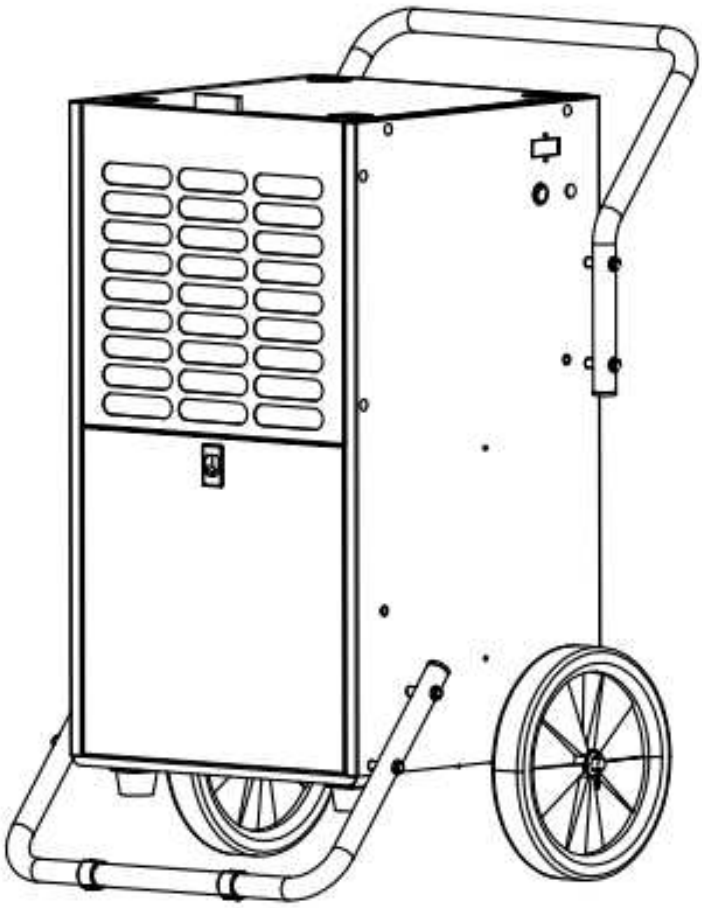
Building Dryer WDH-80B



Dear customer,

You have chosen a high-quality product. Here are a few tips to help you enjoy this product:

In case of any problems:

We hope that the appliance meets your expectations! Should there be any cause for complaint despite the greatest possible care, please contact us briefly, as we are very concerned about your satisfaction and would like to clear up any misunderstanding.

Mounting the transport handle and the stand handle:

To reduce the volume of a new appliance, the transport handle and the stand were mounted the wrong way round.

The following accessories are included for mounting the transport handle and the stand handle:

1) 1 x transport handle
2) 1 x stand bracket
3) 8 x hexagon head screws
4) 1 x hexagon spanner

To install the building dryer, place it on the front (front panel). We strongly recommend using a soft surface to protect the appliance. This can be a blanket, towel, polystyrene or similar!

1) To mount the stand bracket, you must first remove the incorrectly mounted stand bracket using the hexagon spanner.
2) Remove the stand bracket and align it the right way round. Then mount it on each side using 2 hexagon head screws.
3) To fit the transport handle, you must also use the hexagon spanner to remove the transport handle that has been fitted the wrong way round.
4) Now remove the transport handle and align it the right way round. Then mount it on each side using 2 hexagon head screws. DONE !

After transport or installation:

As the appliance works with coolant, please leave it upright for at least 1 hour before using it for the first time or after fitting the stand and transport handle so that the coolant can settle properly inside the appliance.

During initial operation / hose connection:

If you wish to use a hose connection to drain the condensate, ensure that the hose connection is properly fitted and that the condensate (water) can always drain away unhindered! If this is not observed, the water condensed by the construction dryer (up to 80 litres per day) can cause damage to the room!

Room humidity and dehumidification performance:

If you would like to check the room humidity and the associated dehumidification performance with your own humidity meter (hygrometer), please ensure that this humidity meter is not attached to a wall, as this will falsify the true humidity of the room air. See also the explanations under “Troubleshooting“!

