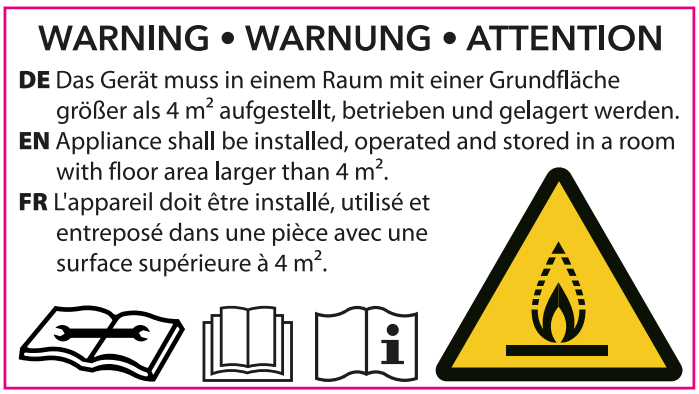
Installation and maintenance work on the cooling and air-conditioning circuit must only be carried out by a specialist in cooling and air-conditioning.

Safety signs and labels on the device

Notice

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

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



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

Refrigerant R454C

H221 – Flammable gas.
H280 – Contains gas under pressure; may explode if heated.
P377 – Leaking gas fire; Do not extinguish, unless leak can be stopped safely.
P381 – Eliminate all ignition sources if safe to do so.
P410 and P403 – Protect from sunlight. Store in a well-ventilated place.

Warning of electrical voltage

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

Warning of electrical voltage

Risk of electric shock!
Risk of an electric shock if the device comes into contact with water!
Do not use this device in immediate vicinity to showers or swimming pools!
Never immerse the device in water!

Warning of electrical voltage

Risk of electric shock!
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

A falling device can cause injuries! **Always transport the device with the help of other persons.** Never stand below the device when it is suspended. Ensure adequate stability of the device's wall fixing.

Warning

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

Warning

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

Notice

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

Behaviour in the event of an emergency

1. Switch the device off.
2. Disconnect the device from the mains: Hold onto the mains plug while pulling the power cable out of the mains socket.
3. Do not reconnect a defective device to the mains.

Information about the device

Device description

The dehumidifiers of the DH series use the principle of condensation to automatically dehumidify rooms.

The refrigerant R454C is used inside the device for this purpose. The refrigerant R454C comes with a low GWP factor (Global Warning Potential) of 146 and an ODP (ozone depletion potential) of 0.

The fan draws damp room air through the air inlet, the evaporator and 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 frost. The dehumidified, cooled air is rewarmed at the condenser and blown out at a temperature of approx. 5 °C above room temperature (see "Condensation principle" illustration in the annex).

The drier air, thus conditioned, mixes with the air in the room via the air outlet. 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 pre-assembled condensation drain hose and is discharged from the device.

The device features a hygrostat with control dial for setting the desired humidity level. The ventilation speed can also be set.

The device can reduce the relative humidity of a room to approx. 40 %.

A good comfort level for people using a room for normal use is between 50 % and 65 % relative humidity.

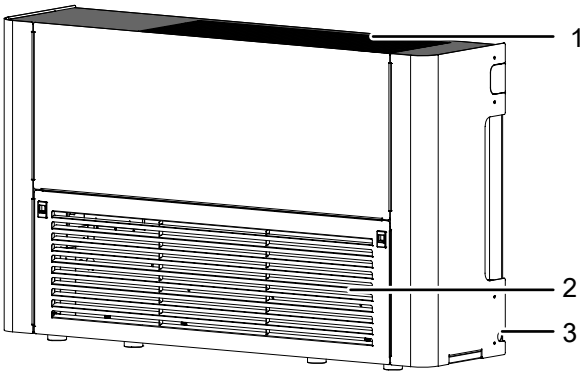
Because of the heat radiation generated during operation, the room temperature may rise slightly.

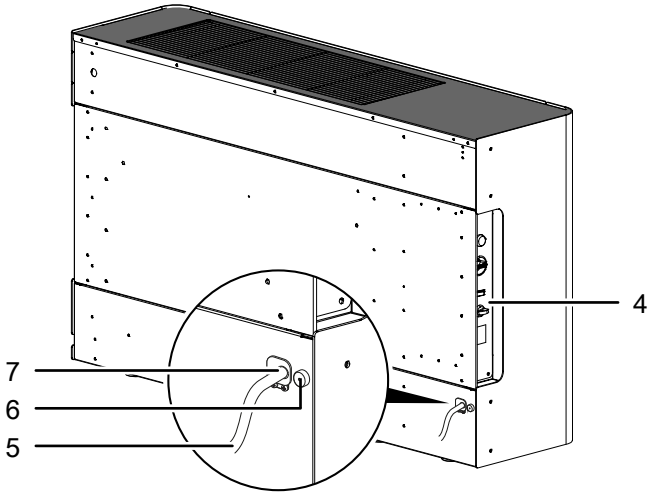
A high humidity level in the air (starting at 70 % RH) provides the perfect breeding ground for mould. However, the room air must not be too dry either (< 40 % RH). Materials such as leather or rubber become porous, and wood becomes brittle and fissured.

The device is protected against dripping water (IPX2).

An optional hot water heating coil can be installed in the device. A wired remote control can optionally be connected.

Device depiction





No.	Designation
1	Air outlet
2	Air inlet with air filter
3	Hose connector for condensation drain hose
4	Control panel
5	Mains connection cable
6	Feed-through for wired remote control (connection inside the device)
7	Mains connection cable feed-through

Transport and storage

Notice

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

Transport

Always utilize the help of two other persons to transport the DH 120. Do not try to transport the device without the help of another person. To lift the device, use a forklift or an elevating truck as appropriate.

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

Before transporting the device, observe the following:

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Drain the remaining condensate from the device.
- 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.
- If the device has been moved, allow it to stand for 30 minutes before using it again so that the lubricating oil can flow back into the compressor. Acting contrary might lead to compressor damage and a malfunctioning device.

Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device.
- 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.
- Only position the device in rooms where there is no source of ignition (e.g. open flames, an active gas appliance or an electric heater).
- Store the device in a dry location and protected from frost and heat.
- If required, use a cover to protect the device from invasive dust.
- Place no further devices or objects on top of the device to prevent it from being damaged.

