



tech globe

# USER MANUAL

## INDUSTRIAL AIR DRYER



MODEL: TG 55 PRO+  
TG 70 PRO+



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## 1. BEFORE YOU START

### 1.1 PRODUCT DESCRIPTION

The dehumidifier is used to remove excess moisture from the air. The resulting reduction in relative humidity protects buildings and their contents.

The environmentally friendly refrigerant R290 is used. R290 has no harmful effect on the ozone layer or global warming. Special precautions must be taken due to the high flammability of the refrigerant.

### 1.2 SYMBOLS ON THE UNIT AND IN THE OPERATING INSTRUCTIONS



Warning

This unit uses a flammable refrigerant. If a refrigerant leak causes the refrigerant to come into contact with a flame or a heating element, there is a risk of fire.



Please read the USER MANUAL carefully before use.



Further information can be found in the OPERATING MANUAL.



Before starting operation, service personnel are required to carefully read the OPERATING MANUAL.

### FOR SAFETY REASONS, ALWAYS OBSERVE THE FOLLOWING RULES:

- It is strongly recommended that installation and servicing be carried out by a qualified service technician.
- The unit is designed exclusively for use with R-290 gas as the designated refrigerant.
- Do not release the refrigerant into the atmosphere.
- R-290 is flammable and heavier than air.
- It initially accumulates in the lower parts of buildings, but may be dispersed by fans.
- If the refrigerant is present or suspected to be present in the air, do not attempt to identify the cause of the fault yourself.
- If a leak is detected, immediately evacuate all persons from the room where the dehumidifier is located, ventilate the room and contact the local fire brigade to inform them of the refrigerant leak.
- Do not use open flames or other potential ignition sources inside the room where the leak is detected.

**FAILURE TO OBSERVE THIS WARNING MAY RESULT IN AN EXPLOSION, DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

## 2. FOR YOUR SAFETY



Before using the dehumidifier, please read this manual carefully and ensure you fully understand it.

### WARNING:

#### PRECAUTIONS DURING OPERATION

##### WARNING – to reduce the risk of accident:

- Always connect the appliance to a power supply with the same voltage, frequency and rated power as stated on the product's rating plate.
- Always use a grounded electrical socket.
- Unplug the power cord when cleaning, servicing or when the appliance is not in use.
- Do not operate the appliance with wet hands.
- Do not immerse the appliance or expose it to rain or other liquids.
- Do not leave the appliance switched on and unattended. Do not tilt or turn the appliance.
- Do not unplug the appliance by pulling on the power cord.
- Do not place any objects on top of the appliance.
- Do not insert your fingers or any other objects into the air outlet.
- Do not touch the air inlet or the aluminium fins of the device whilst it is in operation.
- Do not use the appliance if it is damaged or shows signs of malfunction.
- Do not clean the appliance with any chemical agents.
- Do not use the product if the plug or cable is damaged. If it is not working properly, contact a qualified electrician or service centre to have it checked and repaired; never attempt to dismantle it yourself.
- Ensure that children do not play with the appliance.
- Ensure that the appliance is kept away from fire, flammable or explosive materials.
- Do not use any agents other than those recommended by the manufacturer to speed up the defrosting or cleaning process.
- The appliance must be kept in a room where there are no sources of continuous heat (such as an open flame, a running gas appliance or a running electric heater).
- Please note that refrigerants may be odourless.
- Keep ventilation openings free from obstructions.



Warning

Anyone working on or inspecting the refrigerant system must hold a current, valid certificate issued by an industry-accredited assessment body, confirming their competence to handle refrigerants safely.



Warning

Servicing should only be carried out in accordance with the equipment manufacturer's instructions. Maintenance and repairs requiring the assistance of other qualified personnel should be carried out under the supervision of a person competent in the use of flammable refrigerants.

## KIT CONTAINS:



Screws (for wheels) x2



Screws (for bracket) x4



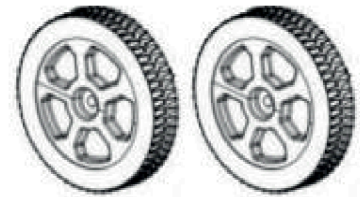
Flexible cable 1m x1



Nuts (for wheels) x2



Washers (for wheels) x2



Wheels x2

## 3. FEATURES

Air dehumidifiers use compressor technology to remove water from the environment.

