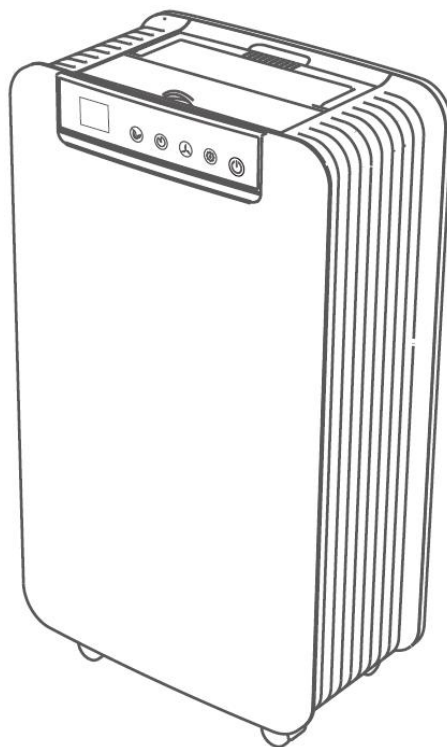




Home Dehumidifier User Manual



R290



OL12-B015E

(With R290 refrigerant)

READ AND SAVE THESE INSTRUCTIONS

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1. BEFORE YOU BEGIN

1.1 PRODUCT DESCRIPTION

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

The environmentally friendly R290 is used as the refrigerant. R290 has no damaging influence on the ozone layer (ODP), a negligible greenhouse effect (GWP) and is available worldwide. Because of its efficient energy properties, R290 is highly suitable as a coolant for this application. Special precautions must be taken into consideration due to the coolant's high flammability.

1.2 SYMBOLS FROM THE UNIT AND USER MANUAL



warning

This unit uses a flammable refrigerant.

If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.



Read the USER MANUAL carefully before operation.



Further information is available in the USER MANUAL, SERVICE MANUAL, and the like.



Service personnel are required to carefully read the USER MANUAL and SERVICE MANUAL before operation.

THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The unit is designed only for use with R-290(propane) gas as the designated refrigerant.
- **The refrigerant loop is sealed. Only a qualified technician should attempt to service!**
- Do not discharge the refrigerant into the atmosphere.
- R-290 (propane) is flammable and heavier than air.
- It collects first in low areas but can be circulated by the fans.
- If propane gas is present or even suspected, do not allow untrained personnel to attempt to find the cause.
- The propane gas used in the unit has no odor.
- The lack of smell does not indicate a lack of escaped gas.
- If a leak is detected, immediately evacuate all persons from the store, ventilate the room and contact the local fire department to advise them that a propane leak has occurred.
- Do not let any persons back into the store until the qualified service technician has arrived and that technician advises that it is safe to return to the store.
- No open flames, cigarettes or other possible sources of ignition should be used inside or in the vicinity of the units.
- Component parts are designed for propane and non-incentive and non-sparking. Component parts shall only be replaced with identical repair parts.

FAILURE TO ABIDE BY THIS WARNING COULD RESULT IN AN EXPLOSION, DEATH, INJURY AND PROPERTY DAMAGE.

2. FOR YOUR SAFETY

Your safety is the most important thing we concerned!



WARNING



Please read this manual carefully and fully understand before operating your dehumidifier.

2.1 OPERATIONAL PRECAUTIONS

WARNING- to reduce the risk of fire, electric shock or injury to persons or property:

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The A-weighted sound pressure level is below 42 dB.
- The appliance shall be disconnected from its power source during maintenance.
- Always operate the unit from a power source of equal voltage, frequency and rating as indicated on the product identification plate.
- Always use a power outlet that is grounded.
- Unplug the power cord when cleaning or when not in use.
- Do not operate with wet hands. Prevent water from spilling onto the unit.
- Do not immerse or expose the unit to rain, moisture or any other liquid.
- Do not leave the unit running unattended. Do not tilt or turn over the unit.
- Do not unplug while the unit is operating.
- Do not unplug by pulling on the power cord.
- Do not use an extension cord or an adapter plug.
- Do not put objects on the unit.
- Do not climb or sit on the unit.
- Do not insert fingers or other objects into the air outlet.
- Do not touch the air inlet or the aluminum fins of the unit.