Important safety instructions:

- Follow the operating instructions carefully when setting up, using and cleaning the appliance!
- Supervise the dehumidifier when children are near the appliance!
- Pay attention to the electricity, never go into the appliance with objects or insert them!
- Do not place any objects on the dehumidifier!
- Do not block the exhaust air fins of the appliance and please ensure that there is sufficient space/clearance around the fan!
- Ensure that there is sufficient air supply to the appliance, otherwise this can lead to a reduction in performance and, in the worst case, to overheating and/or fire!
- Make sure that no moisture reaches the electrical system of the appliance!
- Only use the recommended voltage for operating the appliance!
- Make sure that the power cable is unfolded (untied) before you connect it to the socket!
- Make sure that the plug is clean and properly connected to the socket before using the appliance!
- In the event of problems or damage, always contact the manufacturer immediately and never repair them yourself!
- Never touch the plug or socket with wet hands!
- Please do not use multiple sockets to operate the dehumidifier!
- Do not repair defective or damaged cables on the appliance yourself, you could get a serious electric shock!
- This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Cleaning and user maintenance must not be carried out by children unless they are 8 years of age or older and are supervised. The appliance and its connecting cable must be kept away from children under the age of 8.
- Ensure that flammable substances (e.g., gases/oils etc.) are never in the vicinity of the appliance!
- The appliance is intended for indoor use only.
- If you are not going to use the appliance for a longer period of time, switch it off and unplug it from the mains!
- The appliance must be stored in a well-ventilated room in which the room size corresponds to the room area specified for operation!
- Do not make any changes to the device!

Please switch off the appliance immediately and disconnect it from the mains/power supply if something appears to be wrong! In this case, please contact a specialist and do not attempt to repair the appliance yourself!

Examples: Fan does not run during operation; fuse has blown or the compressor rattles loudly.

Important operating and safety instructions regarding the refrigerant R290 in this appliance:
(Read these instructions carefully and observe them before using the device!)

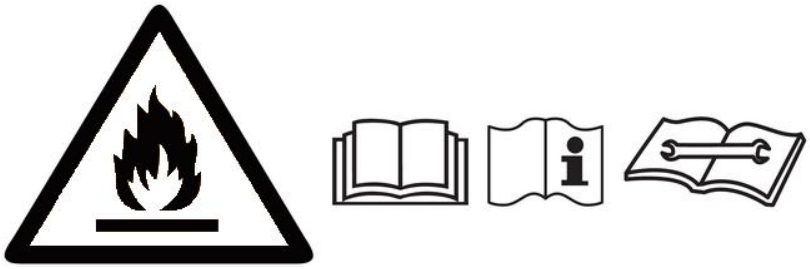
- The refrigerant R290 complies with European environmental directives!
- The appliance works with the refrigerant R290. This refrigerant is highly flammable and explosive if the safety instructions are not observed!
- The appliance contains 0.200 kg of R290 refrigerant - the maximum permitted filling quantity of R290 refrigerant for dehumidifiers is 0.3 kg!
- The minimum air circulation rate is 535 m^3/h !
- The appliance must be stored in a room without continuously operating ignition sources (e.g., open flames, an operating gas appliance or an operating electric heater).
- Protect the appliance and especially the internal parts from damage or flames/heat!
- Please note that the refrigerant is odorless and a leak cannot be detected immediately by the smell!
- If refrigerant should escape, it can ignite or explode, particularly in poorly ventilated rooms in conjunction with high heat, sparks or flames!
- Make sure that the exhaust air outlet is always ensured and is not obstructed by other objects!
- The appliance should be set up, operated and stored in a room with a minimum size of 10 m^2 !
- Pack the device carefully when you are no longer using it to protect it from damage! Be careful when storing the device to avoid mechanical faults.
- When cleaning, proceed strictly according to the manufacturer's instructions and do not use any additional heat sources to accelerate the defrosting process of the appliance!
- Never work on the cooling circuit or parts containing refrigerant yourself!
- Only persons who are authorized and certified by an accredited agency for handling refrigerants should work on the refrigerant circuit.
- If the mains connection cable of this appliance is damaged, it must be replaced by the manufacturer or its customer service department or a similarly qualified person in order to avoid hazards.
- The appliance must be installed in accordance with national installation regulations.
- Do not use any objects other than those permitted by the manufacturer to accelerate the defrosting process.
- Do not drill or burn.

This appliance has parts that must not be replaced or repaired!

The refrigerant cannot be renewed or replaced!

Do not carry out any repairs or modifications to your device yourself!

Maintenance and repair work that requires the assistance of other qualified persons must be carried out under the supervision of specialists in the use of flammable refrigerants.