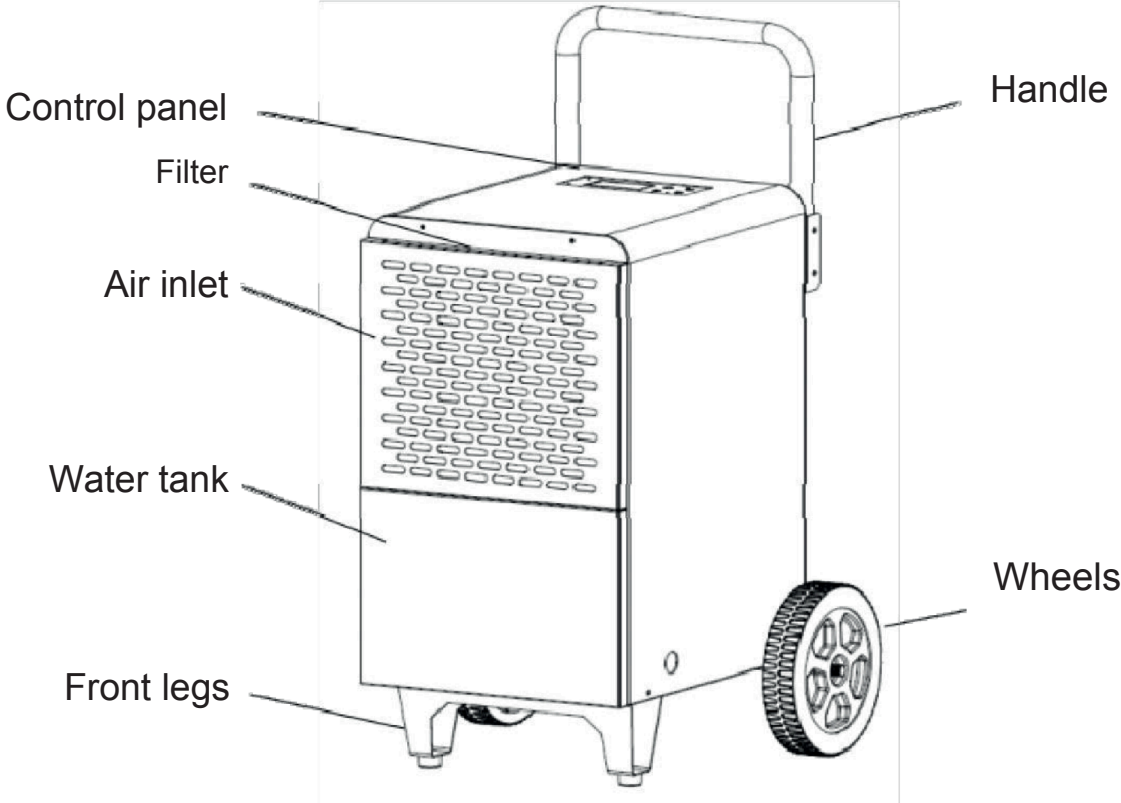
Compressor dehumidifiers are ideal for rooms where the temperature in winter is above 12–15°C, although these units can be used at temperatures as low as 5°C.

The dehumidifiers are easy to move and are designed to remove unwanted moisture.

### KEY FEATURES:

1. Easy-to-use controls.
2. A cost-effective way to combat mould, condensation and damp.
3. Wheels for improved mobility.
4. Control panel with adjustable operating time and target humidity range of 10–95% RH, ensuring the room is not over-dried and energy is not wasted.
5. Option to operate using the tank or drain water via a hose.
6. An audible alarm when the tank is full and an automatic shut-off function.