- Do not operate the unit if it is dropped, damaged or showing signs of product malfunction.
- Do not clean the appliance with any chemicals.
- Ensure the unit is far away from fire, inflammable, or explosive objects.
- The unit shall be installed in accordance with national wiring regulations.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture.
- The appliance shall be stored in a room without continuously operation sources (for example: open flames, an operating gas appliance or an operating electric heater).
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Do not piece or burn, even after use.
- Be aware that refrigerants may not contain an odour.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than 8 m².
- Compliance with national gas regulations shall be observed.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.

 WARNING	<p>Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry, recognized assessment specification.</p>
 WARNING	<p>Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.</p>

If you don't understand something or need help, please contact the dealer services.

2.2 SAFETY PRECAUTIONS ON SERVICING

Please follow these warnings when to undertake the following when servicing a dehumidifier with R290.

2.2.1 Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2.2.2 Work procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.

2.2.3 General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

2.2.4 Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. no sparking, adequately sealed or intrinsically safe.

2.2.5 Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO₂ fire extinguisher adjacent to the charging area.

2.2.6 No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

2.2.7 Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

2.2.8 Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

- The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
- The ventilation machinery and outlets are operating adequately and are not obstructed;
- If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

2.2.9 Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

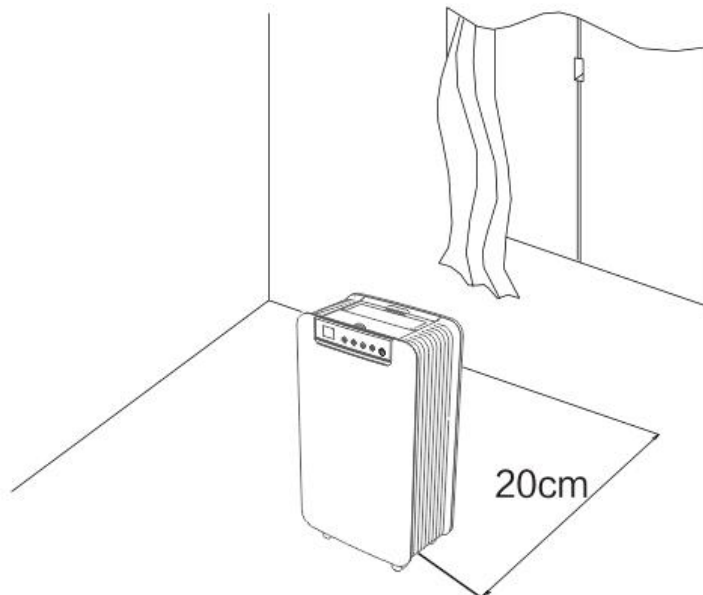
Initial safety checks shall include:

- those capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that there no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

3. INSTALLATION

3.1 LOCATION

1. Place the unit on a firm, level surface in an area with at least 20cm of free space around it allow for proper air circulation.
2. Never install the unit where it could be subject to:
 - Heat sources such as radiators, heat registers, stoves or other products that products that produce heat.
 - in an area where oil or water may be splashed
 - Direct sunlight
 - Mechanical vibration or shock
 - Excessive dust
 - Lack of ventilation, such as cabinet or bookcase
 - Uneven surface



WARNING!

Install the unit in rooms which exceed 4 m².
Do not install the unit in a place where inflammable gas may leak.



NOTE!