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Important safety instructions for repairing an appliance with R290 refrigerant:

1. Check the surroundings

Before you start working on systems containing flammable refrigerants, safety checks are required to ensure that the risk of ignition is minimized. When repairing the refrigerant system, the following safety precautions must be observed and complied with before any work is carried out on the system.

Procedure

The work must be carried out in a controlled manner to minimize the risk of flammable gases or vapors being present during the execution of the work.

2. General work area

All maintenance personnel and other persons in the vicinity must be instructed on the type of work to be carried out. Work in confined spaces must be avoided. The area around the work area must be cordoned off. Ensure that the conditions in the work area have been made safe by checking the flammable material.

3. Check for the presence of refrigerants

The area must be checked with a suitable refrigerant detector before and during the work to ensure that the technician is aware of possible flammable atmospheres. Ensure that the refrigerant detector used is suitable for working with flammable refrigerants, e.g. non-sparking, adequately sealed and intrinsically safe.

4. Presence of a fire extinguisher

If hot work is to be carried out on the refrigerant equipment or associated parts, suitable fire extinguishing equipment must be readily available. Ensure that a dry powder fire extinguisher or a CO2 fire extinguisher is nearby.

5. No ignition sources

Persons carrying out work in connection with a refrigerant system which involves exposure to piping containing or having contained flammable refrigerant must use ignition sources in such a way that they cannot cause a fire or explosion hazard. All possible ignition sources, including cigarette smoking, should be kept sufficiently away from the site of installation, repair and disposal, during which the flammable refrigerant may be released into the surrounding area. Prior to work, the area around the equipment must be inspected to ensure that there are no flammable hazards or ignition risks. "No Smoking" signs must be posted.

6. Ventilated area

Ensure that the work area is outdoors or that it is sufficiently ventilated before interfering with the system or carrying out hot work. Sufficient ventilation must be ensured for the entire duration of the work to be carried out. The ventilation should safely disperse any refrigerant released and preferably discharge it externally into the atmosphere.

7. Testing the refrigerant equipment

If electrical components are replaced, they must be suitable for the purpose and have the correct specification. The manufacturer's guidelines for maintenance and repair must be observed and followed at all times. If in doubt, contact the manufacturer's technical department for assistance.
The following tests must be applied to installations containing flammable refrigerants:

- The filling quantity is in accordance with the room size within which the parts containing refrigerant are installed.
- The ventilation equipment and the ventilation outlets are running properly and are not blocked.

8. Testing of electrical devices

Before repairing and maintaining electrical components, preliminary safety checks and inspections must be carried out on the components. If there is a defect that could jeopardize safety, the appliance must not be connected to the mains until the defect has been rectified. If the defect cannot be repaired immediately but operation must continue, an adequate temporary solution must be found. This must be reported to the owner of the equipment so that all parties are informed.
The preliminary safety checks must include:

- Capacitors must be discharged; this should be done in a safe manner to avoid the possibility of sparking.
- No live components or wiring must be exposed when filling, restoring or flushing the system.
- Continuity of the earth connection.

9. Repairs to hermetically sealed components

During the repair of hermetically sealed components, all power to the appliance must be disconnected prior to the removal of sealed covers etc. If it is essential that power is supplied to the appliance during maintenance, a permanent leak detection system must be in place to warn of a potentially dangerous situation.
Particular attention must be paid to the following point to ensure that when working on electrical components, the enclosure is not modified in such a way that the degree of protection is impaired. This includes damage to cables, an excessive number of connections, terminals that do not comply with the original specification, damage to seals, improper fitting of sealing screws, etc.
Ensure that the appliance is securely mounted. Ensure that seals or sealing material are not so worn that they no longer serve their purpose to prevent the ingress of flammable atmospheres.
Replacement parts must be in accordance with the manufacturer's specifications.

NOTE: The use of silicone sealants may hinder the effectiveness of some leak detectors. Intrinsically safe components do not need to be sealed before working on them.

10. Repair of intrinsically safe components

Do not apply a permanent inductive load or capacitive load to the circuit without ensuring that this does not exceed the permissible voltage and current for the equipment being used. Intrinsically safe components are the only types that can be worked on while connected to the mains in the presence of a flammable atmosphere. The test equipment must have the correct ratings. Replace components only with parts specified by the manufacturer. Other parts may cause the refrigerant to ignite in the atmosphere due to a leak.

11. Cabling

Check that the cabling is not subject to wear, corrosion, excessive pressure, vibration, sharp edges or other harmful environmental effects. The test must also take into account the effects of ageing or continuous vibration from sources such as compressors or fans.

