

# USER MANUAL

Home Dehumidifier

This shared manual  
is applicable to:

- PD08A-18
- PD10A
- PD10A-80



# About Kesnos

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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. Please read this manual thoroughly before operating the device. It will guide you through the installation and operation of the dehumidifier. It is advised to keep this manual for future reference.
2. Set the dehumidifier on a flat and even surface in an upright position and allow **24 Hours** of "settling" before turning it on. Note: The dehumidifier must be kept in an upright position during use to avoid internal damage.

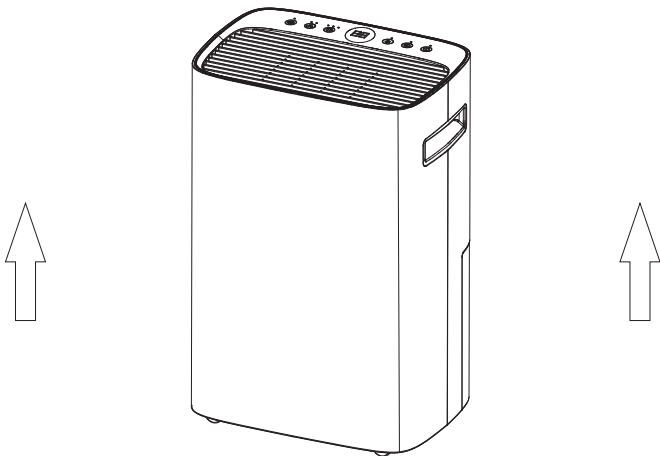


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# GENERAL SAFETY PRECAUTIONS

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- This dehumidifier is designed exclusively for indoor use and is not intended for operation in narrow, confined spaces such as closets.
  - Avoid placing the device on soft and uneven ground, otherwise there might be 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 the water tank is emptied before turning on the dehumidifier to prevent overflow and water spillage.
  - Ensure the drain hose runs downward without bending or winding for continuous water drainage.
- 
- It is advised to keep doors and windows closed for the dehumidifier to achieve maximum moisture removal effectiveness.
  - Avoid sitting, standing, or placing heavy objects on the device.
  - Avoid contact with water as the dehumidifier is not waterproof. If it's exposed to water, especially if it's soaking wet on the surface, please turn the dehumidifier off immediately, disconnect it from power, and contact Kesnos customer service for help.
  - Keep the device away from heat-generating appliances, such as furnaces and electric kettles, and flammable materials.
  - No pesticides or flammable liquids are allowed near the device.
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- Do not tilt the device to prevent spilled water from damaging it.
  - Avoid inserting fingers, rods, or other thin objects into the air inlet and outlet grilles of the dehumidifier.
  - Children aged 8 and above, as well as individuals with reduced physical, sensory, or mental capabilities, should only operate the device under supervision. Children under the age of 8 should not tamper with the device.
  - Stop and unplug the device immediately at any sign of malfunction.
  - For damaged cords, please contact the manufacturer or certified technicians for replacement to avoid hazards.

# GENERAL SAFETY PRECAUTIONS

- Kindly use the power button to turn off the dehumidifier before unplugging it, rather than pulling the plug directly.
- Always empty the water tank before moving or lifting the dehumidifier.
- Be sure to unplug the dehumidifier first before cleaning or packing it.
- If the dehumidifier is not going to be used for an extended period, please remember to unplug it.
- Use soft cloth for cleaning and avoid splashing water directly on it. It is recommended to use a neutral detergent for cleaning the dehumidifier.
- Alcohol, gasoline, benzene, and other chemical solvents are strictly prohibited for cleaning purposes.