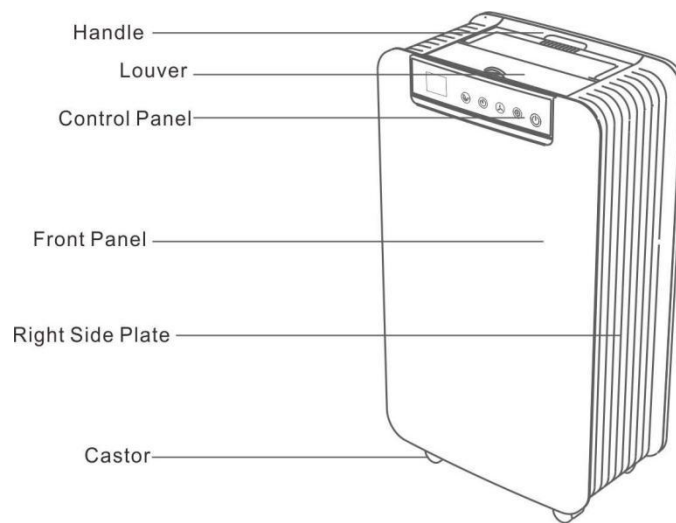
The manufacturer may provide other suitable example or may provide additional information about the refrigerant odour.

3.2 OPERATING THE DEVICE SAFELY

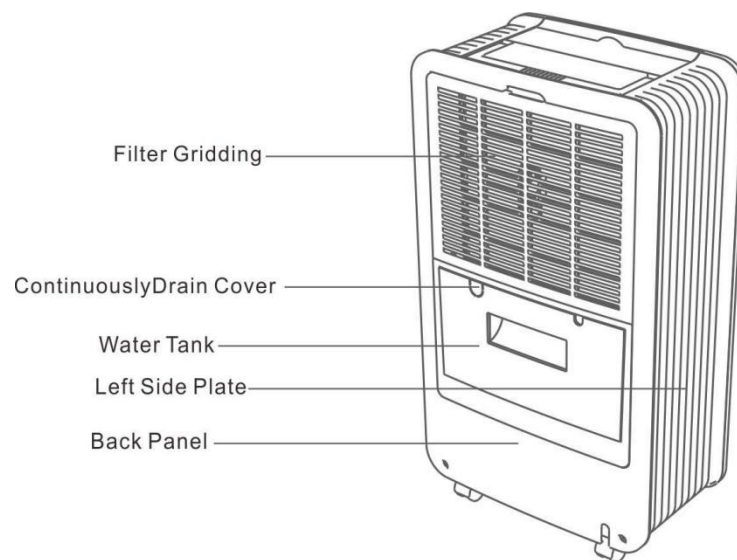
- Check the device after unpacking for any damages or scratches on it.
- Operate this unit in an ambient temperature from 5°C to 35°C.
- Do not use outdoors. This dehumidifier is intended for indoor residential applications only.
- Do not operate in close proximity to walls, curtains, or other objects that may block inlet and outlet.
- Keep the air inlet and outlet free of obstacles.
- If tipped more than 45°, allow the unit to set upright for at least 24 hours before start up.
- Keep doors and windows close for better energy saving.
- Do not operate or store the unit in direct sunlight or rain.
- It is normal for air outlet to feel warm to touch after continuous operation on hot days.
- Empty the water tank before moving dehumidifier.
- Make sure the Water tank is correctly fitted otherwise the unit will not operate properly.
- The dehumidifier starts up in the mode selected when the unit was last used.
- The dehumidifier starts dehumidifying if the room humidity is 3% higher than the selected humidity.
- There is a protective 3-minutes time delay of the compressor. Wait 3 minutes for the dehumidifier to resume dehumidification.