12. Detection of flammable refrigerants

Under no circumstances should potential ignition sources be used when searching for or detecting refrigerant leaks. A halogen searchlight (or any other search device that uses naked flames) must not be used.

13. Leak detection methods

The following leak detection methods are considered acceptable for systems containing flammable refrigerants. Electronic leak detectors must be used to detect flammable refrigerants, but their sensitivity may not be sufficient or they may need to be recalibrated. (Detection equipment must be calibrated in a refrigerant-free area.) Ensure that the leak detector is not a potential ignition source and that it is suitable for the refrigerant used.
Leak detection equipment must be set to a percentage of the lower explosive limit and must be calibrated to the refrigerant used and the appropriate percentage of gas (25% maximum) must be confirmed. Leak detection fluids are suitable for use with most refrigerants, but the use of cleaning agents containing chlorine must be avoided as chlorine can react with the refrigerant and degrade the copper piping.
If a leak is suspected, all open flames must be removed/extinguished. If a refrigerant leak is detected that requires brazing, all refrigerant must be recovered from the cooling system or isolated (by shutting off valves) in a part of the system remote from the leak. Oxygen-free nitrogen must then be flushed through the system before and during the brazing process.

14. Removal and emptying

If you are intervening in the refrigerant circuit to carry out repairs - or for any other reason - conventional methods must be used. However, it is important that best practice is always followed, as flammability must be taken into account. The following procedure should be followed:

- Remove the refrigerant
- Flush the circuit with inert gas
- Deflate
- Flush again with inert gas
- Open the circuit by cutting or soldering

The refrigerant charge must be prepared in the correct preparation cylinders. The system must be "purged" with oxygen-free nitrogen to keep the appliance safe. This process may need to be repeated several times. Compressed air or oxygen must not be used for this purpose.
Purging can be achieved by intervening in the vacuum in the system with oxygen-free nitrogen and continuing to charge until the working pressure is reached and then releasing to atmosphere and finally drawing into a vacuum. This process must be repeated until there is no more refrigerant in the system. When the last filling with oxygen-free nitrogen takes place, the system must be vented to atmospheric pressure. This is absolutely necessary if soldering work has to be carried out on the pipework. Make sure that the outlet for the vacuum pump is not located near sources of ignition and that ventilation is available.

15. Filling process

In addition to conventional filling processes, the following requirements must be followed:

- Ensure that no contamination of the various refrigerants occurs when filling the equipment. Hoses or cables must be as short as possible to minimize the amount of refrigerant they contain.
- Cylinders must remain upright.
- Ensure that the cooling system is earthed before filling the system with refrigerant.
- Mark the system when filling is complete (if not already done).
- Extreme care must be taken not to overfill the cooling system.
- Before refilling the system, the pressure must be tested with oxygen-free nitrogen. The system must be tested for leaks at the end of filling but before commissioning. A check leakage test must be carried out before leaving the site.

16. Decommissioning

Before carrying out this procedure, it is necessary that the technician is fully familiar with the equipment and its details. It is a recommended standard that all refrigerants are safely reconditioned. An oil and refrigerant sample must be taken prior to the task to be carried out in case analysis is required before the reclaimed refrigerant is reused. It is necessary that electrical power is available before the task is started.

a) Familiarize yourself with the equipment and its operation.
b) Disconnect the system electrically.
c) Make sure before you carry out the procedure:

   - that mechanical handling equipment is available; if necessary, also for the Handling refrigerant cylinders;
   - that personal protective equipment is available and worn properly;
   - that the reprocessing process is supervised by a competent person at all times;
   - that the reprocessing equipment and cylinders comply with the applicable standards.

d) Pump out the refrigerant system if possible.
e) If a vacuum is not possible, create a manifold so that the coolant can be removed from the various parts of the system.
f) Make sure that the cylinder is straight and secure.
g) Start the treatment system and operate it according to the manufacturer's instructions.
h) Do not overfill the cylinders (no more than 80 % liquid filling capacity)
i) Do not exceed the maximum working pressure of the cylinder, not even temporarily.
j) When the cylinders have been properly filled and the process is complete, ensure that the cylinders and equipment are immediately removed from site and that all shut-off valves on the equipment are closed.
k) Recycled refrigerant must not be filled into other cooling systems unless it has been cleaned and tested.

17. Labeling

The equipment must be marked so that it has been taken out of service and that the refrigerant has been drained. The marking must be dated and signed.
Ensure that there are markings on the equipment stating that the equipment contains flammable refrigerant.