Applicable to  
PD10A and PD10A-80

**Refrigerant R32  
Safety Group A2L**



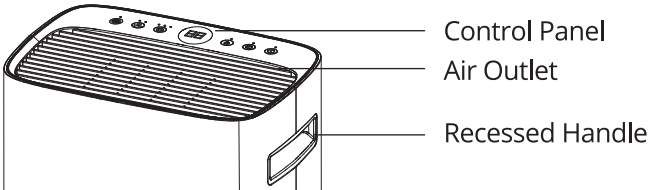
Applicable to PD08A-18

**Refrigerant R290  
Safety Group A3**

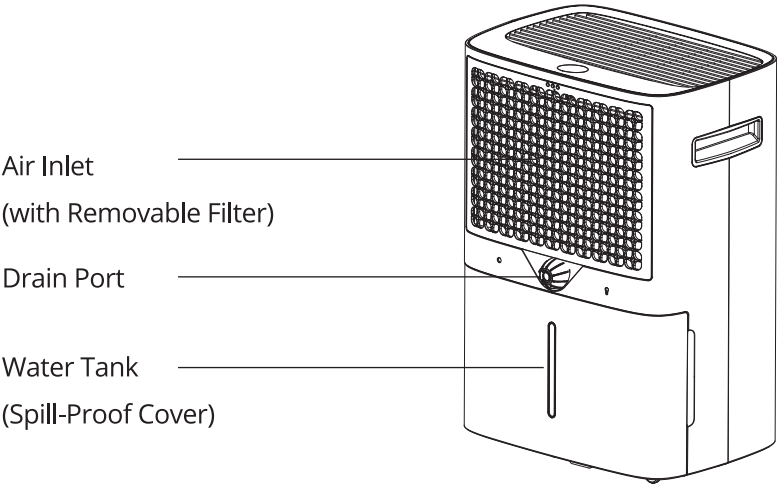


- The transportation and disposal of this dehumidifier must comply with local regulations regarding flammable refrigerants.
- Please avoid smoking or having open flames near the device to eliminate potential ignition sources.
- Do not pierce or burn the dehumidifier casing as it may result in a refrigerant leak. Please be aware that refrigerants may be odorless.
- Device maintenance and repair should be handled by professionals due to the potential safety hazards and environmental concerns associated with refrigerant leaks. Certified technicians are advised to consult the [Maintenance & Cleaning](#) section in this manual for important warnings regarding the safe use of flammable refrigerants.

# PARTS ILLUSTRATION



(Front Side)

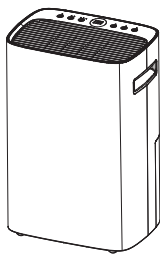


(Back Side)

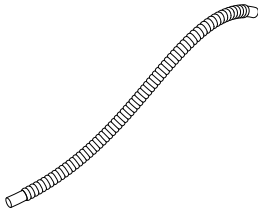
**Note:** These graphic drawings are for demonstration purposes only.  
The actual product may vary slightly in size and shape.

# PACKAGE CONTENTS

The dehumidifier package contains the following items:



Home Dehumidifier x 1



Drain Hose x 1



User Manual x 1

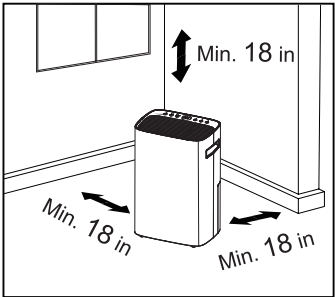
**Note:**

This shared manual for models PD10A-80, PD10A, and PD08A-18 provides unified instructions with model-specific sections. Model differences are indicated with the wording "Applicable to [Model]". Please refer to the instructions specific to your model.

# DEVICE POSITIONING & PLACEMENT

Set the dehumidifier on a flat and stable surface.

The operational temperature range for the dehumidifier must be maintained between 41°F to 95°F (5–35°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.