4. PRODUCT OVERVIEW

4.1 FRONT VIEW



BACK VIEW



4.2 FEATURES

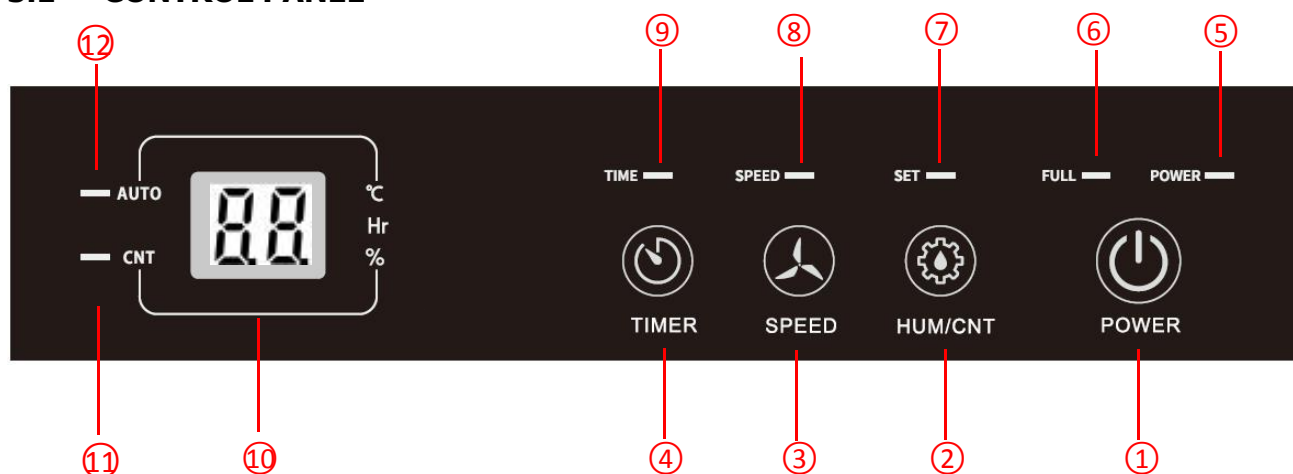
- ✓ Powerful moisture removal (Up to 12L/day dehumidification)
- ✓ Antibacterial Filter
- ✓ Continuous Drainage or 1.5L Water Tank
- ✓ Clothes Drying Function/ Auto-Defrost
- ✓ Humidity Monitor shows current air humidity.
- ✓ Auto mode automatically adjusts humidity levels.
- ✓ Electronic control/Auto shut-off/ auto restart
- ✓ Effectively removes moisture, dust, and dust mites from the air.
- ✓ Low power consumption-energy efficient.
- ✓ A 24 hours timer to set the time of operation.
- ✓ Quiet fan has two speed settings.

4.3 SPECIFICATIONS

MODEL NO.	OL12-B015E
Dehumidify Capacity	12L/day (30°C, RH80%)
Rated Voltage	AC220-240V
Rated Frequency	50Hz
Max. Rated Input Power	170W
Max. Rated Input Current	1.1A
Sound Pressure Level	≤42dB(A)
Water Tank Capacity	1.5L
Refrigerant Charge	R290/60g
Net Weight	10.5kg
Maximum suction/exhaust side working pressure	0.7MPa/3.2MPa
Maximum permissible pressure on the high/low pressure side	3.2MPa
Heat exchanger maximum allowable pressure	3.2MPa

5. OPERATION

5.1 CONTROL PANEL



FUNCTION KEYS AND INDICATORS

1.	POWER button	Press once to switch the machine on or off.
2.	Hum/CNT button	Selects humidity set-point or continuous operating.
3.	Fan speed button	Press to select fan speed between high and low.
4.	Timer button	Sets a time for the unit to automatically start or stop.
5.	Power LED (orange)	Lights up when the unit is power on.
6.	Water Full LED(red)	Lights up when water tank is full.
7.	Humidity LED (orange)	Lights up when setting humidity.
8.	Fan speed LED (high: orange/low: blue)	Lights up when adjust the fan speed.
9.	Timer LED (blue)	Lights up when the Timer function is set.
10.	Digital Display	Displays the current humidity (20-95%) and the humidity setting (40-80%). Displays timer setting and temperature.
11.	AUTO mode LED (blue)	Lights up when switch to AUTO mode.
12.	Continuous mode LED(orange)	Lights up when switch to Dry function for continuous dehumidifying.

