KESNOS

USER MANUAL

Commercial Dehumidifier

DP602A >

Read the manual before operating the device and keep it for future reference.

About Kesnos

Dedicated to enhancing comfort and well-being in every home, Kesnos is a US-based dehumidifier manufacturer that prioritizes the efficient removal of excess moisture from your living space. By eliminating the breeding ground for mold, mildew, and allergens, Kesnos aims to create a safe and healthy indoor climate for your loved ones.

Professional Customer Service

We kindly remind you to thoroughly inspect your dehumidifier upon delivery for any potential damages or missing parts. If you have any concerns, please contact us directly for solutions before reaching out to the seller for a return. Our dedicated support team is ready to assist you promptly for your complete satisfaction.

support@kesnos.com

Before Getting Started

1. Firstly, take a few minutes to read this manual thoroughly before operating the device. It will quickly walk you through the installation and operation of the dehumidifier.
2. Set the dehumidifier on a flat and even ground in an upright position and allow **24 Hours** of "settling" before turning it on.
3. It's advised to keep this manual for future reference.

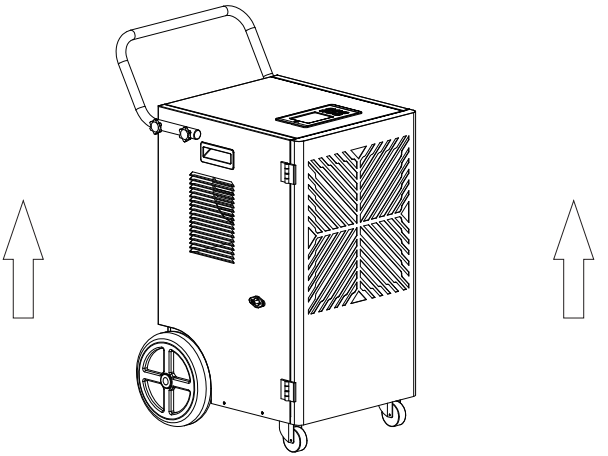


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GENERAL SAFETY PRECAUTIONS

- The dehumidifier is designed for indoor use only and is not intended for operation on public transport, such as buses, subways, and trains.
- Avoid placing the device on soft, shaky, or uneven ground, as this may cause vibration and movement during operation.
- Verify that the dehumidifier's voltage matches your electrical supply and plug it into grounded outlets in accordance with local regulations regarding electrical safety.
- Ensure that the drain hose runs downward without bending or winding to facilitate continuous water drainage.
- Avoid contact with water as the dehumidifier is not waterproof.

- Be sure to unplug the dehumidifier first before cleaning or packing it.
- Turn off the dehumidifier before unplugging the device.
- For damaged cords, please contact the manufacturer or certified technicians for replacement to avoid hazards.
- Do not dismantle or modify the device without professional certification. Such actions may lead to safety hazards and void the warranty.
- If the dehumidifier is not going to be used for an extended period, please remember to unplug it.

- Keep the dehumidifier away from direct sunlight, heat-generating devices, and flammable materials, including stoves, gasoline, etc.
- Avoid sitting, standing, or placing heavy objects on the device.
- No pesticides or flammable liquids are allowed near the device.
- Avoid inserting fingers, rods, or other thin objects into the air inlet and outlet grilles of the dehumidifier.
- Stop and unplug the device immediately at any sign of malfunction.

GENERAL SAFETY PRECAUTIONS

- Do not tilt the device to prevent spilled water from damaging it.
- Children aged 8 and above, as well as individuals with reduced physical, sensory, or mental capabilities, should operate the device only under supervision. Children under 8 should not tamper with it.
- Use soft cloth for cleaning and avoid splashing water directly on it.
- Neutral detergents are recommended for surface cleaning. Alcohol, gas, and benzene are prohibited for cleaning purposes.