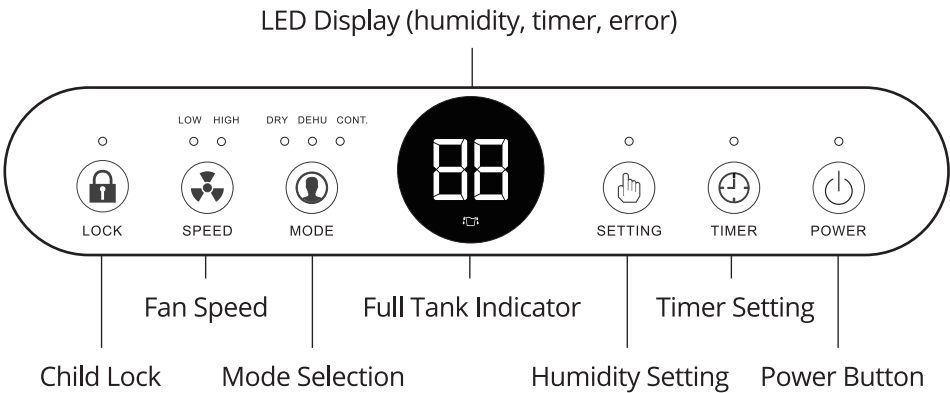
When positioning the dehumidifier, please ensure it is not placed too close to walls or other objects, as this could obstruct the air vents. Maintain a minimum clearance of 18 inches above and around the device, as depicted in the diagram.

The device should be positioned, operated, and stored in an area with a minimum space of 43 sq. ft.

# FUNCTION OVERVIEW

## Control Panel Illustration

Applicable to PD10A and PD10A-80



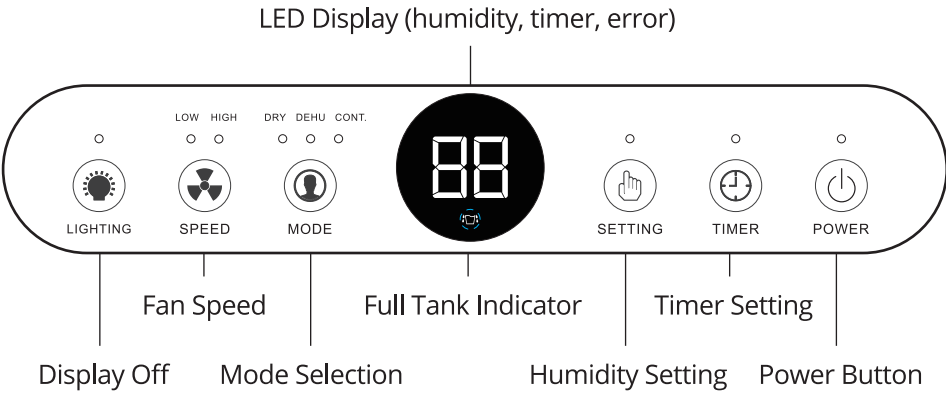
## Button and Indicator Explanation

The table below illustrates the functions of each button and the meanings of indicators.

Button Icon	Meaning	Indicator Status
	<b>Power Button</b> To turn the dehumidifier on or off.	<ul style="list-style-type: none"><li>• On: Powered on</li><li>• Off: Powered off</li><li>• Flicker: Delayed compressor start</li></ul>
	<b>Timer Setting</b> To set the device on a timer for auto-on or auto-off.	<ul style="list-style-type: none"><li>• On: A timer has been set</li><li>• Off: No timer currently set</li><li>• Flicker: Timer setting in progress</li></ul>
	<b>Humidity Setting</b> To set target humidity level for the dehumidifier.	<ul style="list-style-type: none"><li>• On: Humidity setting in progress</li><li>• Off: Humidity setting complete</li></ul>
	<b>Full Tank Alarm</b> To signal a full water tank.	<ul style="list-style-type: none"><li>• Flicker: Full water tank or improperly positioned</li><li>• Off: Water tank not full</li></ul>
	<b>Mode Selection</b> To switch between different operating modes.	<ul style="list-style-type: none"><li>• DRY: Dry Clothes Mode</li><li>• DEHU: Dehumidifying Mode</li><li>• CONT.: Continuous Mode</li></ul>
	<b>Fan Speed</b> To adjust the fan speed for different airflow rates.	<ul style="list-style-type: none"><li>• Low: The fan is set to low speed</li><li>• High: The fan is set to high speed</li></ul>
	<b>Child Lock</b> To enable or disable child lock protection on the control panel.	<ul style="list-style-type: none"><li>• On: Child lock activated</li><li>• Off: Child lock deactivated</li></ul>

# FUNCTION OVERVIEW

## Applicable to PD08A-18



## Button and Indicator Explanation

The table below illustrates the functions of each button and the meanings of indicators.