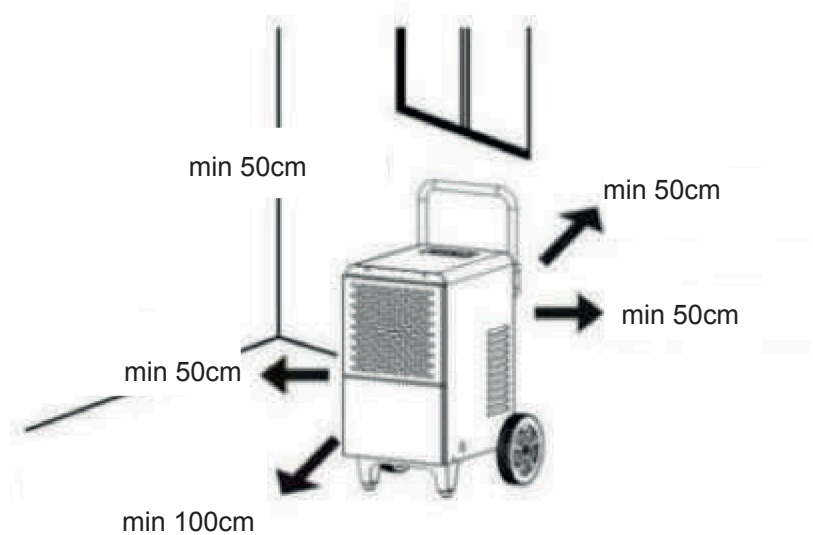
# 4. PRODUCT OVERVIEW



## 5. POSITIONING THE AIR DRYER

An incorrectly positioned dehumidifier will be inefficient. When positioning the unit, ensure that air circulation around the appliance is not restricted.

Leave at least 50 cm of space to the side and rear of the unit and 100 cm at the front. This dehumidifier is intended for indoor use only.



Your dehumidifier will remove moisture from the air, protecting your home from the harmful effects of excess damp as soon as it is switched on. Excess moisture is distributed throughout the house. For this reason, the dehumidifier should be placed in a central and clear location so that it can draw in damp air from all over the house. A warm hallway or landing is an ideal spot for your dehumidifier. If possible, leave internal doors ajar to allow air to circulate.

Alternatively, if you have a serious problem in one room, you can start by placing the dehumidifier there and move it to a more central location at a later date. Please note that the appliance should not be placed directly next to a radiator or other heat source.

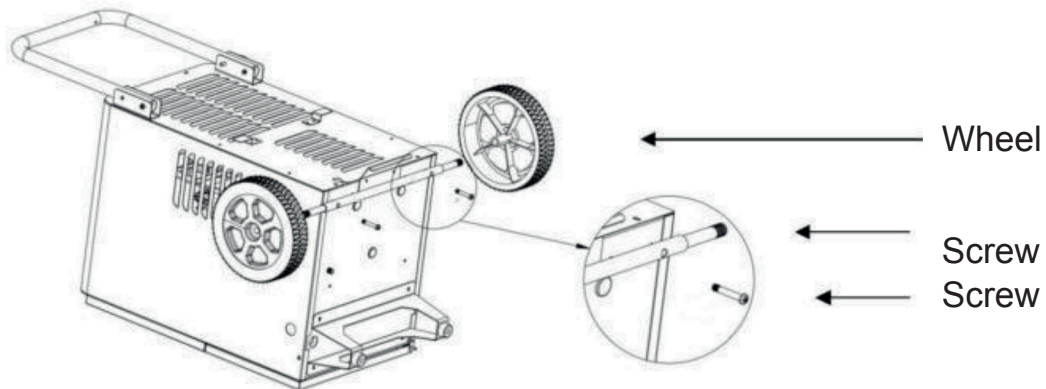
Note: Do not move the unit if there is water in the tank.

## 6. INSTALLATION

The unit must be connected correctly in accordance with the user manual. To prevent damage to the compressor, the unit must remain in an upright position for 2 hours after assembly before being connected.

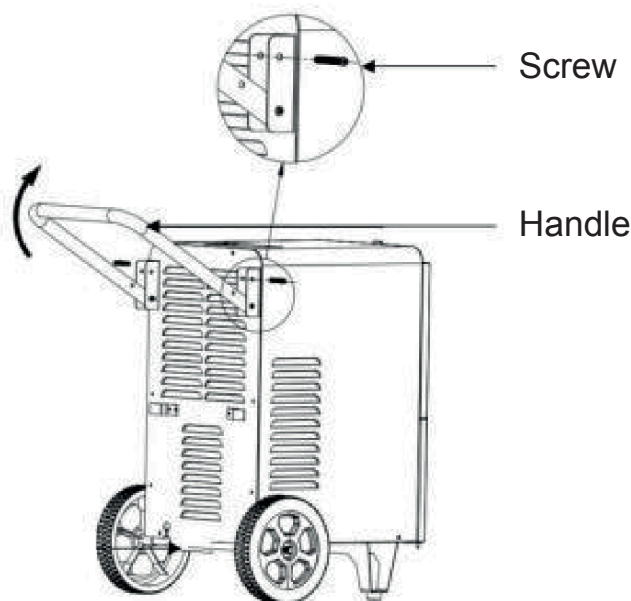
### WHEEL INSTALLATION

1. Secure the axle to the base of the unit using the 4 screws provided.
2. Using the supplied washers and nuts, attach the wheels to each end of the axle, ensuring they are secure.
3. Position the unit upright.