5.2 SETTINGS

A. Operation mode setting

a. Normal Operation

- ⇒ Press **POWER** key to turn on the unit.
- ⇒ Press the **HUM/CNT** key to activate the AUTO mode.
The unit operates in auto mode with the default 60% humidity set-point.

b. Continuous Operation

- ⇒ Press **POWER** key to turn on the unit and operates in continuous mode automatically.
The unit starts to dehumidify in continuous operation with the default 20% relative humidity. The fan runs at high speed. The display reads current relative humidity. The humidity set-point cannot be adjusted in this mode.
- ⇒ Press **POWER** key again to turn off the dehumidifier.
The fan keeps running for a while and then stops.

Note: For continuous operation the drain hose should be connected in order to continuously drain the collected water.

B. Set Humidity (setting range: 40%-80%):

The humidity set-point can be adjusted in Auto mode.

- ⇒ Press HUM/CNT key repeatedly to adjust humidity set-point by increments of 5%.The unit will cycle on and off to maintain the level.
Set the humidity level between 40% and 60% for comfort.

C. Set Fan Speed:

- ⇒ Press SPEED key to switch the speed between high and low.
Note: The fan speed cannot be set when in defrosting progress.

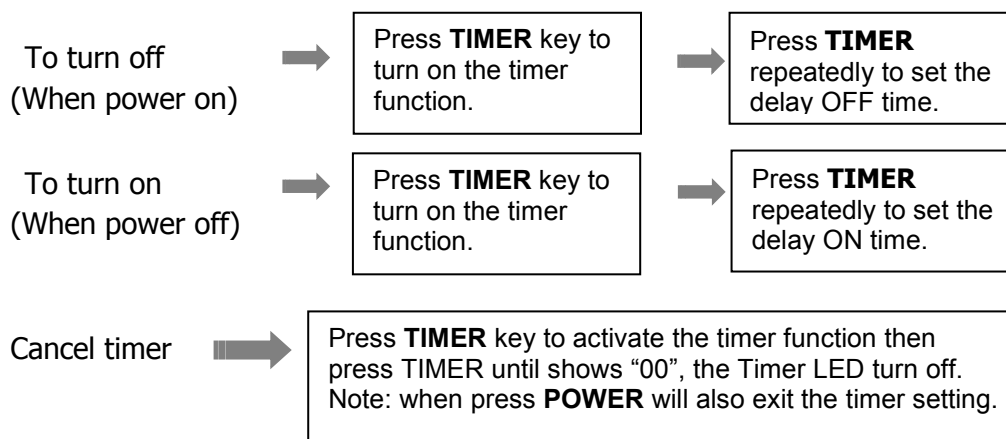
D. Room Temperature Inspection

In addition to the humidity level, the digital display can also indicate the current room temperature. Please check as follows:

- ⇒ Press and hold the HUM/CNT button for 5 seconds.
The screen displays the temperature in degree Celsius for 5 seconds.

E. Timer Setting (0hour-24hours) :

The timer has two ways of operation:



F. **Water FULL Indicator**

The machine automatically shuts off once the water tank is full, alerting the user through an indicator light and buzzing for 15 times. It reminds you to check:

- If the water tank is full, empty and re-install the water tank.
- If the water tank is not in position, the full indicator always on and the unit is inoperative.
- Re-install the tank correctly, and the unit will auto operating as your last setting.

G. **Auto Restart function**

When there is a power outage, the dehumidifier automatically restarts when the power comes back on and also resumes settings.

H. **Automatic Defrost function**

At low room temperatures (below 18 °C), frost may buildup at the evaporator reducing the airflow across it during dehumidifying.

The dehumidifier will automatically start defrosting for 7 minutes.

⇒ The POWER LED blinking.

⇒ The compressor stops and the fan keeps running.

Do not turn off the unit and it will automatically restart dehumidifying.

I. **Overload Protection**

In the event of a power loss, to protect the compressor there is a 3-minute delay until the compressor restarting.

5.3 DRAINAGE

There are two ways of removal collected water produced by the unit.