WARNING

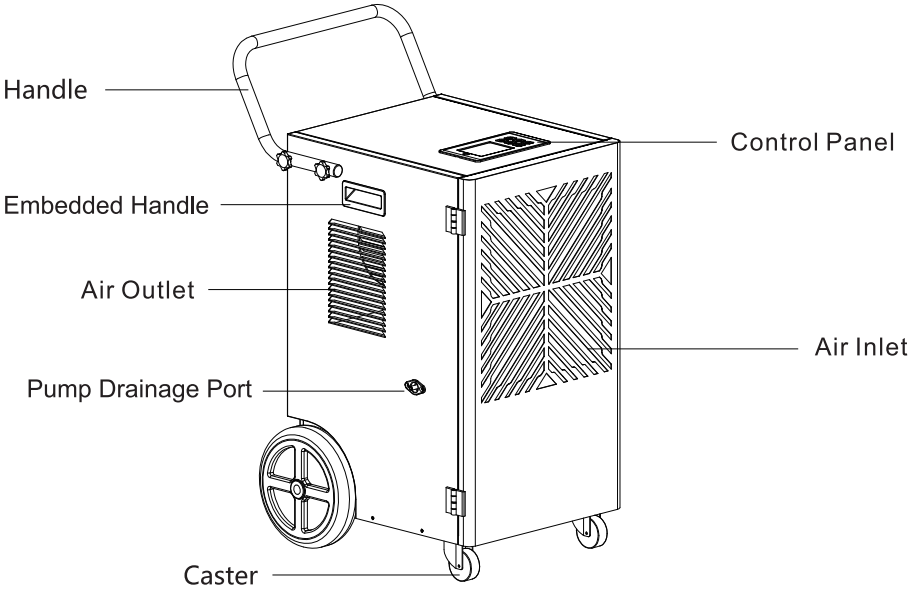
Do not use means to accelerate the defrosting process or to clean the appliance, other than those recommended by the manufacturer. Risk of Fire or Explosion—Store in a well-ventilated room without continuously operating flames or other potential ignition. Do not pierce or burn. Be aware that refrigerants may not contain an odor.



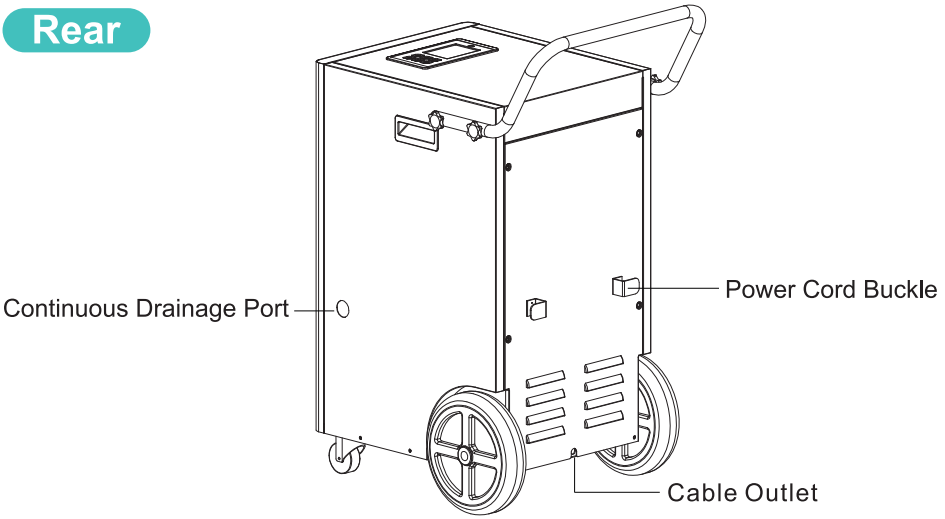
- The transportation and disposal of this dehumidifier must comply with local regulations regarding flammable refrigerants.
- The appliance shall be installed, operated and stored in a room with a floor area larger than 54 sq. ft.
- Under no circumstances should you pierce or burn the dehumidifier casing, which may lead to refrigerant leak. Be aware that refrigerants may be odorless.
- Device maintenance and repair should be left to trained professionals due to the potential safety hazards and environmental concerns associated with refrigerant leaks. Certified technicians can consult the Maintenance & Cleaning section in this manual for guidance on handling the flammable refrigerant with caution.

PARTS ILLUSTRATION

Front

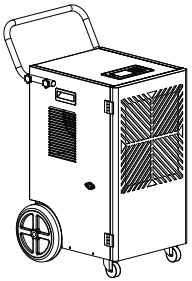


Rear

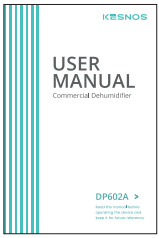


PACKAGE CONTENTS

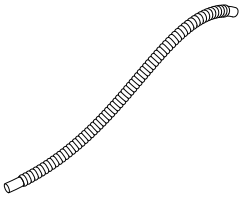
The package of this commercial dehumidifier contains the following items:



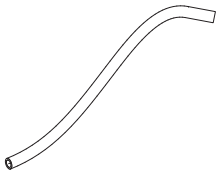
Commercial Dehumidifier × 1



User Manual × 1



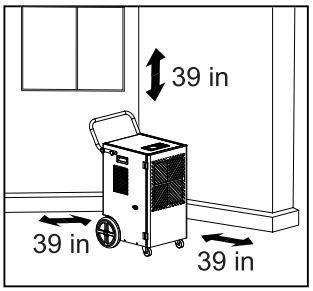
Gravity Drain Hose × 1



Pump Drain Hose × 1

Device Positioning & Placement

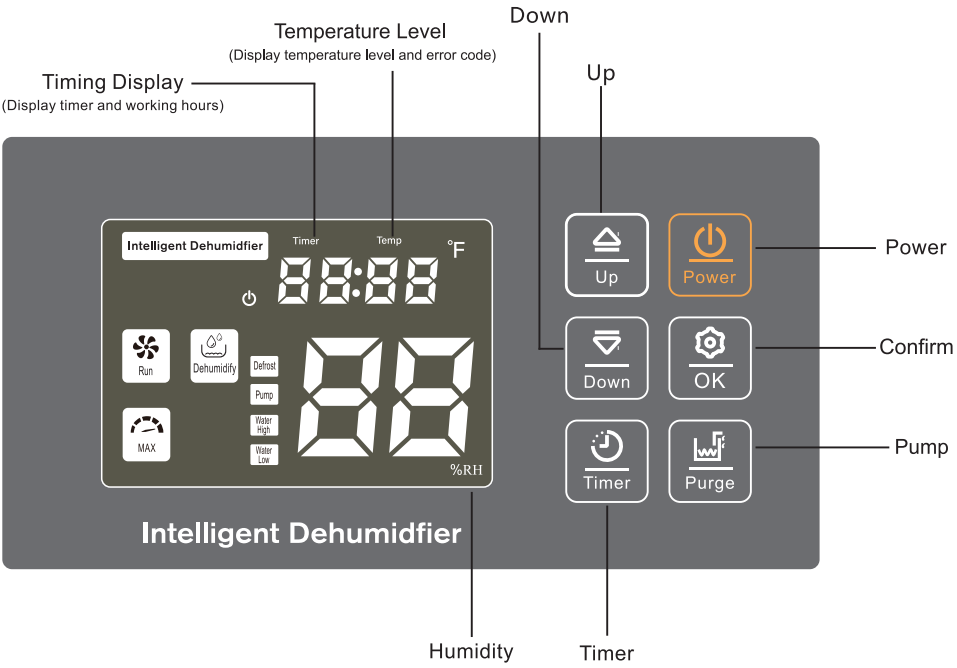
1. The operational temperature range for the dehumidifier must be maintained between 41°F to 100°F (5–38°C). Operation outside of this specified temperature range may lead to potential damage to the product. Therefore, please do not place the device in an area where temperatures fall outside of this range.
2. When positioning the dehumidifier, please ensure it is not placed too close to walls or other objects, as this could obstruct the air vents. Maintain a minimum clearance of 39 inches above and around the device, as depicted in the diagram.



3. The device should be positioned, operated, and stored in an area with a minimum space of 54 sq. ft.

FUNCTION OVERVIEW

1. Control Panel



Button Instructions

Up
Adjust the values upward for humidity and timer settings.

Down
Reduce the values for humidity and timer settings.

Timer
Turn on or off the timer function or set up the timing hours.

Power
Turn on or off the unit.

OK
Confirm the humidity and timer settings.

Purge
Enable the pump.

2. Indicators on the LCD Display

" Intelligent Dehumidfier " lights up when turn on the dehumidifier and lights off when turn it off.

" " lights up when the dehumidifier has been plugged in but not turned on yet.

" " shows the current room humidity. When you press " " or " " button to set the target humidity , it will turn to display the previous setting value and keep blinking.

" " lights up when the fan is running and lights off when it stops running.

" " flickers typically because the compressor is not kicked in. It usually happens when the dehumidifier is under the 3-minute compressor delay status, or the dehumidifier is programmed to delay-start (AUTO ON TIMER).

" " lights up when the setting humidity is 10%, and the dehumidifier enters into continuous mode.

" " flashes when the dehumidifier is defrosting. The dehumidifier will defrost when the frost accumulated on the interior of the dehumidifier. The fan keeps running when defrosting, while the compressor is not. The dehumidifying function will cease until the frost melted. " " will light off when the defrosting completed, then the dehumidifier begins to dehumidify automatically.

NOTE: Frequent defrost process indicates that the room temperature is too low. Therefore, if the room temperature is lower than 60°F, please consider adding heat to promote proper drying.

" " lights up when the pump is in good condition. It will light up once you turn on the dehumidifier. It flashes when the pump is working to drain the water out.

" " and " " will blink when the ambient humidity value is lower than or equal to the preset humidity value. After 30 seconds, the compressor and fan stop working. The dehumidifier will automatically restart when the ambient humidity exceeds the preset value.

OPERATION INSTRUCTIONS

Power

Press the " " button to turn the dehumidifier on. When the dehumidifier is on, the " " indicator lights off, and the " Intelligent Dehumidfier " indicator lights up.