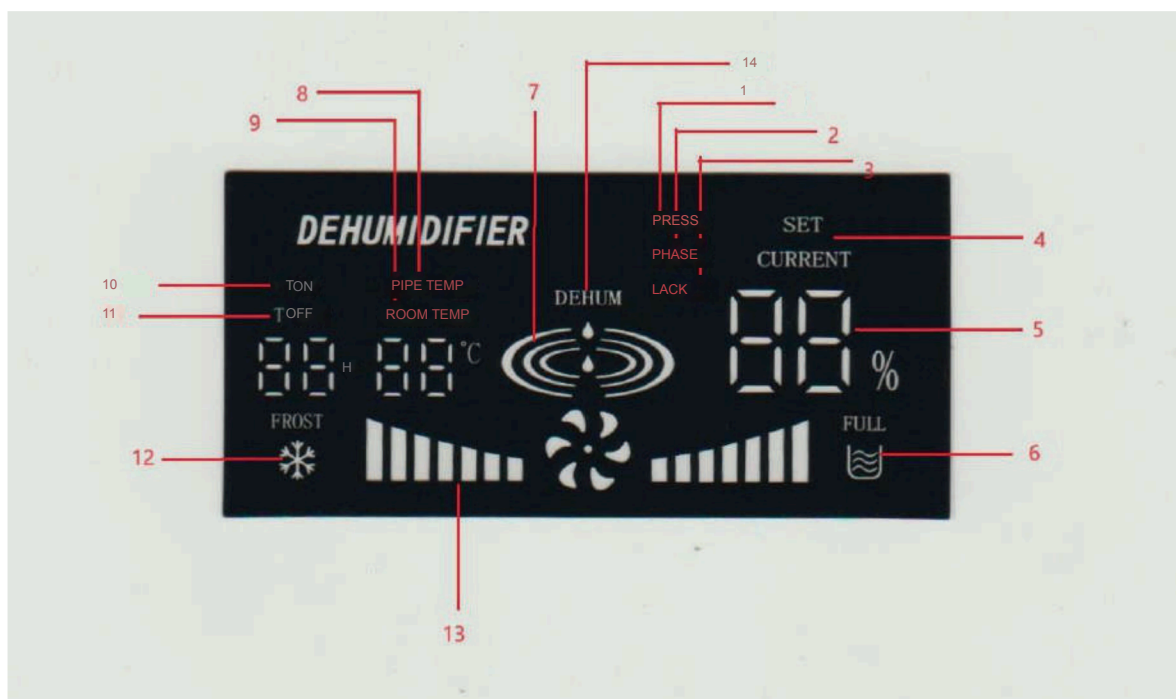
### HANDLE ASSEMBLY

To facilitate transport, the handle has been attached to the rear of the device. Before use, unfold the handle to the upright position and secure it with the two screws provided.





## 7. OPERATION AND FUNCTIONS



1. Pressure protection (displayed only for three-phase voltage).
2. Phase fault (displayed only for three-phase voltage).
3. Phase loss (displayed only for three-phase power).
4. Set the desired humidity.
5. Current room humidity.
6. Full water tank alarm.
7. Unit in dehumidification mode.
8. Temperature of the evaporator copper pipe.
9. Current room temperature.
10. Timer on.
11. Timer off.
12. Defrosting.
13. Fan speed.
14. Unit in standby mode.

## 8. Function keys and indicators

1	POWER button	Press once to switch the device on or off.
2	TIMER button	Press to turn the timer function on or off.
3	Increase the humidity	Set the humidity within the range of 10%–95% and the timer setting. (1h–24h)
4	Decreasing the humidity	
5	AUTO dehumidification button	Press + to switch the unit to continuous dehumidification mode.
6	Full water tank	FULL Lights up when the water tank is almost full.
7	Timer operating time	T ON T OFF 11 H Lights up after the timer function has been set.
8	Defrost LED	FROST Lights up when the automatic defrosting process is in progress.
9	Automatic dehumidification mode	Once continuous dehumidification mode is activated, you can press the button to decrease or increase the humidity level.
10	Automatic appliance drying	After switching off the machine, press this SSS button and the unit will dry out inside.
11	Digital display	Displays the current humidity (10–95%) and humidity setting (10–95%). Displays the timer and temperature settings.