Assembly and start-up

Scope of delivery

- 1 x Device
- 1 x Condensation drain hose, 16 mm diameter
- 1 x Manual
- 1 x Heating coil (optional)

Unpacking the device

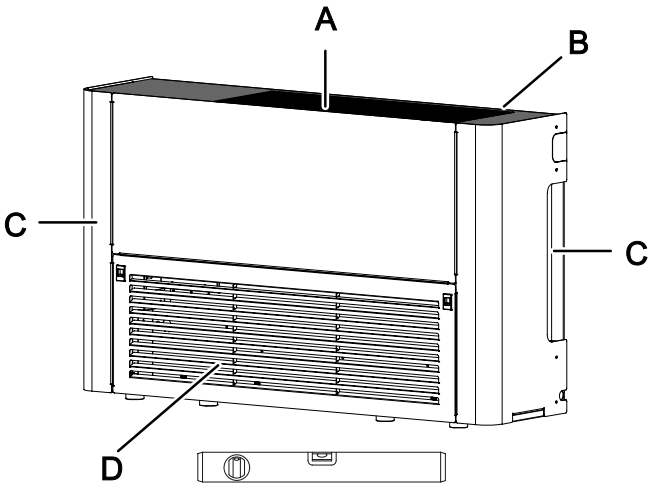
1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable (power cable must be purchased separately). Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Start-up

Notes on commissioning:

- When positioning the device, observe the minimum distance from adjacent walls or other objects as described in the Technical data chapter.
- Always utilize the help of two other persons to position the device. Do not try to position the device on your own. To lift the device, use a forklift or an elevating truck as appropriate.
- When positioning the device, keep a sufficient distance to heat sources.
- Only put up the device on firm ground.
- Place the device in an upright and stable position on a horizontal and stable surface.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Only position the device in rooms where potentially leaking refrigerant cannot accumulate.
- When positioning the device, secure the device locally with an RCD (Residual Current Device) which complies with the appropriate regulations.
- Make sure that no curtains or other objects interfere with the air flow.
- Before restarting the device, check the condition of the mains plug and power cable. Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the power cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!

- Before restarting the device, check the condition of the filter. If the filter is dirty or damaged, replace the filter (see Air filter replacement in the Maintenance chapter).



Electrical connection (voltage supply)

Notice

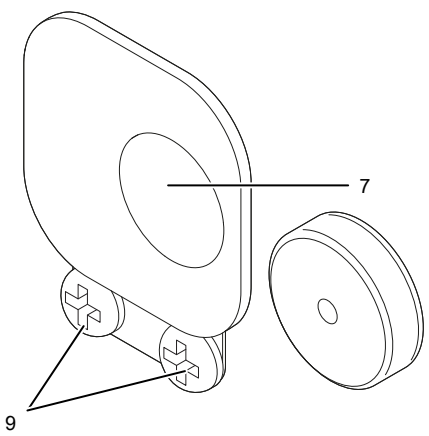
A short piece of cable is attached to the device upon delivery. Do not use this short piece of cable; remove it and dispose of it properly! It is only used for testing at the factory and is not intended to be used by the end customer!

A power cable for connection to the mains is not supplied. Observe the country-specific regulations and the technical data in the annex when purchasing a separate power cable with mains plug. The mains connection cable must be connected by a qualified electrician.

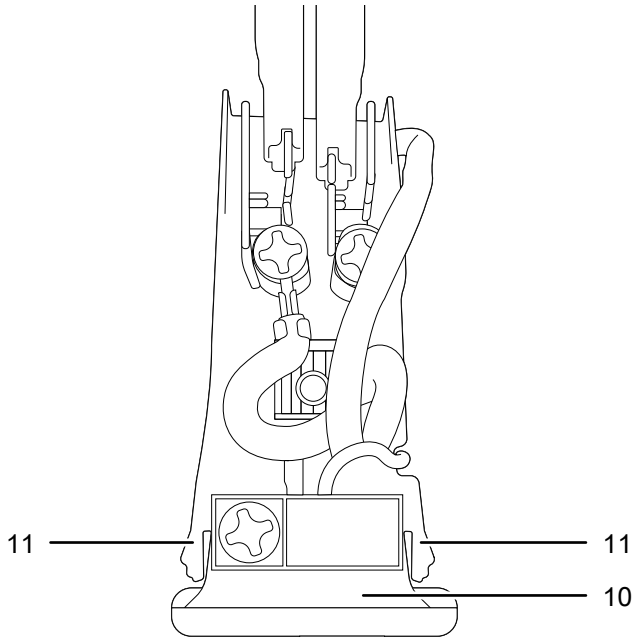
✓ Observe the country-specific specifications when connecting the mains connection cable.

✓ Make sure that no current is flowing through the mains connection cable to be connected.

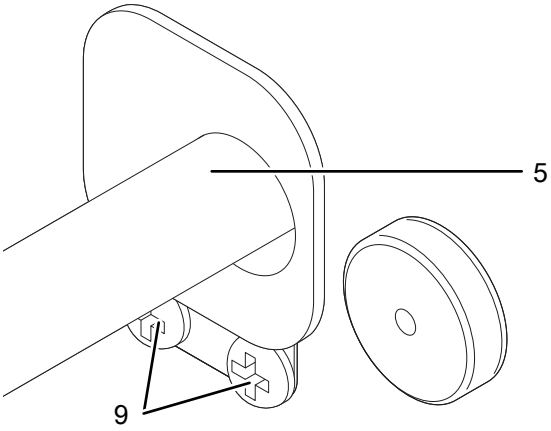
1. Loosen the two slotted screws (9) at the mains connection cable feed-through (7).



2. Pull the mains connection (10) out of the feed-through (7) and use a tool (e.g. a screwdriver) to push the two clamping tabs (11) between the housing and the mains connection inwards.



3. Wire the mains connection (10) according to your country-specific specifications.
4. Insert the mains connection with the mains connection cable (5) into the feed-through and tighten the connection using the two slotted screws.



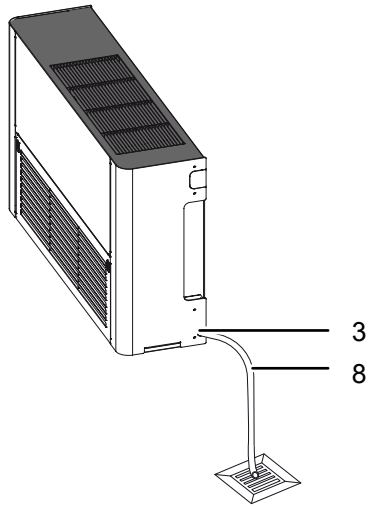
Installing the condensation drain hose

Notice

The device is designed to allow water that it collects during the dehumidification process to gravity drain into a permanent drain. The drain must be situated below and within reasonable range of the device. The device can optionally be operated with an external condensate pump. It can be obtained from the manufacturer under the article number 6.100.000.019.

✓ The condensation drain hose shows no signs of damage.

1. Connect the condensation drain hose (8) to the device's hose connection (3).
2. Position the end of the condensation drain hose (8) near a water drain. For larger distances, a longer hose of the same type (16 mm diameter) can also be used.



3. Regularly check the condensation drain hose for obstructions or kinks.

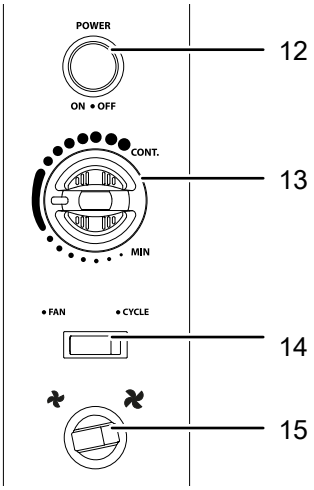
Connecting the power cable

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

Operation

- After being switched on, the device operates fully automatically.
- If the ventilation flip switch (14) is set to *Fan*, the fan runs continuously, even if the compressor is switched off. If the ventilation flip switch (14) is set to *Cycle*, the fan only runs if the compressor is running.
- If the device is equipped with a heating coil, the ventilation flip switch (14) must not be set to *Cycle*.
- Avoid open doors and windows.