Button Icon	Meaning	Indicator Status
	<b>Power Button</b> To turn the dehumidifier on or off.	<ul style="list-style-type: none"><li>• On: Powered on</li><li>• Off: Powered off</li><li>• Flicker: Delayed compressor start</li></ul>
	<b>Timer Setting</b> To set the device on a timer for auto-on or auto-off.	<ul style="list-style-type: none"><li>• On: A timer has been set</li><li>• Off: No timer currently set</li><li>• Flicker: Timer setting in progress</li></ul>
	<b>Humidity Setting</b> To set target humidity level for the dehumidifier.	<ul style="list-style-type: none"><li>• On: Humidity setting in progress</li><li>• Off: Humidity setting complete</li></ul>
	<b>Full Tank Alarm</b> To signal a full water tank.	<ul style="list-style-type: none"><li>• Flicker: Full water tank or improperly positioned</li><li>• Off: Water tank not full</li></ul>
	<b>Mode Selection</b> To switch between different operating modes.	<ul style="list-style-type: none"><li>• DRY: Dry Clothes Mode</li><li>• DEHU: Dehumidifying Mode</li><li>• CONT.: Continuous Mode</li></ul>
	<b>Fan Speed</b> To adjust the fan speed for different airflow rates.	<ul style="list-style-type: none"><li>• Low: The fan is set to low speed</li><li>• High: The fan is set to high speed</li></ul>
	<b>Display Off</b> To toggle the display lighting on or off.	<ul style="list-style-type: none"><li>• On: Display lighting turned off</li><li>• Off: Display lighting turned back on</li></ul>

# FUNCTION OVERVIEW

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## Features

### 24-Hour Timer


Utilize the timer feature to automatically schedule your dehumidifier to turn on or off within a maximum duration of 24 hours. When the device is running, set a timer to cease operation at your desired hour. In standby mode, use the timer to automatically start dehumidification within your specified time frame.

### Auto Defrosting

The auto-defrosting function enables the dehumidifier to automatically detect and address frost build-up on its coils for better efficiency in cold conditions. During defrosting, the compressor stops, the power indicator flickers, but the fan runs at high speed.

It will automatically resume normal operation once the defrosting is completed, and the power indicator will stop flickering.

### Three Modes Available


This versatile dehumidifier is designed with three modes available: Dry Clothes Mode, Dehumidifying Mode, and Continuous Mode. Press the  button to cycle through these three modes, and the matching indicator will illuminate when a mode is selected.

### Power-off Memory Restart

In the event of an unexpected power failure or accidental unplugging, the dehumidifier offers automatic restart, seamlessly resuming operation with your previously saved settings once power is restored.

Please note that any set timer will be interrupted and require resetting.

### Adjustable Fan Speed

Press the  button to choose between high or low speed to customize the airflow pace in Dehumidifying Mode and Continuous Mode.

Please note that the fan speed defaults to high in Dry Clothes Mode.

# OPERATION INSTRUCTIONS

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## Power On/Off & Standby Mode

After being plugged in, the power indicator on the dehumidifier will light up to signal it's connected to power. Then press the [⏻] button to turn it on.

When powering off, the compressor stops immediately after the [⏻] button is pressed. Wait for 5 seconds until the fan stops running as well before unplugging the dehumidifier.

### 3-Minute Compressor Delay Protection

It's recommended to use the [⏻] button to place the dehumidifier into standby mode before unplugging it. Otherwise, the 3-minute compressor protection will be triggered, delaying the compressor start when the dehumidifier is powered back on.