## 9. SETTINGS

### 1. Operating mode - Continuous operation

- Press the POWER button to switch on the unit.
- The unit starts dehumidifying in continuous mode, regardless of the humidity level. In this mode, the dehumidification range cannot be adjusted.

### Operating mode - Normal operation

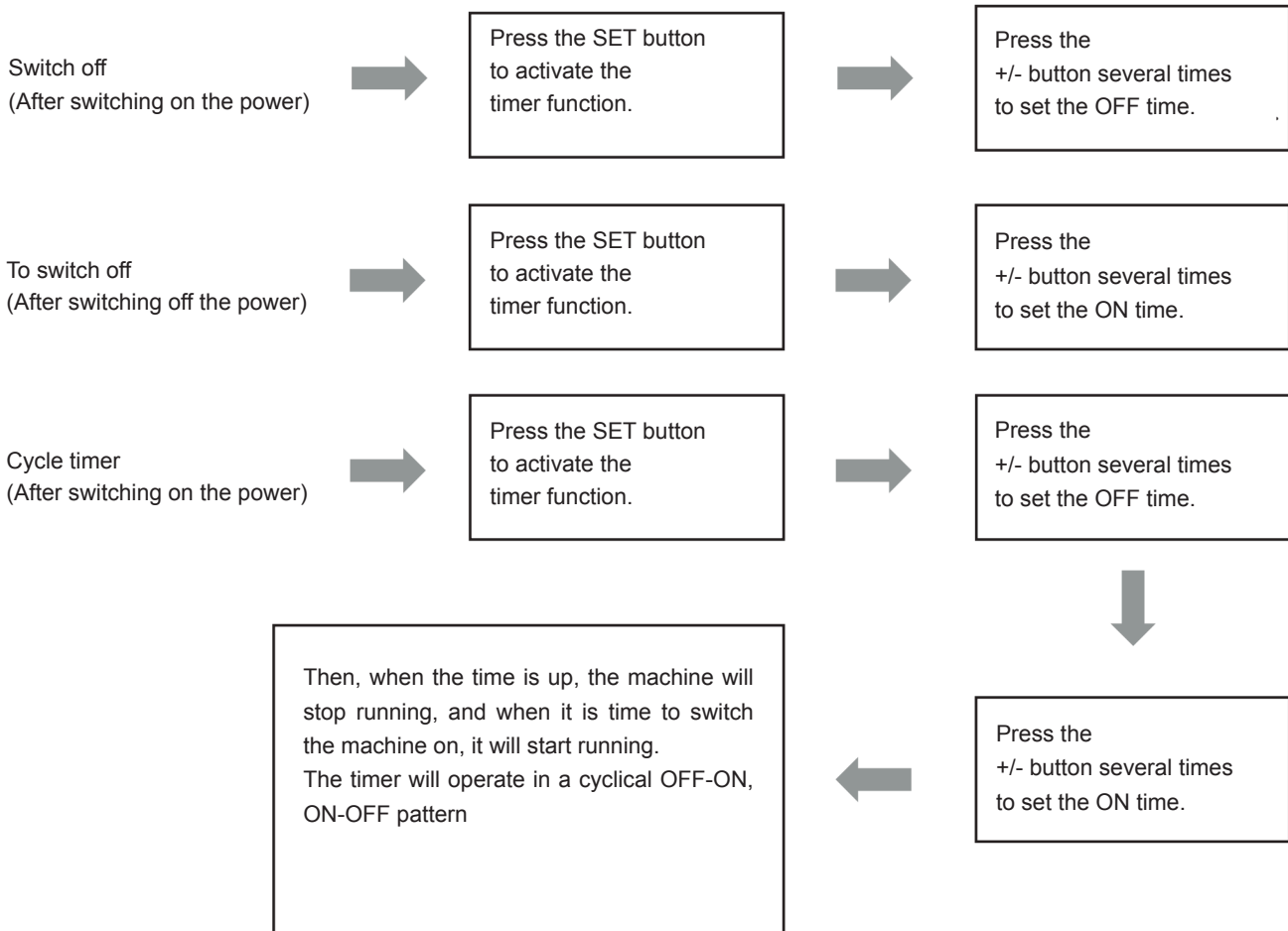
- Press the POWER button to switch on the unit.
- Press the AUTO button to deactivate continuous mode.
- The unit operates in normal mode, with a default humidity setting of 50%.
- Press the POWER button again to switch off the dehumidifier. The fan will run for a moment and then stop.