Operating elements



No.	Designation	Meaning
12	Power button	Switching the device on and off
13	Hygrostat control dial	Setting the desired humidity level
14	Ventilation flip switch	Changing between the settings *Fan* (continuous ventilation operation) and *Cycle* (compressor-dependent ventilation operation)
15	Ventilation selector switch with operating status light	Setting the desired fan speed Operating status light indicates if there is a status message (see Errors and faults chapter)

Switching the device on

1. Press the power button (12).
   ⇨ The operating status light of the ventilation selector switch (15) flashes at regular intervals.
2. Make sure that the condensation drain hose has been properly laid and connected. Do not create tripping hazards.
3. Make sure that the condensation drain hose is neither kinked nor jammed and that there are no objects on the condensation drain hose.
4. Make sure that the condensate can run off properly.

Regulating the humidity level

Set the desired humidity level via the hygrostat control dial (13). The horizontal position of the hygrostat control dial (13) is selected at the beginning and represents the basic setting (medium humidity value).

1. Turn the hygrostat control dial (13) clockwise to reduce the humidity level.
2. Turn the hygrostat control dial (13) counter-clockwise to increase the humidity level.

Setting the fan speed

- Turn the ventilation selector switch (15) to the icon ✣ to set a medium fan speed.
- Turn the ventilation selector switch (15) to the icon ✣ to select a high fan speed.

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 for damages.
- Check the on-site fusing.
- Check the preselected humidity level at the hygrostat's control dial. The humidity in the room must be above the selected range. Reduce the preselected desired humidity level.
- Have the electrics checked by a specialist company for cooling and air-conditioning or by the manufacturer.

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

- Check the condensation hose for proper fit.
- Check the room temperature. Observe the device's permissible operating range according to the technical data.
- Check whether the actual humidity level is within the device's operating range (see Technical data).
- Check the preselected humidity level at the hygrostat's control dial. The humidity level in the room where the device is positioned must be higher than the desired humidity level set. Reduce the preselected desired humidity level.

The device is loud or vibrates:

- Check whether the device is mounted horizontally.
- Check the inside of the device for dirt. Clean the interior of the device if necessary.

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

- Check the air inlet and air filter for dirt. Remove external dirt.
- Check the air inlet for dirt. Remove external dirt.
- Check the inside of the device for dirt. Clean the interior of the device if necessary.

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 the manufacturer for repair.

Status messages

Under normal conditions, when the device is dehumidifying, the operating status light of the ventilation selector switch (15) flashes slowly at regular intervals.

When humidity levels have reached the hygrostat setpoint the status light will flash quickly.

Status of the operating light	Cause	Remedy
Operating status light is permanently illuminated without flashing	NTC resistor and/or humidity sensor are defective	Switch the device off and contact the customer service.
Device is switched on and operating status light does not light up	No power to device or hardware fault.	Check that the power supply to the device is switched on. If so, switch the device off and contact the customer service.
Operating status light flashes quickly but humidity in room is higher than required.	Hygrostat is incorrectly set to achieve required humidity or the device is timing its next compressor start (3 minutes).	See Operation chapter for hygrostat adjustment.
Operating status light flashes irregularly	Ambient temperature is outside the permissible range	Switch off the device and make sure that the device is only operated within the permissible operating temperature range (see technical data and temperature operating range diagram).
	Pressure of the refrigerant circuit is outside the permissible range	Switch off the device and restart it. Should the problem persist, please contact the customer service.

Maintenance

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 4 weeks	at least every 2 months	at least every 6 months	at least annually
Check air inlets and outlets for dirt and foreign objects and clean if necessary	X		X			
Clean the exterior		X				X
Visually inspect the inside of the device for dirt		X				X
Check for damage	X					X
Check the attachment screws		X				X
Test run						X
Replace the air filter					X	
Replace air filter (in case of a high dust and/or soot pollution)				X		
Empty the optional condensate pump, condensation tray and/or condenser dryer		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 for damage																
Check the attachment screws																
Replace the air filter																
Replace air filter (in case of a high dust and/or soot pollution)																
Check the optional condensate pump and tank, and clean if necessary																
Test run																
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. Hold onto the mains plug while pulling the power cable out of the mains socket.

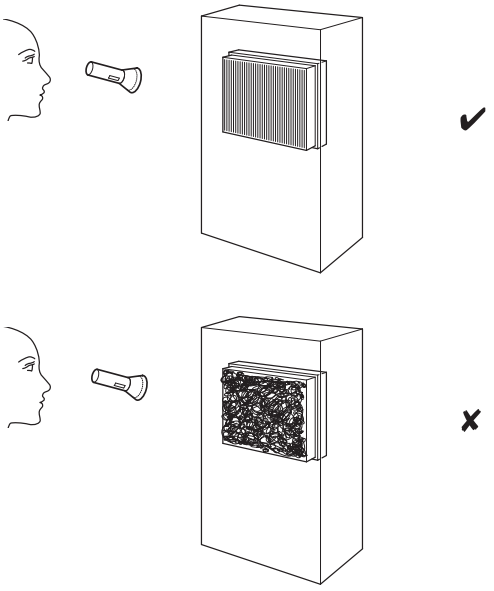
Warning of electrical voltage
Maintenance tasks at the electrical equipment or the air-conditioning technology must only be carried out by specialist companies for cooling and air-conditioning or by the manufacturer.

Cleaning the housing

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

Visual inspection of the inside of the device for dirt

1. Remove the air filter.
2. Use a torch to illuminate the openings of the device.
3. Check the inside of the device for dirt.
4. Put the air filter back in.



Cleaning the inside of the device

Perform this activity at least once a year.

1. Remove the housing.
2. Remove heavy soiling on the inside of the device. If necessary, clean the interior of the device using compressed air or lukewarm soapsuds.
3. Put the housing back on the device.

Refrigerant circuit

Danger
Refrigerant R454C
H221 – Flammable gas.
H280 – Contains gas under pressure; may explode if heated.
P377 – Leaking gas fire; Do not extinguish, unless leak can be stopped safely.
P381 – Eliminate all ignition sources if safe to do so.
P410 and P403 – Protect from sunlight. Store in a well-ventilated place.

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

Air filter replacement

Perform this activity every 6 months. In case of a high dust and/or soot pollution the air filter has to be replaced after 2 months at the latest. Regularly inspect the filter condition.