If the dehumidifier is frequently powered on and off (without being unplugged), a 3-minute delay will still occur before the compressor restarts.

## Humidity Setting

Once powered on, the dehumidifier will automatically detect and display the space humidity level on the screen (please note that the displayed humidity level may have a deviation of 3-5% RH from the actual humidity level).

In Dehumidifying Mode, you can use the [↶] button to set a target humidity level for your space. Note: The [↶] button will be unresponsive in Dry Clothes Mode and Continuous Mode.

**Step One:** Press the [↶] button, and the humidity setting indicator will illuminate, with the current preset humidity target blinking on the display.

**Step Two:** Continue pressing the [↶] button to set your desired humidity level, ranging from 30% RH to 80% RH. Each press will increment the humidity level by 5% RH.

**Step Three:** After finishing the setting, wait for 5 seconds for automatic exit or press any button to exit manually. The humidity setting indicator will turn off, and the display will return to showing the current space humidity level.

If the target humidity level is set to 30% RH, the dehumidifier will automatically enter continuous mode.



# OPERATION INSTRUCTIONS

## Mode Selection

The dehumidifier offers three modes to customize its operation and help you manage different levels of dampness. Press the **[🔄]** button to cycle through Dry Clothes Mode, Dehumidifying Mode, and Continuous Mode.

Mode	Dry Clothes Mode	Dehumidifying Mode	Continuous Mode
Application Scenario	Automatically operates to dry your clothes	Efficiently controls space humidity to maintain it at your target level	Operates continually to maintain 30% humidity automatically
Indicator Symbol	DRY	DEHU	CONT.
Function	The compressor starts, and the fan is set to work at full capacity.	The compressor auto stops when space humidity is 5% below preset level, and resumes at 5% over.	The compressor continuously operates regardless of space humidity.
Humidity Setting	Humidity NOT adjustable	30% –80% RH adjustable (Default level: 50% RH)	Humidity NOT adjustable
Fan Speed	Defaults to high, NOT adjustable	High, Low	High, Low
Timer Setting	Supported	Supported	Supported

Note: Exercise caution and avoid placing wet clothes directly above the dehumidifier in the Dry Clothes Mode, as the device is not waterproof.

## Smart Humidity Control

In Dehumidifying Mode, the dehumidifier features smart humidity control to efficiently maintain the space humidity at your desired level.

When the space humidity falls below your preset humidity level by more than 5% RH, the dehumidifier automatically pauses its operation. The power indicator and humidity value simultaneously flicker on the control panel. Initially, the compressor pauses, followed by the fan, which stops running within 30 seconds.

The compressor and fan automatically resume operation as soon as the space humidity rises above the target humidity level by more than 5% RH again. This smart humidity control design helps maintain the space humidity at the desired level in an energy-efficient and convenient way.

# OPERATION INSTRUCTIONS

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## Timer Setting

Use the timer setting to schedule the dehumidifier to automatically turn on or off. Please note: The 24-hour timer is for one-time operation only and cannot be set to repeat. Additionally, be aware that any timer settings will be cleared if the power is interrupted or if the unit is turned off and then back on again.

### Programmed Shut-down:

1. Press [⏸] to access the timer setting. The "Timer" indicator will light up, with the timer length flickering on the display.
2. Use the [⏸] button to adjust the duration, cycling through 00 to 24 hours in 1-hour increments.
3. After selecting the timer length, wait for 5 seconds until it automatically exits. The Timer indicator will remain illuminated.

### Programmed Start-up:

1. In standby mode, the [⏸] button is still functional for setting an auto-on timer for the dehumidifier.
2. Press the [⏸] button to access the timer setting first. Then select the timer length using the [⏸] button.
3. Once a timer is successfully set, the Timer indicator will remain illuminated, and the remaining hours will appear on the display.

Note: To cancel a timer, you will need to set the timer length to 0 or restart the dehumidifier.

## Child Lock (ONLY applicable to PD10A-80 and PD10A)

This design prevents children from tampering with the device, reducing the risk of accidents. Press and hold the [⏸] button for 3 seconds to activate Child Lock protection, which renders all buttons unresponsive. To disable the child lock, simply repeat the process.