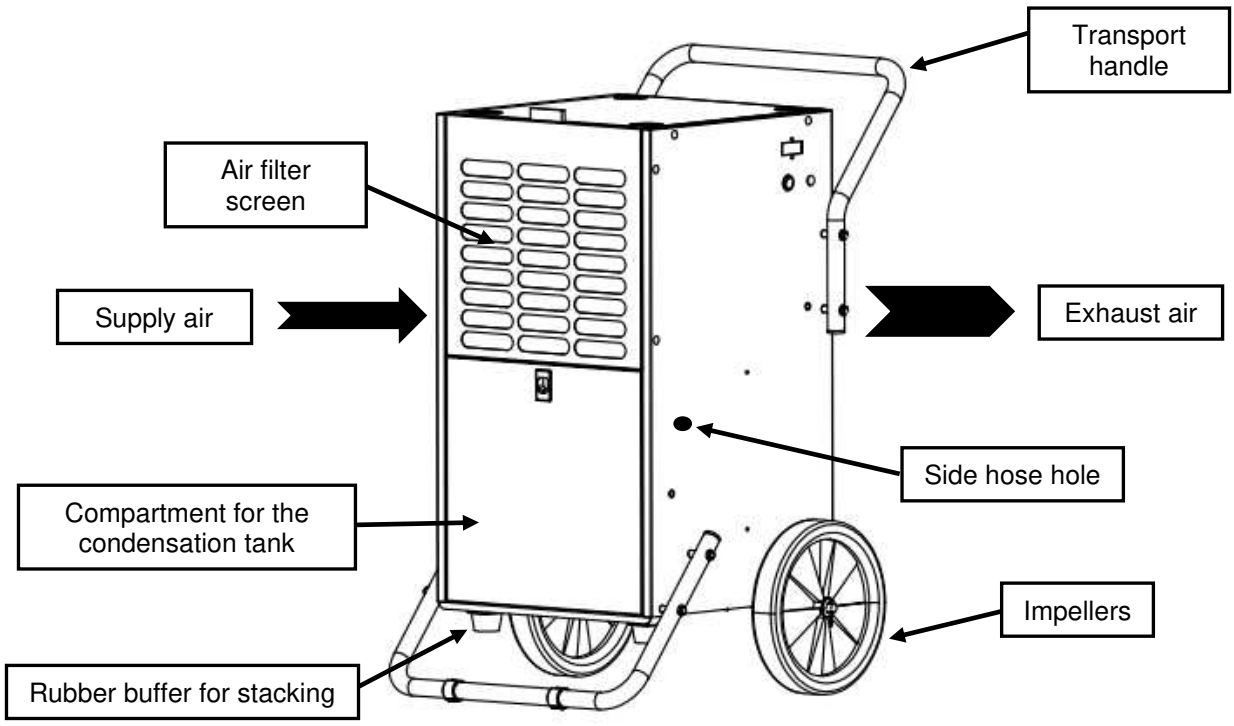
18. Reprocessing

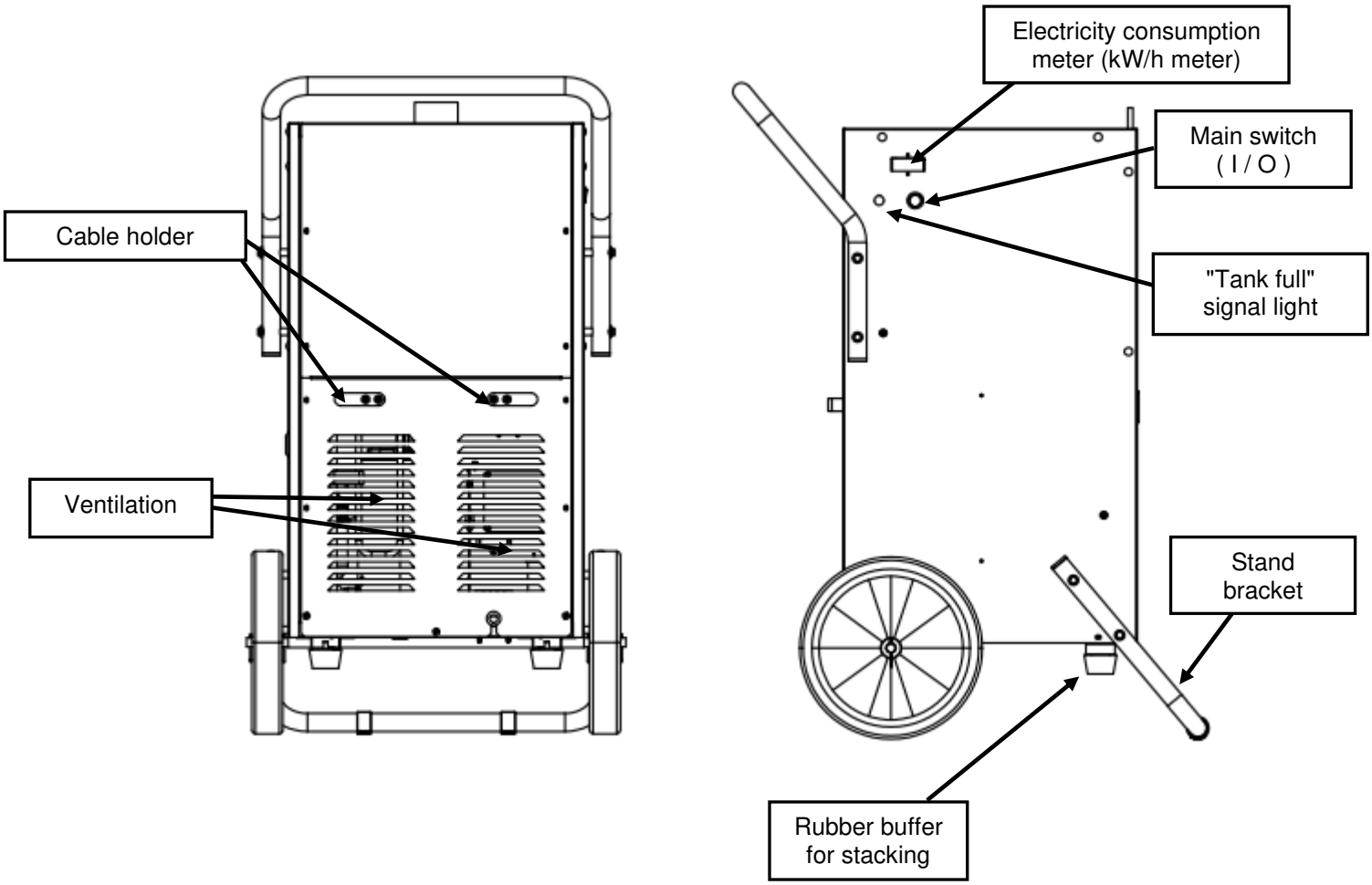
When removing refrigerant from a system, either for maintenance or decommissioning, it is recommended as standard that all refrigerant is safely removed. When transferring refrigerant to cylinders, ensure that only suitable refrigerant recovery cylinders are used. Ensure that the correct number of cylinders are available to hold the total amount of refrigerant. All cylinders used must be suitable and marked for the reconditioned refrigerant (i.e., special cylinders for reconditioning refrigerant). The cylinders must have a pressure relief valve and a connected shut-off valve and be in good working condition. Empty reprocessing cylinders must be emptied of air and, if possible, cooled before reprocessing.
The reprocessing plant must be in good working order with appropriate instructions concerning the relevant equipment and must be suitable for the reprocessing of flammable refrigerants.
In addition, a set of calibrated scales in good working order must be available. Hoses must be complete with leak-free and faultless disconnect couplings.
Before using the reconditioning device, check that it is in perfect working order, that it has been properly maintained and that all associated electrical components are sealed to prevent ignition in the event of a refrigerant release. If in doubt, contact the manufacturer.
The reconditioned refrigerant must be returned to the refrigerant supplier in the correct reconditioning cylinder and the appropriate disposal certificate must be arranged. Do not mix refrigerant in remanufacturing units and especially not in cylinders.
If a compressor or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to ensure that no flammable refrigerant remains in the lubricant. The evacuation process must be carried out before returning the compressor to the supplier. Only electrical heating of the compressor housing may be used to accelerate this process. If oil is drained from a system, this must be done in a safe manner.

19. Electrical components

Electrical components that can generate arcs or sparks and that are not considered ignition sources due to compliance with 22.116.1 letters b), c), d) or f) may only be replaced by parts specified by the appliance manufacturer. Replacement with other parts may lead to ignition of the refrigerant in the event of a leak.

Description of the device parts:





Instructions for use:

1. Commissioning

Insert the mains plug properly into the socket.