Notice

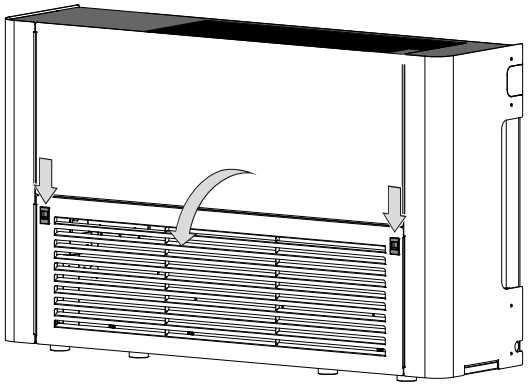
Make sure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

Notice

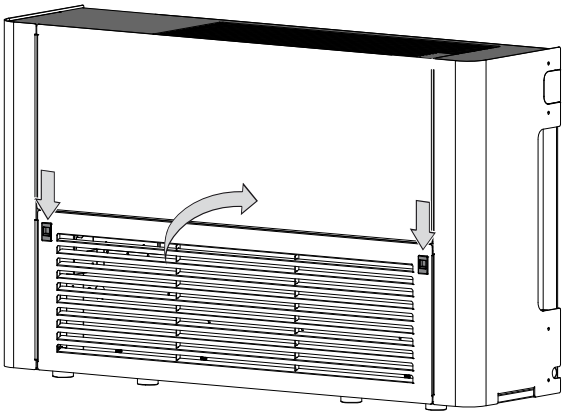
Do not operate the device without an air filter inserted into the air inlet!
Without the air filter, the inside of the device will be heavily contaminated. This can reduce the performance and result in damage to the device.

Please proceed as follows to replace the filter:

1. Remove the air inlet from the device.



2. Remove the old air filter from the device and dispose of the air filter according to the national regulations.
3. Insert a new air filter into the device.
4. Reinsert the air inlet into the device.



Technical annex

Technical data

Parameter	DH 120
Dehumidification performance	see diagram for dehumidification performance
Mains connection	220–240 V ~50 Hz
Peak power input[1)]	2.562 kW
Peak current	11.6 A
Heat recovery[2)]	4.7 kW
Refrigerant	R454C
GWP factor	146
CO_2 equivalent	0.234 t
Amount of refrigerant	1.6 kg
Suction side pressure	0.6 MPa
Discharge side pressure	2.7 MPa
Max. pressure	3.0 MPa
Air volume (freely blowing)	1067/1463 m^3/h
Sound pressure level @ 1 m Low fan speed High fan speed	 51 dB (A) 56 dB (A)
Operating range temperature	5 °C to 40 °C, see temperature operating range diagram
Setting range relative humidity	40 % RH to 95 % RH
Max. permissible relative humidity	95 % RH
Weight	130 kg
Dimensions (length x width x height)	365 mm x 1410 mm x 860 mm
Condensation drain hose connection	5/8"
Type of protection	IPX2
Optional hot water heating coil	
Heating capacity at a hot water temperature of 55 °C/50 °C and 29 °C air temperature	8 kW
Water flow rate	23.3 l/m
Heating capacity at a hot water temperature of 80 °C/70 °C and 29 °C air temperature	15.9 kW
Pressure loss	45 kPA
Pipe connection size (diameter)	22 mm
Minimum distance to walls or other objects: A: top: B: bottom: C: side: D: front:	 1 m 0 m 0.5 m 0.5 m

1) Power input in kW at 35 °C/80 % RH

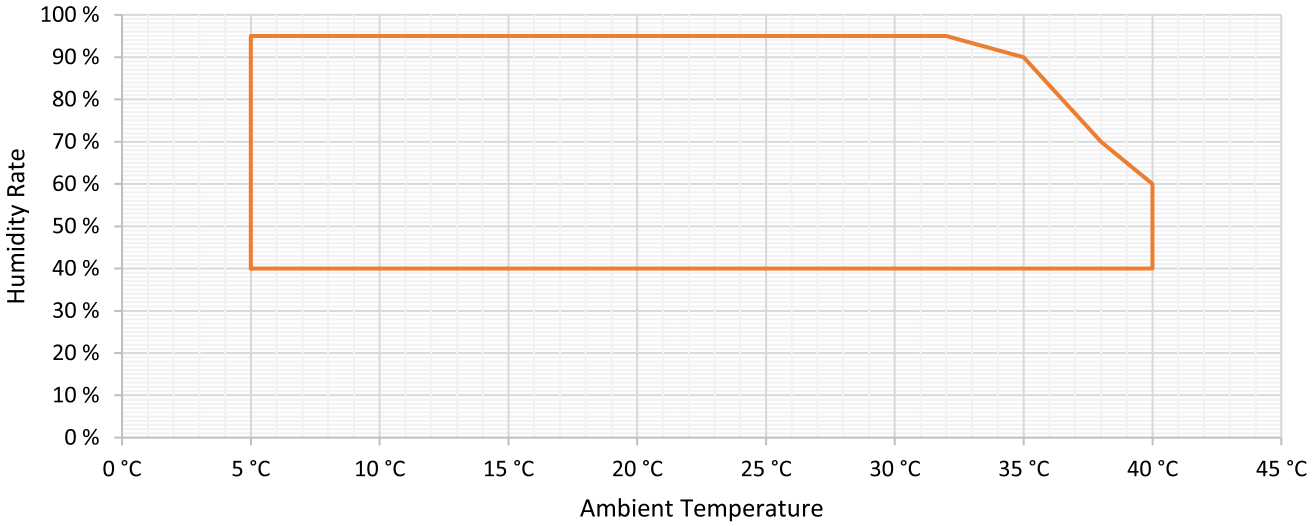
2) Heat emission in kW at 20 °C/60 % RH

Capacity and specific power*

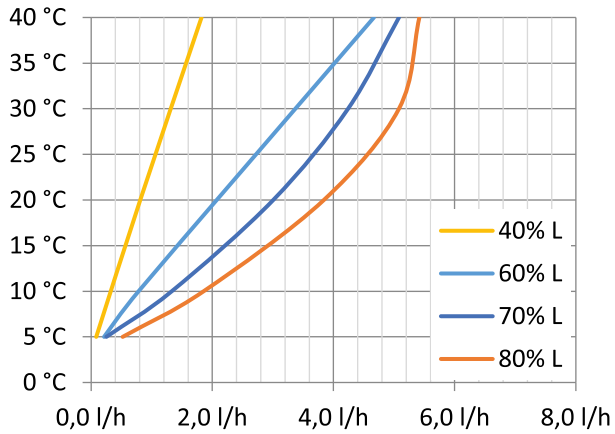
Ambient conditions	Capacity	Power consumption	Nominal current	Energy consumption
5 °C / 90 % RH	26.3 l/24 h	1.118 kW	5.1 A	1.022 kWh/l
10 °C / 80 % RH	59.2 l/24 h	1.289 kW	5.9 A	0.526 kWh/l
20 °C / 60 % RH	68.5 l/24 h	1.592 kW	7.2 A	0.558 kWh/l
30 °C / 60 % RH	99.6 l/24 h	2.132 kW	9.7 A	0.514 kWh/l
35 °C / 80 % RH	176.3 l/24 h	2.562 kW	11.6 A	0.349 kWh/l