Press " " to turn the dehumidifier off. When the mechine is turned off, the " " indicator lights up, and the " Intelligent Dehumidfier " indicator lights off.

NOTE: To protect the compressor, the fan will continue to operate for 5 seconds after the dehumidifier shuts off. So please do not disconnect the power cord to force the dehumidifier to stop. Always use the " " button.

Check the Room Humidity

Check the room humidity readout (" ") on the control panel.

Set a Desired Humidity Percentage Value

Press " " or " " button to preset your desired humidity level. The humidity level can be set within a range of 10%RH(Relative Humidity) to 90%RH(Relative Humidity) in 1%RH increment. The setting humidity needs to be at least 5% lower than the room humidity. After setting the target humidity, press " " or wait 5 seconds to confirm.

NOTE:

1. The dehumidifier will stop and start automatically to maintain room humidity level within a range of ±5% of the preset target humitity.

   For example, if the set humidity is 50%:
   When the detected humidity is 45%, 5% lower than the preset humidity, the dehumidifier will automatically stop and enter into standby mode, the compressor stops working and indicators " " and " " flash.

   When detected humidity raises to 55%, 5% higher than the preset humidity, the dehumidifier will automatically restart.

2. If the preset humidity is equal to or higher than the room humidity, the dehumidifier will not start.

3. If the preset humidity level is 10%, the dehumidifier will enter continuous mode and run continuously.

Timer Setting

The " " function enables you to either delay AUTO-ON or delay AUTO-OFF the dehumidifier in the choice from 1 hour to 24 hours. Press " " and " " to adjust the timer by 1 hour increments.

・Setting AUTO-ON timer: When the dehumidifier is off, press " " to set a timer to automatically start the machine.

・Setting AUTO-OFF timer: When the dehumidifier is on, press " " to set a timer to automatically shut down the machine.

NOTE:

1. Before setting AUTO-ON TIMER, make sure the dehumidifier is plugged in.

2. For AUTO-ON setting, please turn on the dehumidifier to set a desired humidity level. Otherwise, it will maintain the previous setting humidity.

3. You can only set AUTO-ON timer when the dehumidifier is off or set AUTO-OFF timer when the mechine is on. It is not able to set both AUTO-ON and AUTO-OFF timer at the same time.

4. The timer will ONLY function one time instead of cycling the dehumidifier on or off indefinitely.

5. The timer function will be disabled when the dehumidifier has been powered on/off manually.

6. Set the timer as 00, the timer function will not be activated.

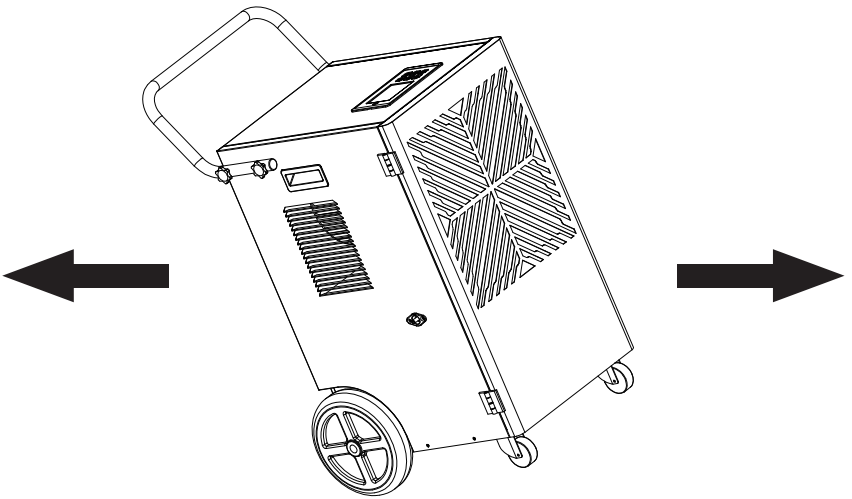
Pump Setting

During operation, it will automatically pump the water out via the drain hose when the pump reservoir is full. No need manual intervention.

Before moving the dehumidifier, press " " to empty the pump reservoir to avoid water spillage.

" " will blink when the pump is draining. The pump will stop working automatically in 40 seconds and stop blinking when the pump reservoir is almost empty.

NOTE: Please press " " to empty the inbuilt reservoir first to avoid water leakage **while** moving the dehumidifier.



3 Minutes Compressor Delay Mechanism

To avoid any damage to the dehumidifier, the unit will not start working in a 3 minutes complete cycle. In other word, if you turn the dehumidifier off and then restart it immediately, the compressor will not kick in until 3 minutes later. During this period, you can see the "  " indicator flashing on the LCD screen until the compressor kicks in.