Switch on the appliance using the main switch (I / O).

The appliance is programmed so that the construction dryer runs in continuous operation (continuous dehumidification). This means that you do not need to make any further settings.
Switch the appliance off again using the main switch (I / O) if dehumidification is no longer required.

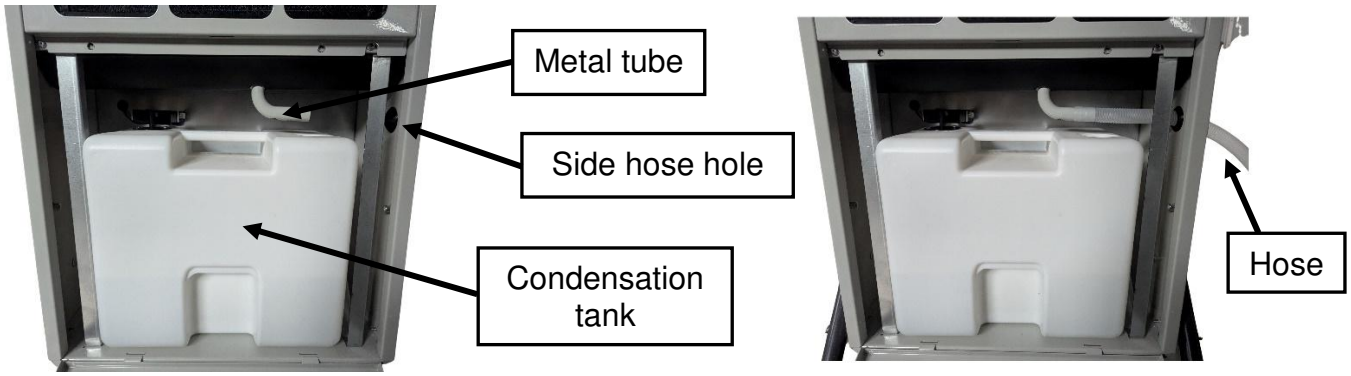
Operating instructions

To protect the compressor, the appliance should always be running or switched off for at least 3 minutes before you press the main switch (I / O) again!

In the event of cold ambient temperatures or icing in the appliance, a defrosting process is automatically initiated with the aid of a sensor. During this defrosting process, the defrost mode automatically controls the air circulation and compressor operation!

2. Connecting a hose

2.1 The connection point for the drain/condensation hose is located on the right-hand side of the condensation tank (see diagrams below).
2.2 It is best to use the enclosed ½ inch plastic hose and feed it through the hole provided on the side and then put the hose over the metal pipe provided.
2.3 Ensure a proper fit. For safety reasons, we recommend securing the hose with a clamp!
2.4 Make sure that the hose is not kinked and always has a slight gradient!



3. Cleaning

3.1 Cleaning the housing

- Please disconnect the mains plug before cleaning the construction dryer.
- Only use mild cleaning agents to clean your construction dryer.
- NEVER spray your construction dryer (e.g. with water or similar).

3.2 Cleaning the air filter screen

The air filter screen at the front of the air intake filters out fluff, hair and coarse construction dust. The air filter also ensures that less dust is deposited on the cooling fins, thereby guaranteeing greater efficiency. Too much dust and dirt in the filter screen or on the cooling fins reduces the dehumidification performance and, in the worst case, can even lead to damage to your construction dryer. Therefore, the following applies to coarse soiling or in rooms with a lot of construction dust: Clean the air filter screen and also the inner evaporator unit* (*only possible after opening the panelling) regularly!

- Always clean the filter if it can be assumed that the air intake is reduced due to the dirty air filter screen or if it can be assumed that dirt and dust have accumulated on the cooling fins. (This may even be the case daily on dusty construction sites).
- Switch off the appliance and disconnect the mains plug!
- Now remove the air filter screen by pulling it upwards by the tab.
- Wash the dirty sieve well under lukewarm water or vacuum it thoroughly with a hoover.
- Allow the air filter screen to dry and then put it back into its holder from above.

4. Other notes

Do not expose the compressor to temperatures above 45°C. Please do not do this even if the appliance is not switched on/connected. This could damage the compressor!

The exhaust air from the construction dryer is approx. 2°C - 3°C warmer than the supply air (room temperature). This can lead to significantly higher room temperatures in smaller and well-insulated rooms; this process is completely normal.

For effective and economical dehumidification operation, please close all doors and windows in the operating room of the construction dryer if possible!