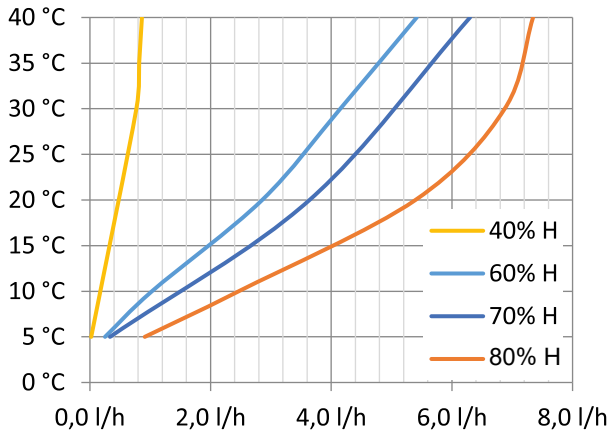
* except the optional heating coil

Operating range temperature

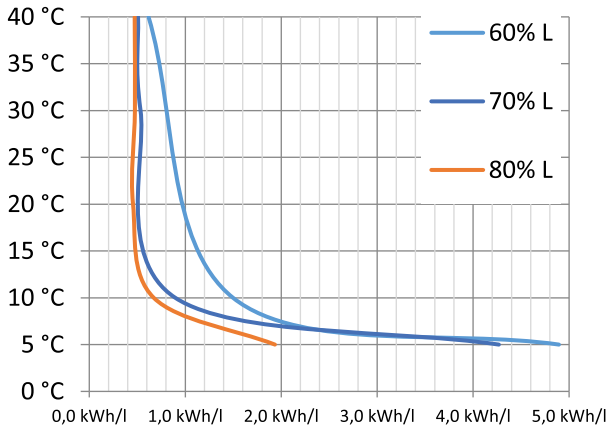


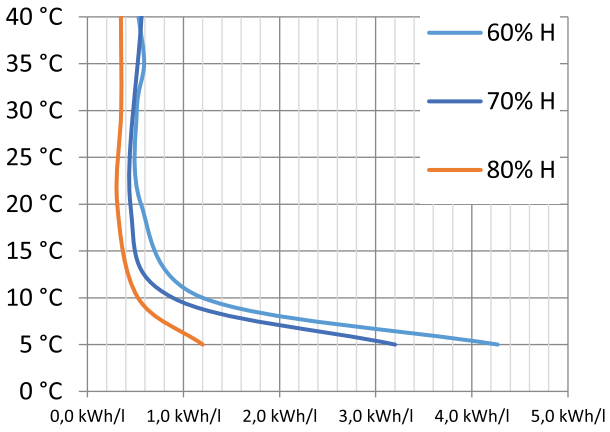
Dehumidification performance



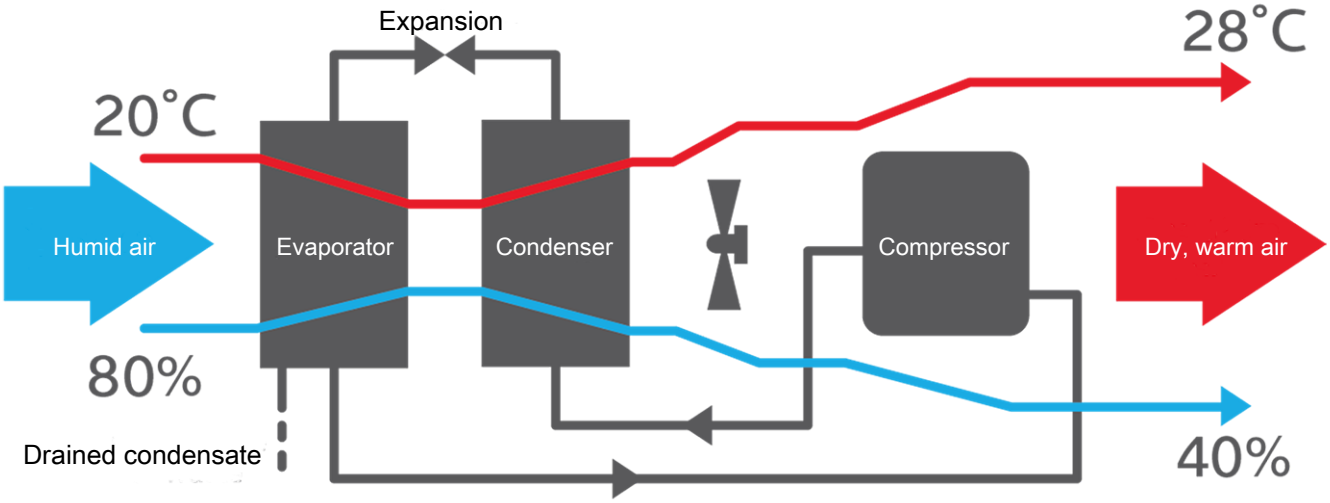


Energy factor

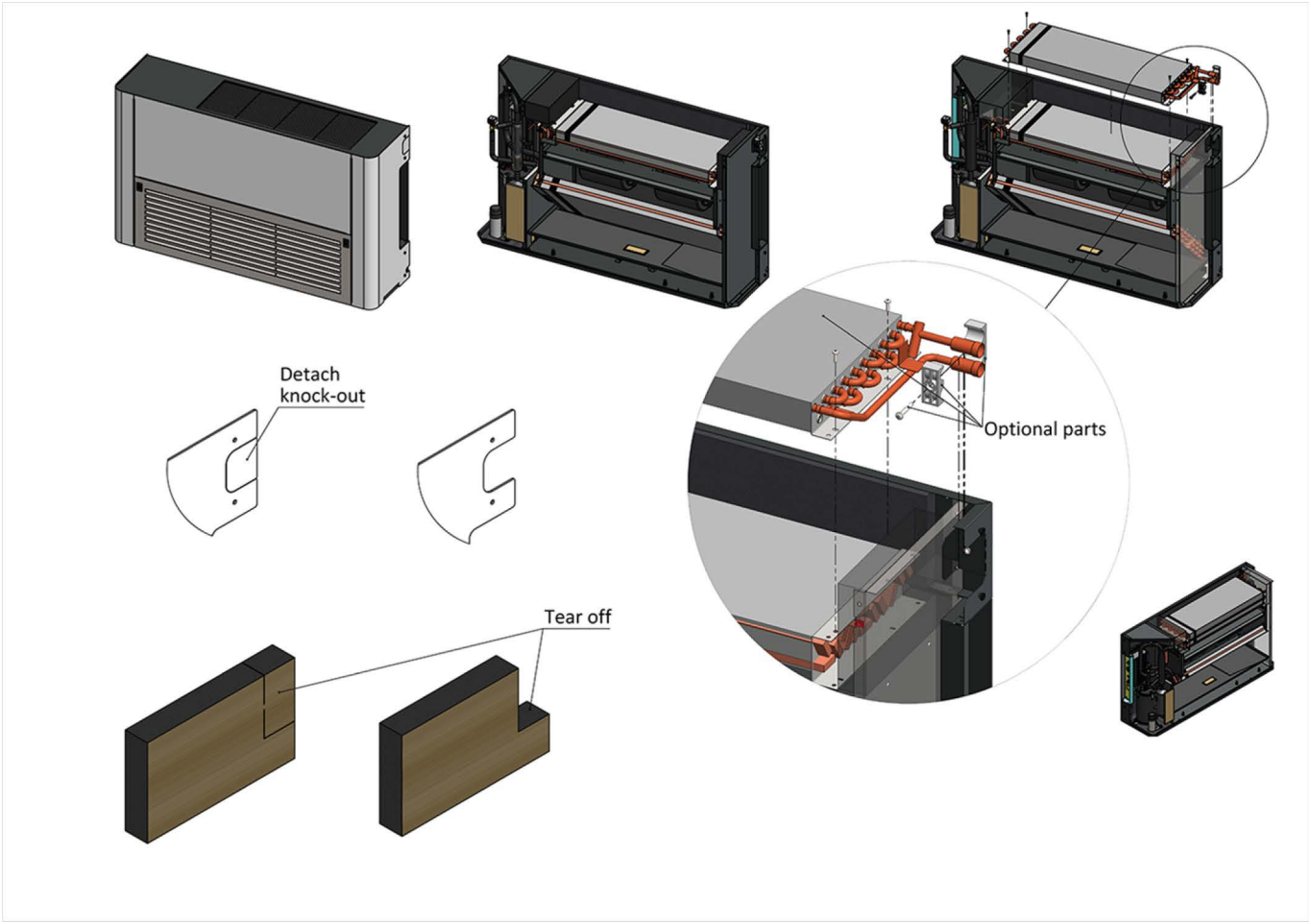




Condensation principle illustration



Hot water heating coil (optional) illustration



Installing the hot water heating coil (optional)

Notice

The device can optionally be supplied with a separate hot water heating coil. The hot water heating coil is not included in the standard scope of delivery, but can be ordered separately. The hot water heating coil may only be installed by a plumber. Please observe the supplied installation instructions for the hot water heating coil.

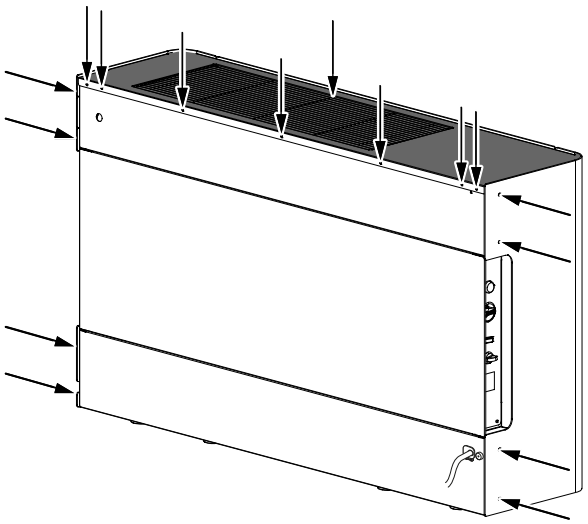
Notice

Please also observe the technical data in the annex for installation.

Before fitting the hot water heating coil, the device housing must be removed as follows:

✓ The device is switched off and not connected to the mains.

1. Loosen the 16 screws at the housing as shown.



2. Carefully remove the housing.
3. The hot water heating coil can now be installed by a plumber in accordance with the supplied installation instructions for the hot water heating coil (see also Heating coil (optional) illustration).