Auto Defrost

When the frost builds up on the evaporator coils, the compressor will stop working and the fan will continue to run until the frost melted. When the dehumidifier is defrosting, you can see the "  " indicator lights up on the LCD screen.

Auto Drainage

Thanks to the built-in pump, the dehumidifier will drain the condensation water automatically.

Auto-Restart

If the dehumidifier shuts off unexpectedly due to power outage, it will restart with the previous function settings automatically when the power resumes.

The timer function will not be retained and you need to reset it.

Temperature Protection Function

When the room temperature is higher than 113°F, the dehumidifier will automatically enter into HIGH-TEMPERATURE PROTECTION SYSTEM where the LCD screen shows "  " and the compressor stops working.

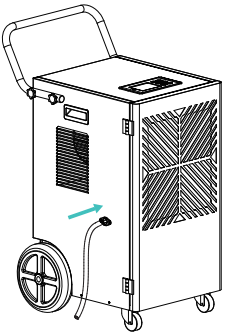
When the room temperature is lower than 40°F, the dehumidifier will automatically enter into LOW-TEMPERATURE PROTECTION SYSTEM where the LCD screen shows "  " and the dehumidifier stops working.

Pump Drainage

During operation, the dehumidifier will automatically pump the water out via the drain hose when the pump reservoir is full. No need manual intervention.

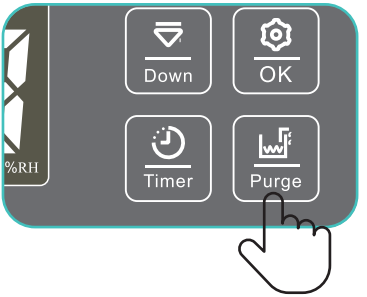
Before turning on the dehumidifier, make sure the hose has been connected to the drain outlet properly.

1



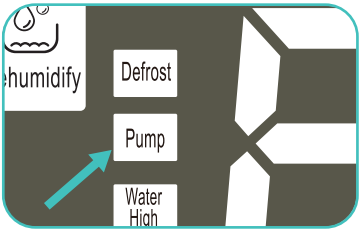
Attach the hose to the drain outlet directly.

2



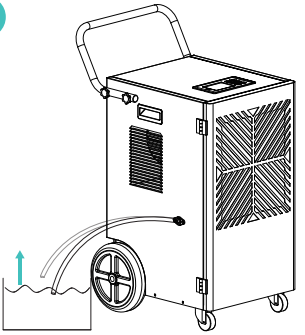
Press " " to empty the pump reservoir.

3



The " " indicator will stop blinking when the pump reservoir is almost empty.

4



Take the hose out from the water collection container.

DRAINAGE

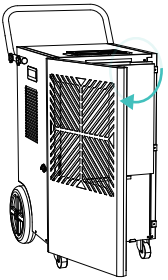
NOTE:

Place the unattached end in a sink, drain, bucket or outdoors - anywhere that water can drain out safely. (Ensure there are no kinks or other obstructions that will stop the water to flow.)

If you use a bucket or other container for water collection, check it regularly to prevent overflows. The drain hose for the water pump can drain up to 15ft vertically. More than 15ft may cause water flow back to the pump and result in water leakage.

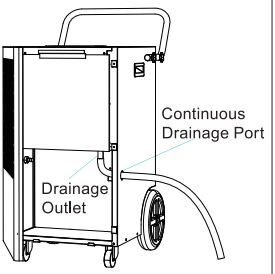
Continuous Drainage

1



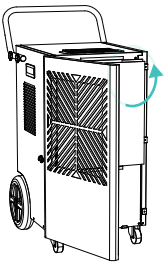
Open the panel from the right side.

2



Remove the original connected short hose, insert the long hose through the continuous drainage port and connect it to the drainage outlet.

3



Close the panel.

NOTE:

1. Please make sure the connections are tightly connected to avoid water leakage.
2. The hose should be lower than the drain outlet to avoid backflow.
3. The hose cannot be distorted or has substantial turning.

TROUBLESHOOTING

When the breakdown and problems occurs on the dehumidifier, please refer to the troubleshooting part in the manual. Do not dismantle or repair the unit yourself, for improper repair may cause danger.

If a condition listed below occurs, please check the following items before calling customer service. It may save you time and expense.

Problems	Analyses	Solutions
Not working	Dark Display	Check the power cord socket and the wiring.
	Defrost indicator lights up	Defrost function is running, and the indicator will light off after auto-defrost finished.
	" -H " indicator lights up	The unit shall not used in high-temperature conditions.
	" -L " indicator lights up	The unit shall not used in low-temperature conditions.
Much Noise	The unit is place at uneven surface.	Place the unit at somewhere flat and even.
	The filter may be blocked.	Clean the filter. See "Maintenance".
	The inlet or outlet may be blocked.	Keep the unit iniet or outiet away from objects.