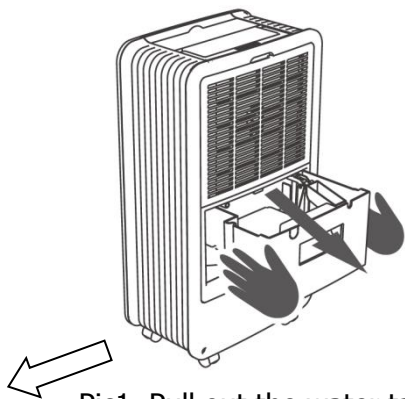
A. Manual draining: Empty water tank by manual.

B. Continuous draining: Use gravity to drain condensate water by attaching a drain hose.

5.3.1 EMPTYING THE WATER TANK

The water tank built in unit will fill up and shut the unit down once it is full. It will run again once you empty the water tank and installed properly.

- 1) When the tank is full, The unit will make a buzzing sound, and the "**FULL**" light will turn on.
- 2) Press the **POWER** button to turn off the unit.
- 3) Pull on the water tank and simply slide out of the body of the dehumidifier.
- 4) Empty the water into an area with a drain or outside.
- 5) Clean the inside of the tank as well as the outside.
- 6) Replace the empty tank back into the unit.
- 7) Press the **POWER** button to resume operation.
- 8) If the **FULL** light does not extinguish, check that the float is correctly in place.



Pic1. Pull out the water tank



Pic2. Empty the water tank

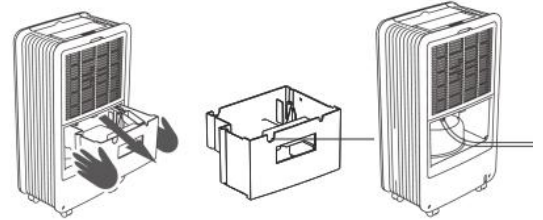


Pic3. Don't remove the float

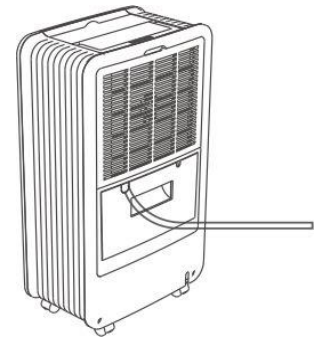
5.3.2 CONTINUOUS DRAINING

For continuous operation or unattended dehumidification, please connect the attached drain hose to the unit. Condensate water can be automatically flow into a bucket or drain by gravity.

- Set the unit in a horizontal surface and stable position.
- Switch off the unit before operating.
- Remove the plug of the water outlet opening, and keep it in safe area.



- Securely and properly connect the drain hose and make sure it is not kinked and clear of obstruction.
- Place the outlet of hose over a drain or bucket and ensure that water could freely flow out of the unit.
- Do not submerge the end of hose into water; otherwise it can cause "Air Lock" in the hose.



To avoid water spillage:

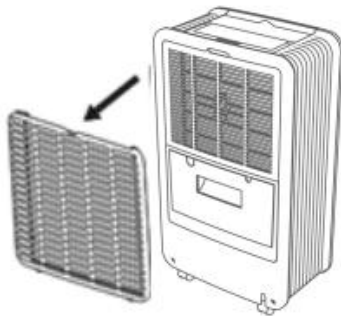
- As the negative pressure of condensate drain pan is large, tilt the drain hose downward toward the floor. It is appropriate that the degree of inclination should exceed 20 degrees.
- Straighten the hose to avoid a trap existing in the hose.

6. MAINTENANCE

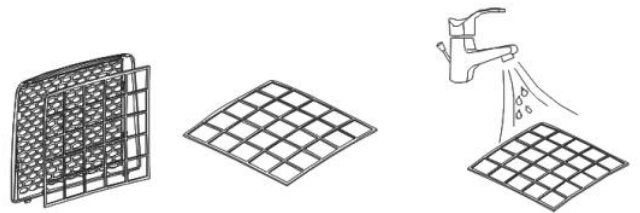
6.1 CLEANING THE AIR FILTER (every two weeks)

Dust collects on the filter and restricts the airflow. The restricted airflow reduces the efficiency of the system and if it becomes blocked it can cause damage to the unit.