4. Reattach the housing and tighten the 16 screws.

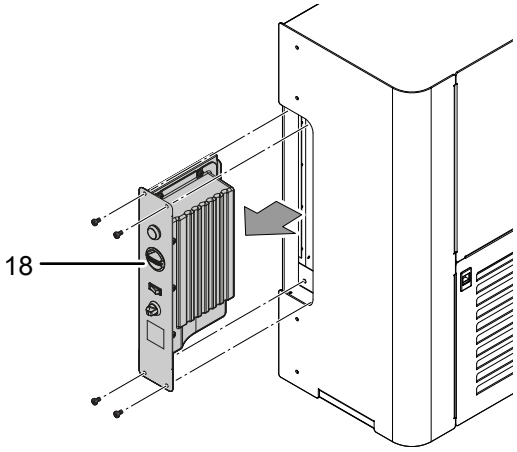
Connecting a remote control with on/off switch (optional)

You have the option of connecting a wired remote control to the device. The wired remote control and the two-core cable are not included in the scope of delivery and must be purchased separately. Observe the country-specific regulations and the Technical data in the annex when purchasing the remote control. The remote control must be connected by a qualified electrician.

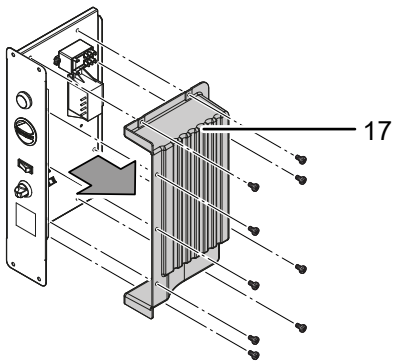
Please proceed as follows to connect the remote control:

✓ **If the device has already been used**: Make sure that the device is switched off and that the mains plug has been disconnected from the socket.

1. Loosen the four screws on the switch box (18) and pull the switch box slightly out of the device.

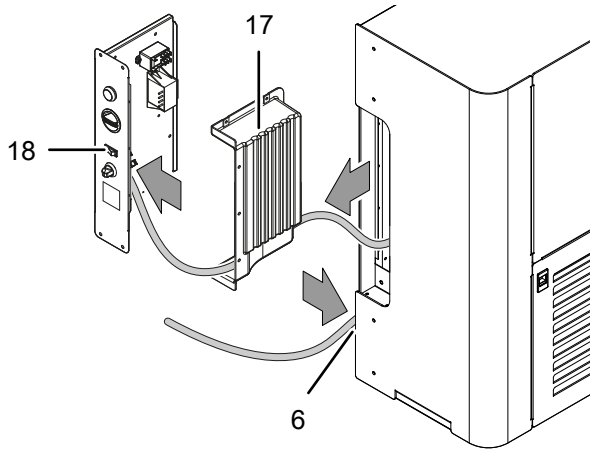


2. Loosen the screws on the switch box cover (17) and remove the cover.

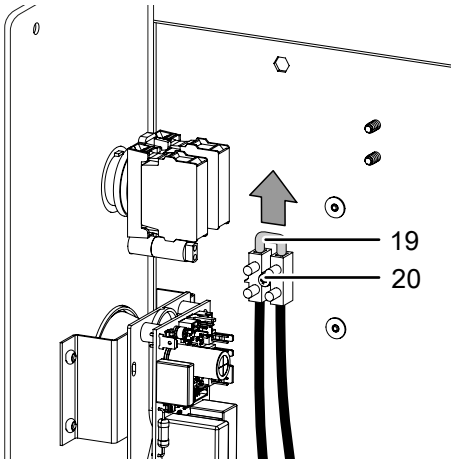


3. Guide the cable of the remote control through the feed-through for the wired remote control (6) on the rear panel and then out of the device through the opening for the switch box.