Warning

If the dehumidifier is still not working properly as expected and the troubleshooting steps or solutions above may not resolve the issue, please shut down and unplug the dehumidifier, then contact Kesnos Customer Service at support@kesnos.com.

ERROR CODES

Error Codes	Handling Method
E1	Replace the temperature and humidity sensor.
E2	Replace the temperature sensor.
E3	Make sure the internal reservoir is well placed, and the WF port is properly connected.
E4	Replace the temperature and humidity sensor.
E6	Make sure the display circuit has been connected right, and the DISPLAY port is well connected.
-H	No problem. The unit resumes working when unit temperature goes down.
-L	No problem. The unit resumes working when unit temperature goes up.

1. If the problems persist, please turn off and unplug the dehumidifier, and contact Kesnos Customer Service: support@kesnos.com.

2. When E1, E2 and E4 fault alarm, the dehumidifier can operate normally, but some functions are disabled. The dehumidifier will automatically resume to operate after the fault is eliminated.

MAINTENANCE & CLEANING

⚠ WARNING:

Ensure the dehumidifier is turned OFF and unplugged before cleaning or maintenance.

Machine Cleaning

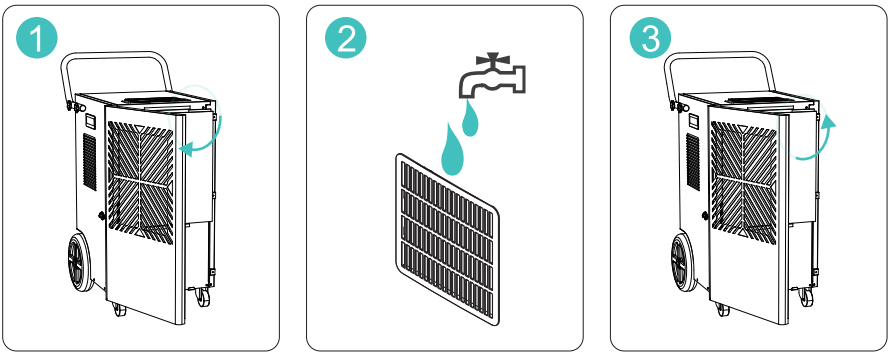
Wipe the dehumidifier housing with a soft damp cloth. Do not submerge or place water on the dehumidifier or control panel. Water may damage the electronic components of the machine. Do not use chemical solvents such as benzene, alcohol, gasoline or other heavy-duty cleaners, for they may damage or deform the surface.

Filter Cleaning

It's advised to clean the filter regularly and properly. Make sure clean the filter at least once a month.

MAINTENANCE & CLEANING

1. Open the panel from the right and remove the filter.
2. Clean the dust on the surface with the vacuum or flush and wash the filter with detergent and place it at somewhere ventilated. Do not expose the filter to strong sunshine or dry the filter with high temperayure, or it may be distorted.
3. Install the filter and close the panel.



Device Storage

When the unit is not being used for a long period of time and you want to store it, please following the steps:

1. Press the Purge Button to drain out the water that accumulates at the bottom of the pump (The recommendation is to operate 2-3 times.)
2. Unplug and wrap the cord with the power cord buckle.
3. Clean the air filter.
4. Cover the unit with a plastic bag.
5. Store the unit upright in a cool and dry place.

Warnings Regarding the R32 Refrigerant



Refrigerant Safety Group A2L

This dehumidifier contains R32, a flammable refrigerant. All operators or maintenance personnel for refrigeration systems must hold a valid certificate from an industry-recognized body for the safe disposal of refrigerants. Repairs and maintenance should strictly adhere to the manufacturer's guidelines. If additional help is required, ensure it's under the supervision of personnel qualified in handling combustible refrigerants.

MAINTENANCE & CLEANING

Transportation, marking and storage for units that employ flammable refrigerants

1. General

The following information is provided for units that employ FLAMMABLE REFRIGERANTS.

2. Transport of equipment containing flammable refrigerants

Attention is drawn to the fact that additional transportation regulations may exist with respect to equipment containing flammable gas. The maximum number of pieces of equipment or the configuration of the equipment permitted to be transported together will be determined by the applicable transport regulations.

3. Marking of equipment using signs

Signs for similar appliances used in a work area are generally addressed by local regulations and give the minimum requirements for the provision of safety and/or health signs for a work location. All required signs are to be maintained and employers should ensure that employees receive suitable and sufficient instruction and training on the meaning of appropriate safety signs and the actions that need to be taken in connection with these signs.

The effectiveness of signs should not be diminished by too many signs being placed together. Any pictograms used should be as simple as possible and contain only essential details.