The air filter requires regular cleaning. The air filter is removable for easy cleaning. Do not operate the unit without an air filter, or the evaporator may be contaminated.



Pic4. Switch off the unit and remove air filter.



Pic5. Using the vacuum to clean the dust.

Step6. Re-assembly the air filter.

Warning!!!

Do not touch the evaporator surface with bare-hand, or could cause injury of your fingers.

6.2 CLEANING UP OF REFRIGERANT

1. Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.
2. Eliminate every possible source of ignition.
3. Use appropriate personal protection equipment (PPE).
4. Evacuate unnecessary personnel, isolate, and ventilate area.
5. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or gas.
6. Prevent entry to sewers and public waters.
7. Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapors.

Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Contact competent authorities after a spill.

7. TROUBLESHOOTING

SYMPTOM		INSPECTION	SOLUTION
The unit is not operating.		✓ Check the power connection in securely.	➤ Insert the power cord securely into the wall Outlet.
		✓ Check if the water level indicator lights up?	➤ Empty the water tank and reinstall correctly.
		✓ Check the room temperature.	➤ The range of operating temperature is 5-35°C .
There is little formation of condensate.		✓ Check the air filter for dirt.	➤ Clean the air filter as necessary.
		✓ Check if the air duct is blocked.	➤ To clear the obstacle.
		✓ Check if the room temperature is below 20°C .	➤ This is normal. Low humidity in low temperature environment.
		✓ Set humidity level is higher than current Humidity value.	➤ Set the humidity level below current humidity value.
Water Leakage		✓ Overflow while moving the unit.	➤ Empty the water tank before transport.
		✓ Check if the drain hose is kinked or bends.	➤ Straighten the hose to avoid a trap existing.
Excessive Noise		✓ Check if the unit is securely positioned.	➤ Place the unit on horizontal and firm ground.
		✓ Check if any loose, vibrating parts.	➤ Secure and tight the parts.
		✓ Noise sounds like water flowing.	➤ Noise comes from flowing refrigerant. This is normal.
ERROR CODES	E1	✓ Humidity sensor dampened or failure.	➤ To clean or replace the humidity sensor.
	CL	✓ Display when Room temperature is below 5°C (41°F) .	➤ Normal. The compressor stops, and the fan keeps running.
	CH	✓ Display when Room temperature is above 35°C (95°F) .	➤ Normal. The compressor stops, and the fan keeps running.
	LO	✓ Display when Room relative humidity is bellow 20%RH.	➤ Normal. The compressor stops, and the fan keeps running.
	HI	✓ Display when Room relative humidity is above 95%RH.	➤ Normal. The compressor and the fan keep running.

8. DECOMMISSIONING

8.1 STORAGE

Long-term storage - If you will not be using the unit for an extended period of time (more than a few weeks) it is best to clean the unit and dry it out completely. Please store the unit per the following steps:

1. Unplug the unit.
2. Drain the remaining water from the unit.
3. Clean the filter and let the filter dry completely in a shaded area.
4. Collect the power cord at the water tank.
5. Re-install the filter at its position.
6. Preserving the machine in ventilating, dry, non- corrosive gas and safe place indoor.
7. The unit must be kept in upright position when in storage.

ATTENTION:

The evaporator inside the machine has to be dried out before the unit is packed to avoid component damage and molds. Unplug the unit and place it in a dry open area for days to dry it out. Another way to dry the unit is to set the humidity point more than 5% higher than the ambient humidity to force the fan to dry the evaporator for a couple of hours.

8.2 DISPOSAL

WARNING!!!

Releasing refrigerant into atmosphere is strictly forbidden!

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.



**This product imported by:
Consumable Direct Ltd
M32 0JT
UK**