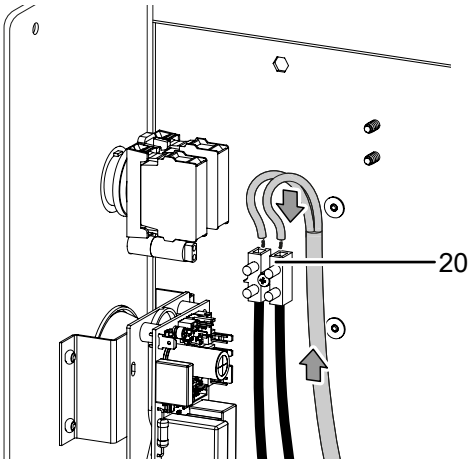
4. Then guide the cable through the opening on the side of the switch box cover (17) and then to the connection located at the top left of the switch box (18).



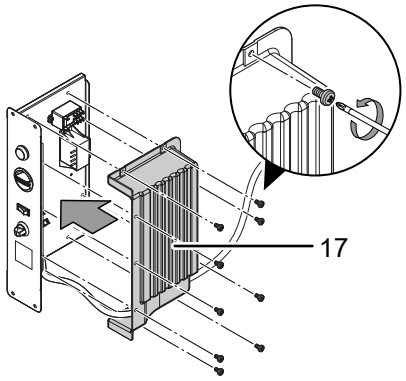
5. Remove the jumper (19) at the connection for the remote control (20). The jumper is no longer needed.



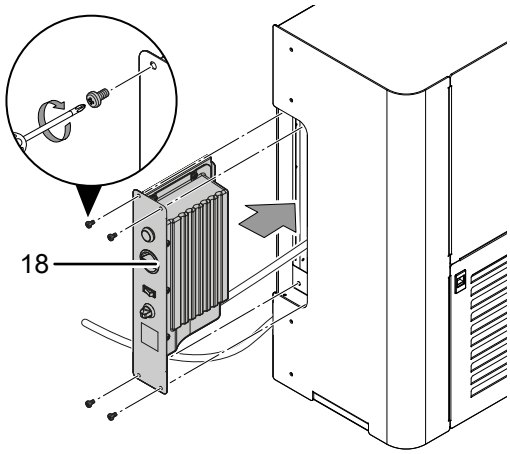
6. Connect the two-core cable to the connection (20).