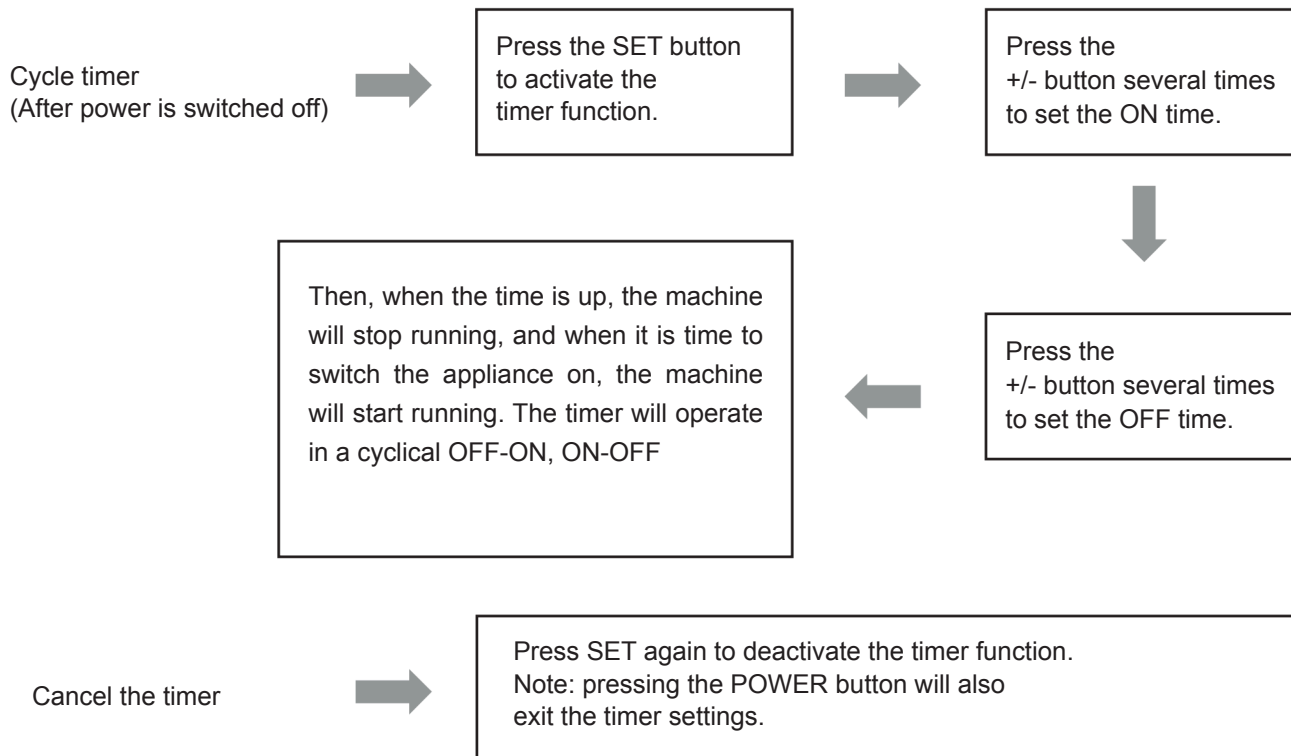
### 2. Set the humidity (setting range: 10%–95%):

- The humidity level can be adjusted during normal operation.
- Press the +/- button several times to adjust the humidity range.
- Once you have set the desired humidity level, the unit will switch on and off to maintain that level.

### 3. Setting the timer (1–24 hours). Press the SET button to set the timer.

The timer operates in two ways:





#### 4. Drying the appliance

After switching off the machine and pressing this button, the interior of the machine will be dried to prevent rusting caused by water.

#### 5. Room temperature control

The ROOM TEMP LED display shows the current room temperature.