4. Disposal of equipment using flammable refrigerants

See national regulations.

5. Storage of equipment/appliances

The storage of the appliance should be in accordance with the applicable regulations or instructions,whichever is more stringent.

6. Storage of packed (unsold) equipment

Storage package protection should be constructed in such a way that mechanical damage to the equipment inside the package will not cause a leak of the REFRIGERANT CHARGE.

The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

Requirements for operation,service and installation manuals of appliances using flammable refrigerants

Qualification of workers

The manual shall contain specific information about the required qualification of the working personnel for maintenance, service and repair operations. Every working procedure that affects safety means shall only be carried out by competent persons.

Examples for such working procedures are:

- breaking into the refrigerating circuit;
- opening of sealed components;

Competence of service personnel

1. General

Information of procedures additional to usual information for refrigerating appliance installation, repair, maintenance and decommission procedures is required when an appliance with FLAMMABLE REFRIGERANT is affected.

The training of these procedures is carried out by national training organisations or manufacturers that are accredited to teach the relevant national competency standards that may be set in legislation.

The achieved competence should be documented by a certificate.

2. Information and training

2.1) The training should include the substance of the following.

2.2) Information about the explosion potential of FLAMMABLE REFRIGERANTS to show that flammables may be dangerous when handled without care.

2.3) Information about POTENTIAL IGNITION SOURCES, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.

2.4) Information about the different safety concepts:

- Unventilated-Safety of the appliance does not depend on ventilation of the housing.
- Switching off the appliance or opening of the housing has no significant effect on the safety.
- Nevertheless, it is possible that leaking refrigerant may accumulate inside the enclosure and flammable atmosphere will be released when the enclosure is opened.
- Ventilated enclosure-Safety of the appliance depends on ventilation of the housing.
- Switching off the appliance or opening of the enclosure has a significant effect on the safety.
- Care should be taken to ensure sufficient ventilation before.
- Ventilated room -Safety of the appliance depends on the ventilation of the room.
- Switching off the appliance or opening of the housing has no significant effect on the safety.
- The ventilation of the room shall not be switched off during repair procedures.

2.5) Information about refrigerant detectors:

- Principle of function, including influences on the operation.
- Procedures, how to repair, check or replace a refrigerant detector or parts of it in a safe way.
- Procedures, how to disable a refrigerant detector in case of repair work on the refrigerant carrying parts.

2.6) Information about the concept of sealed components and sealed enclosures according to IEC60079-15:2010.

2.7) Information about the correct working procedures:

a) Commissioning

- Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
- Connect the pipes and carry out a leak test before charging with refrigerant.
- Check safety equipment before putting into service.

b) Maintenance

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.

c) Repair

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.

• Discharge capacitors in a way that won't cause any spark.
• When brazing is required, the following procedures shall be carried out in the right order: Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
--Evacuate the refrigerant circuit.
--Purge the refrigerant circuit with nitrogen for 5 min (not required for A2L REFRIGERANTS).
--Evacuate again (not required for A2L REFRIGERANTS).
--Remove parts to be replaced by cutting, not by flame.
--Purge the braze point with nitrogen during the brazing procedure.
--Carry out a leak test before charging with refrigerant.
• Reassemble sealed enclosures accurately. If seals are worn, replace them.
• Check safety equipment before putting into service.
d) Disposal
• Ensure sufficient ventilation at the working place.
• Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
• When flammable refrigerants are used,
--evacuate the refrigerant circuit.
--purge the refrigerant circuit with oxygen free nitrogen.
--evacuate again. (not required for A2L refrigerants);
--cut out the compressor and drain the oil.

Information on servicing

1. General

The manual shall contain specific information for service personnel according.

2. 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 minimised.
For repair to the REFRIGERATING SYSTEM

3. Work procedure

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

4. 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.

5. 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 toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i. e. non-sparking, adequately sealed or intrinsically safe.

6. Presence of fire extinguisher

If any hot work is to be conducted on the refrigerating 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.

a) Commissioning

- Ensure that the floor area is sufficient for the REFRIGERANT CHARGE or that the ventilation duct is assembled in a correct manner.
- Connect the pipes and carry out a leak test before charging with refrigerant.
- Check safety equipment before putting into service.

b) Maintenance

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.

c) Repair

- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with FLAMMABLE REFRIGERANTS.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the following order:

--Safely remove the refrigerant following local and national regulations. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building;

d) Decommissioning

- If the safety is affected when the equipment is putted out of service, the REFRIGERANT CHARGE shall be removed before decommissioning.
- Ensure sufficient ventilation at the equipment location.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt,one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- When FLAMMABLE REFRIGERANTS except A2L REFRIGERANTS are used,

--Evacuate the refrigerant circuit.

7. No ignition sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work 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 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.