Stacking several appliances of the same type: If desired, two construction dryers can be stacked on top of each other. The construction dryer is already shaped accordingly. See the diagram opposite.

Technical data

Model designation:	WDH-80B
Voltage:	220-240V~ 50Hz
Maximum power consumption:	1,150 W (5.0 A)
Dehumidification capacity (optimum):	95 litres/day (35°C / 90% r.h.)
Dehumidification capacity (standard):	80 litres/day (30°C / 80% r.h.)
Air circulation:	Approx. 535 m^3/h
Compressor:	Rotary compressor
Dimensions (H/W/D):	913 x 526 x 660 mm (with handle)
Weight:	47 kg
Water resistance:	IPx0
Cooling pressure (max.):	2.5 MPa
Vapour pressure (max.):	1.0 MPa
Coolant:	R290 (0.2 kg)
Application range:	5°C - 35°C

We reserve the right to deviate from the technical data !

Troubleshooting

The appliance ices up.

In cold temperatures or during long periods of continuous operation, the appliance may freeze up despite the defrost sensor. In this case, we recommend that you defrost the appliance manually by switching it off and warming the room slightly.

The appliance is not dehumidifying enough.

Please remember that the primary aim is not to extract as much condensation water as possible, but to dry the room air or ceilings, walls and fixtures and fittings and/or keep them dry!

Please also bear in mind that the construction dryer can only remove moisture from the air and only indirectly from materials (screed/plaster). Depending on the condition of the ceilings, walls and fixtures, it can take several weeks for them to release the stored moisture back into the air! For this reason, we also recommend that if you use your own humidity meter (hygrometer), you place it as freely as possible and at some distance from walls and ceilings, as otherwise the humidity value determined in the room air will be distorted!

As with all construction dryers, the dehumidification performance is decisively influenced by the following factors:
A) Humidity content of the room air and B) Heat/temperature in the room.

Therefore, to be on the safe side, here is an approximate dehumidification table for CONTINUOUS OPERATION:

35 degrees and 90% RH = approx. 95 litres (optimum or maximum performance)

30 degrees and 80% RH = approx.	80 litres	and at 60% RH = approx.	40 litres
20 degrees and 80% RH = approx.	40 litres	and at 60% RH = approx.	23 litres
15 degrees and 80% RH = approx.	29 litres	and at 60% RH = approx.	16 litres
10 degrees and 80% RH = approx.	16 litres	and at 60% RH = approx.	11 litres

All figures are approximate per day (fluctuation tolerance) when measured directly at the appliance inlet and of course these values only apply if the temperature and humidity content remain constant!

Miscellaneous

Guarantee declaration:

Notwithstanding the statutory warranty claims, the manufacturer grants a warranty in accordance with the laws of your country, but at least 1 year (in Germany 2 years for private individuals). The warranty begins on the date of sale of the appliance to the end user.
The guarantee only covers defects that are attributable to material or manufacturing faults.
Warranty repairs may only be carried out by an authorised customer service centre. To make a warranty claim, please enclose the original sales receipt (with date of purchase).

Excluded from the guarantee are

- Normal wear and tear
- Improper use, e.g. overloading the appliance or unauthorised accessories
- Damage due to external influences, use of force or foreign objects
- Damage caused by non-compliance with the operating instructions, e.g. connection to an incorrect mains voltage or non-compliance with the installation instructions
- Completely or partially dismantled appliances

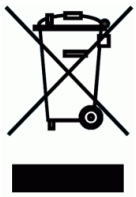
Conformity:

The building dryer has been tested and itself and/or parts of it have been manufactured in accordance with the following (safety) standards:

Naturally with CE conformity.

CE (LVD) conformity tested according to:	EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A2:2019+A14:2019+A15:2021 +A16:2023 EN IEC 60335-2-40:2023+A11:2023 EN 62233:2008
EMC (EMC) conformity tested according to:	EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019+A1:2021+A2:2024 EN 61000-3-3:2013+A1:2019+A2:2021 EN IEC 61000-3-11:2019

Correct disposal of this product:



Within the EU, this symbol indicates that this product must not be disposed of with household waste. Old appliances contain valuable recyclable materials that should be recycled. In addition, the environment and human health should not be harmed by uncontrolled waste disposal. Therefore, please dispose of old appliances via suitable collection systems or send the appliance to the place where you purchased it for disposal. They will then recycle the appliance.

We hope you enjoy using this device

Your Aktobis AG

Keep these instructions for use in a safe place!