#### 6. Automatic defrost function

At low room temperatures, frost may build up on the evaporator, which restricts airflow during dehumidification.

The dehumidifier will automatically start defrosting for 15 minutes.



A flashing LED indicates defrosting.

The compressor stops, but the fan continues to run.

Do not switch off the unit, as it will automatically resume dehumidification.

#### 7. Overload protection

In the event of a power cut, to protect the compressor, it is recommended that you wait 5 minutes before restarting the compressor.

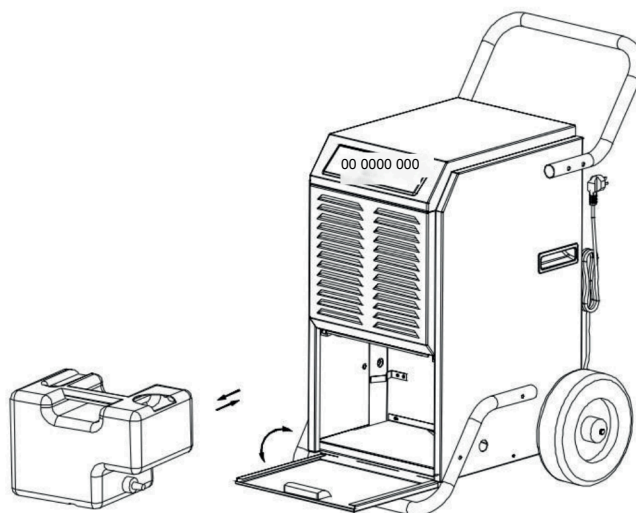
## 10. DRAINAGE

There are two ways to remove the water collected by the unit.

- A. Manual draining: Empty the water tank manually.
- B. Continuous condensate drainage: To drain the condensed water, connect a drain hose.

## 11. EMPTYING THE WATER TANK

1. When the tank is full, the FULL indicator light will come on.
2. The machine will emit a warning sound. Press the power button to switch off the machine.
3. To empty the water tank, open the front panel to access the water tank.
4. Grasp the water tank handle and pull it out horizontally.
5. Once the water has been drained, reinstall the tank and close the front panel.
6. Press the POWER button to restart the machine.

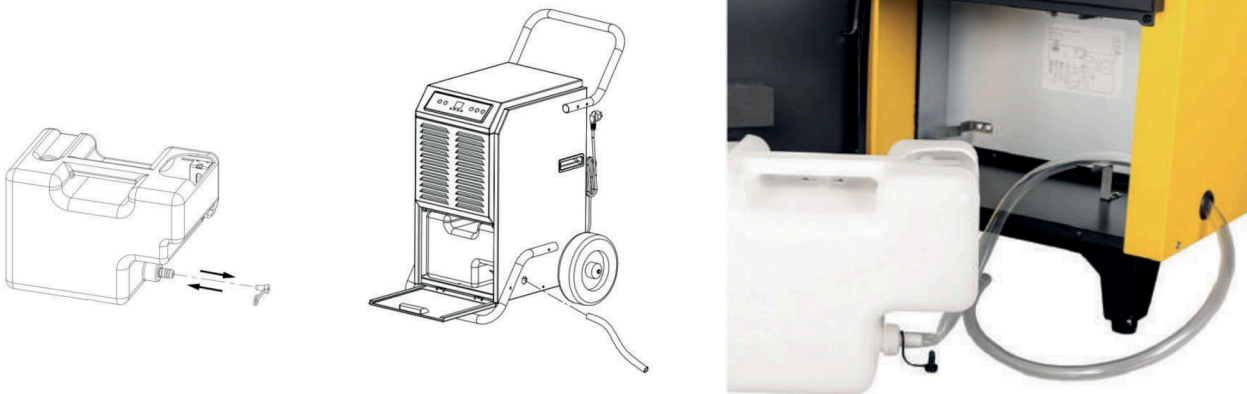


## 12. CONTINUOUS DRAINAGE

For continuous operation or unattended dehumidification, connect the drain hose supplied with the unit.

1. Press the POWER button to switch off the unit.
2. Open the front lower cover and remove the water tank from the unit.
3. Feed the drain hose through the drain hole and connect one end to the drain outlet.
4. Refit the water tank into the unit and close the front lower cover.
5. Direct the other end of the hose to the desired area. Ensure that the drain hose is not kinked.