7. Attach the switch box cover (17) and secure it with the screws.

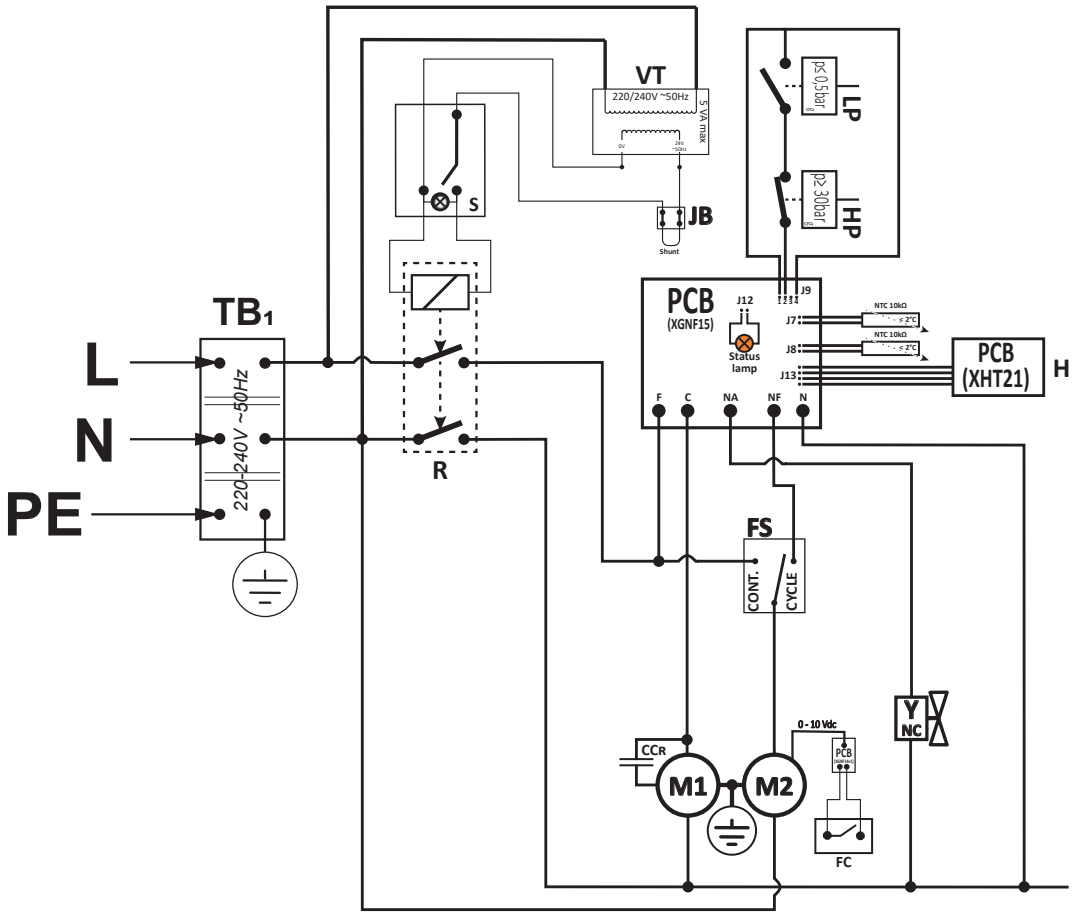


8. Reinsert the switch box (18) into the device and screw it tight with the 4 screws.



Wiring diagram

Electric Wiring Diagram DH 120

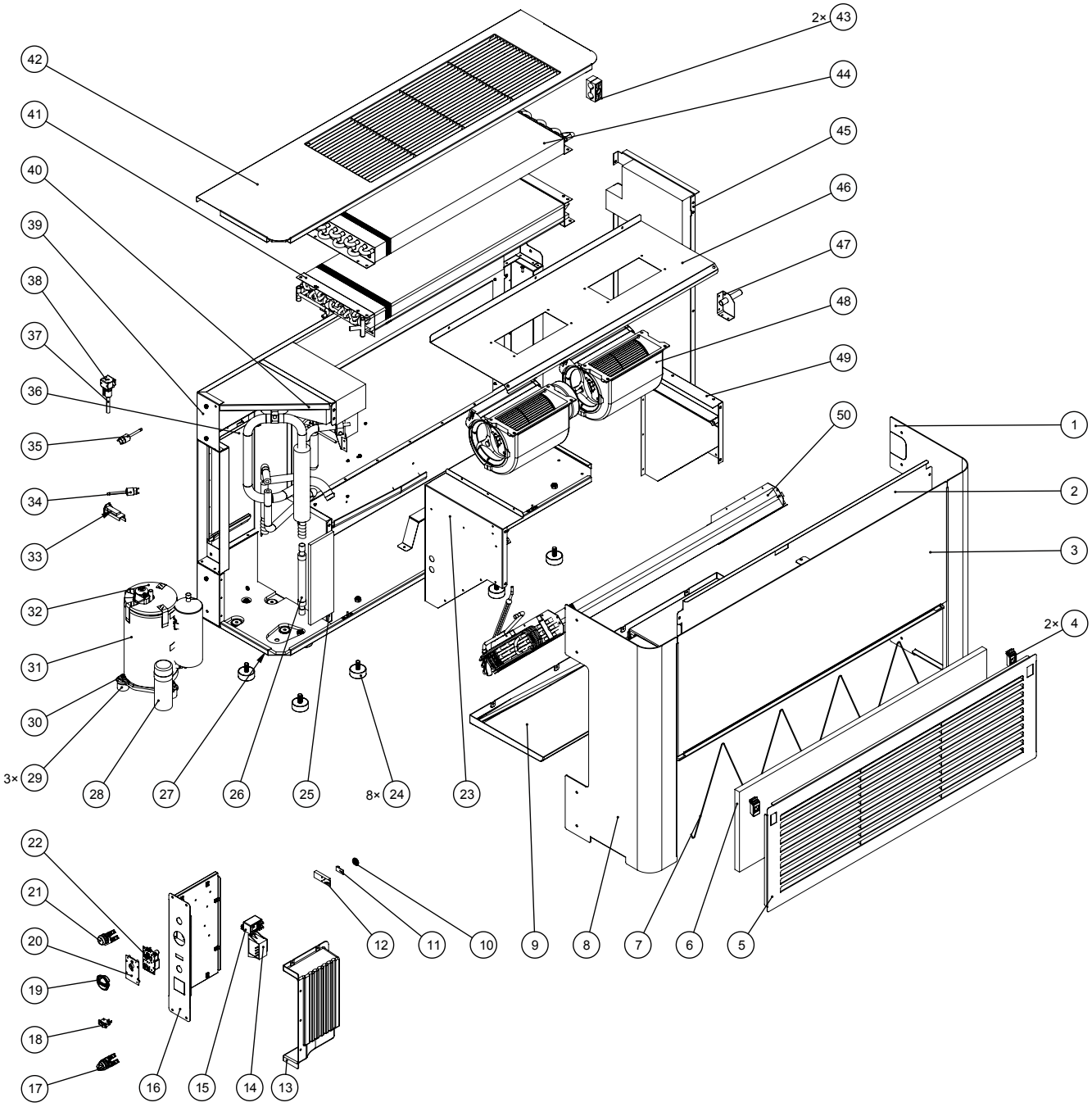


PE – Protective earth conductor	**FC – Fan speed switch**
N – Common Line	**HP – High pressure switch (NC)**
L – Protective Earth	**LP – Low pressure switch (NO)**
S – On-Off switch 0/1	**Y – Defrost solenoid valve (NC)**
M1 – Compressor	**H – Humidity sensor**
RC – Running capacitor	**VT – Power supply**
M2 – Fan motor	**R – Power relay**
FS – Fan mode switch	**JB – Connection bar**

Exploded assembly drawing

Info

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



No.	Spare part	Quantity	No.	Spare part	Quantity
1	Housing's left panel	1	26	Suction line vibration absorber	1
2	Ventilation sealing lid	1	27	Base plate	1
3	Housing's front panel	1	28	Running capacitor	1
4	Snap-lock	2	29	Compressor grommet	3
5	Air inlet grille	1	30	Compressor	1
6	Air inlet filter	1	31	Compressor's body jacket	1
7	Air filter bracket	1	32	Compressor's top jacket	1
8	Housing's right panel	1	33	Cable gland + electric terminal block	1
9	Water pan	1	34	High pressure switch	1
10	Humidity sensor lid	1	35	Low pressure switch	1
11	Humidity Sensor	1	36	Chassis back center panel	1
12	Humidity sensor cover	1	37	Hot gas defrost valve	1
13	Control panel lid	1	38	Hot gas defrost coil	1
14	SELV voltage transformer - for remote switch option	1	39	Chassis back upper panel	1
15	Power relays	1	40	Gusset	1
16	Control panel	1	41	Condensing coil	1
17	Operation mode selector	1	42	Air outlet grille	1
18	Fan cycle switch	1	43	Pipe clamp - for LPHW coil (option)	2
19	Humidistat Knob	2	44	LPHW coil (option)	1
20	Electronic controller bracket	1	45	Chassis left panel	1
21	On/Off switch	1	46	Fan motor deck	1
22	Electronic controller	1	47	Condensates' outlet hose fitting	1
23	Chassis right panel	1	48	Fan motor	1
24	Non-Marking Rubber Feet	8	49	Chassis left panel	1
25	Evaporating coil right panel	1	50	Evaporating coil	1

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.

 The icon with the crossed-out wheeled bin indicates that this device and any associated components (e.g. remote controls, batteries and accumulators) must not be disposed of with household waste at the end of their life. If the device contains batteries or accumulators that contain mercury, cadmium or lead, the respective chemical symbol (Hg, Cd or Pb) is shown below the icon of the crossed-out wheeled bin. You are legally obliged to dispose of old batteries and accumulators properly. 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. 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.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

EU Declaration of Conformity

ORIGINAL EU Declaration of Conformity for a machine in accordance with 2006/42/EC, Annex II, Part 1, Section A		
1.	Machine:	dehumidifiers
2.	Manufacturer:	Trotec GmbH Grebbener Str. 7 52525 Heinsberg Germany online@trotec.com www.trotec.com
3.	./.	
4.	This declaration of conformity is issued under the sole responsibility of the manufacturer.	
5.	Object of the declaration:	DH 120 Year of manufacture as of: 2023
6.	The object of the declaration described in point 5 is in conformity with the following Union harmonisation legislation:	• 2006/42/EC • 2011/65/EU • 2014/30/EU • 2015/863/EU
7.	Applied harmonised standards: • EN 60335-1:2012, EN 60335-1:2012/AC:2014, EN 60335-1:2012/A11:2014, EN 60335-1:2012/A13:2017, EN 60335-1:2012/A15:2021 (Official Journal 13/04/2022) • EN 60335-2-40:2003, 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/A13:2012/AC:2013, EN 60335-2-40:2003/A13:2012, EN 60335-2-40:2003/A2:2009, EN 60335-2-40:2003/AC:2006, EN 60335-2-40:2003/AC:2010 (Official Journal 28/11/2013) • EN 61000-3-3:2013 (Official Journal 13/05/2016) • IEC 61000-3-3:2013 (Official Journal 20/04/2016)	
	Common specifications applied: ./.	
	Other applied standards and specifications: • EN 60335-1:2012/A1:2019, EN 60335-1:2012/A2:2019, EN 60335-1:2012/A14:2019 • EN 61000-3-3:2013/A1:2019 • EN IEC 55014-1:2021, EN IEC 55014-2:2021 • EN IEC 61000-3-2:2019+A1:2021 • IEC 60335-2-40:2018 • IEC 61000-3-3:2013/AMD1:2017, IEC 61000-3-3:2013/AMD2:2021	
8.	./.	
9.	The machine is subject to the conformity assessment procedure on the basis of an internal production control.	
10.	Other information:	Authorised representative compiling the technical documentation: Trotec GmbH Grebbener Str. 7 52525 Heinsberg Germany

Heinsberg, 27 November 2023



Joachim Ludwig (Managing Director)

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