8. 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.

9. Checks to the refrigerating 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 actual REFRIGERANT CHARGE 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;

--refrigerating 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.

10. 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:

• that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

• that no live electrical components and wiring are exposed while charging, recovering or purging the system;

• that there is continuity of earth bonding.

11. Repairs to sealed components

1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

2) Sealed electrical components shall be replaced.

12. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components must be replaced.

Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

13. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

14. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)

Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to Removal and evacuation.

15. Removal and evacuation

When breaking into the refrigerant circuit to make repairs -or for any other purpose- conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration.

MAINTENANCE & CLEANING

The following procedure shall be adhered to:
--safely remove refrigerant following local and national regulations;
--purge the circuit with inert gas(optional for A2L);
--evacuate(optional for A2L);
-- continuously flush or purge with inert gas when using flame to open circuit ; and
--open the circuit.
The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems. For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

16. Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM. Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

17. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.
It is essential that electrical power is available before the task is commenced.
a) Become familiar with the equipment and its operation.
b) Isolate system electrically.
c) Before attempting the procedure, ensure that:

- Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- All personal protective equipment is available and being used correctly;
- The recovery process is supervised at all times by a competent person;
- Recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.
e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
f) Make sure that cylinder is situated on the scales before recovery takes place.
g) Start the recovery machine and operate in accordance with instructions.
h) Do not overfill cylinders (no more than 80 % volume liquid charge).
i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

18. Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

19. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i. e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.
The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

SPECIFICATIONS

MODEL	DP602A
POWER SOURCE	115V~60Hz
TOTAL INPUT CURRENT	8.1 A
MOISTURE REMOVAL (65°F, 60%RH)	48.5 Pints/Day (23L/Day)
MOISTURE REMOVAL (80°F, 60%RH)	74 Pints/Day (35L/Day)
MOISTURE REMOVAL (86°F, 80%RH)	123 Pints/Day (58L/Day)
MOISTURE REMOVAL (95°F, 90%RH)	155 Pints/Day (73L/Day)
INPUT POWER (65°F, 60%RH)	520 W
INPUT CURRENT (65°F, 60%RH)	4.5 A
MOTOR FLA	0.76 A
MOTOR COMPRESSOR (RLA/LRA)	RLA: 5.4 A/LRA: 29 A
REFRGERANT	R32/280 g
MAXIMUM ALLOWABLE PRESSURE	5.5 Mpa (800PSIG)
HIGH PRESSURE	4.0 Mpa (580PSIG)
LOW PRESSURE	1.7 Mpa (247PSIG)

Note:
Recommended operating temperature: 41°F to 100°F. The dehumidifier may experience malfunctions outside of this temperature range.
The manufacturer reserves the right to modify the product without formal notice to the public.

⚠ WARNING:

This product can expose you to chemicals including styrene and its compounds, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Important:

This warning is legally required by California's Proposition 65, which mandates disclosure even for trace amounts of certain substances.
The warning does not indicate that the product is unsafe when used as intended; the risk primarily applies to long-term exposure to significant amounts of these substances. The levels in this product are negligible and within safe limits.

WARRANTY & CONTACT

Warranty

All Kesnos products are covered under our 12-month warranty. Customers, whether purchasing this dehumidifier directly from Kesnos or through an authorized retailer, are welcome to reach out to Kesnos for tech support. An order invoice or proof of purchase will be appreciated.

Please kindly note that product damage caused by regular wear and tear will not be covered under warranty, and the warranty will also be voided for the following behaviors (including but not limited to):

1. Failing to follow the instructions in the manual.
2. Purposeful mishandling of the device.
3. Damaging the device through violent impact.
4. Exposing the device to liquids or infiltrating foreign particles.
5. Unauthorized modification or overhauling of the device.
6. Damage from placing the device upside down.

These are our general terms for warranty service. Customers are more than welcome to contact us for any feedback or advice.

Extend Your Warranty by 1 Year

Register your product at **www.kesnos.com** to extend your 1-year warranty by an additional year.
*Please fill out all required fields and include your Order ID and Date of Purchase if applicable.

Customer Support

If you have any questions or concerns about our product, please feel free to contact our professional support team. Kesnos customer service is always here to help.

KESNOS Office

- 805 Victory Trail Rd, Gaffney, SC, 29340 USA
- Email: **support@kesnos.com**
- Tel: **+1-(213)-895-4871**
- Live Chat: **www.kesnos.com**
- 24/7 Full-Time Response

*Have your Order Number ready before contacting customer support.

KESNOS

Scan the QR code
for Live Chat

@ Kesnos

We hope our products will make your living space healthier and more comfortable.
Your satisfaction is our top priority.
Feel free to tag us when you share a snap on your social media.

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