Disconnect the hose and seal the hose connection with a plug if you wish to collect water in the tank again. Allow the hose to dry before storing.



### **WARNING:**

Do not block the drain hose, as the water will not be able to drain properly and you may damage the machine's components.

## 13. TROUBLESHOOTING

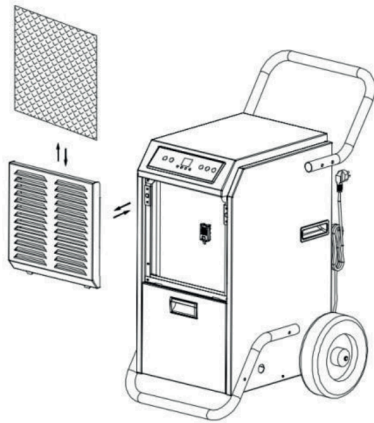
SYMPTOM		CHECK	SOLUTION
The device is not working		Check that the power connection is correct.	Connect all power cables.
		Check whether the water level is lit.	Empty the water tank and reinstall it correctly again.
		Check the room temperature in the room.	The operating temperature range is 5–35 °C.
The appliance is not working.		Check that the air filter is not dirty.	If necessary, clean the .
		Check that the air duct is not is blocked.	Remove the obstruction.
There is little condensate		Check whether the temperature in the room is below 20 °C.	This is normal. Low humidity in an environment with low temperatures.
		The set humidity level is higher than the current value.	Set the humidity level below the current value.
Water leak		Overflow during moving the unit.	Empty the water tank .
		Check that the drain hose is not kinked or bent.	Straighten the hose.
Excessive vibration		Check that the appliance is securely fixed in place.	Place the appliance on a level and firm surface.
		Check for any loose, vibrating parts.	Secure and tighten the parts.
		A noise resembling running water.	The noise is coming from the flowing refrigerant.
Error	E1	Temperature sensor failure.	Check the connection or replace it.
Error	E2	The humidity sensor is faulty or damp.	Clean or replace the .

## 14. MAINTENANCE

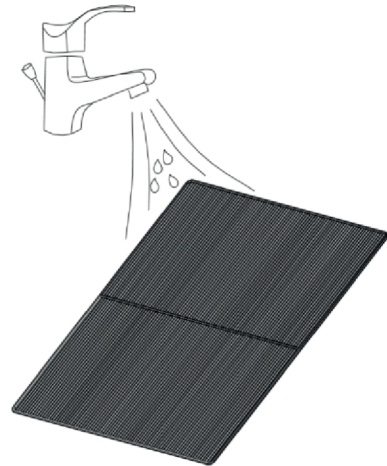
### CLEANING THE AIR FILTER (every two weeks)

The air filter can be removed for easy cleaning. Do not use the appliance without the air filter, as the evaporator may become contaminated.

1. Clean the machine with a soft, damp cloth.
2. To access the filter, slide open the louvre on the front panel.
3. Remove the mesh filter from the appliance.
4. Use a clean cloth to wipe the dust from the filter mesh. If the filter is very dirty, use tap water to rinse it. Dry the filter completely before reinserting it into the air intake grille.
5. A clean filter will improve the machine's performance.



1. Switch off the appliance and remove the air filter.



2. Rinse the air filter under running water.

#### Warning!!!

Do not touch the evaporator surface with your bare hands.

## 15. NOTES

- This appliance is designed to operate at temperatures between 5 °C and 35 °C. Ensure the appliance is earthed whilst in use.
- To avoid damage when moving the unit, do not tilt the dehumidifier by more than 45°.
- If water is draining continuously, position the drain hose horizontally, no higher than the water outlet.
- To extend the service life of the unit, wait 3 minutes after stopping operation before switching the unit back on.
- Before carrying out any repairs or cleaning the machine, ensure that it is switched off.
- Do not use chemicals to clean the machine.
- Do not wash the dehumidifier in water hotter than 40°C, otherwise the plastic surface may fade and become damaged.
- Use a soft, clean cloth to dry the appliance. If the exterior of the appliance is dirty, you may use a neutral detergent and wash it with water.
- When the machine is running, the compressor generates heat. This is normal.
- When used in a dusty environment, take measures to prevent dust from entering the unit.

## 16. CIRCUIT DIAGRAM