The Child Lock protection will be released after a power cycle.

## Display Off (ONLY applicable to PD08A-18)

This button allows you to turn off the display lights. Press this button to switch off the display lights for energy saving or to reduce light disturbance.

# WATER DRAINAGE

## Tank Collection

A water tank is included for efficient water collection: a 2.5L/0.55 Gal tank for PD08A-18 and a 5.4L/1.19 Gal tank for PD10A and PD10A-80. The tank also features a spill-proof cover to effectively prevent water overflow.

### Full Tank Alarm

The dehumidifier is equipped with a full tank alarm that automatically shuts down the compressor and emits a buzzer alarm 5 times when the water tank is filled to capacity. The full tank indicator "☑" will also flicker in red to remind you to empty the tank.

When the buzzer alarm sounds, you can press any button to silence the alarm; however, the full tank indicator will continue blinking.

It is recommended to empty and clean the water tank before turning on the dehumidifier each time. Do not use detergent, steel wool, gasoline, benzene, or other solvents to clean the tank.



Note: The water tank of the PD08A-18 model differs in size and shape.

### Attention:

1. Check if the floater inside the water tank can move freely before putting the tank back in place. A faulty floater can cause the full tank alarm to malfunction, potentially resulting in water overflow.
2. The full tank alarm also activates if the tank is improperly positioned.

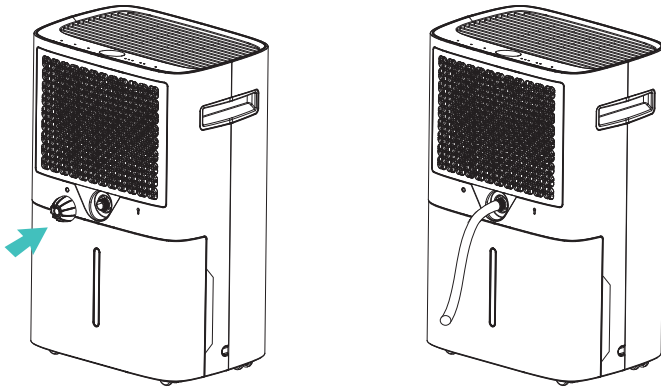
## Gravity Drain

Connect the dehumidifier's drain port to a drain hose for continuous water outflow via (1) the included drain hose (Ø16mm in diameter), or (2) a standard garden hose (NOT Included).

# WATER DRAINAGE

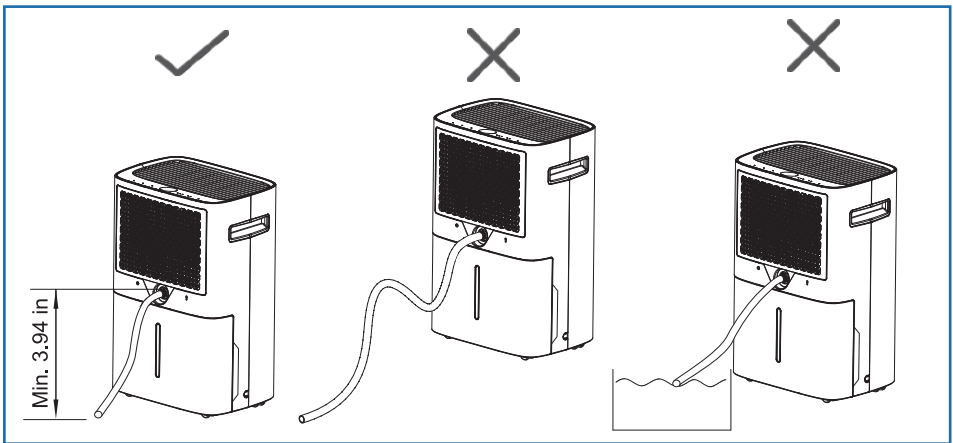
**Step One:** Unplug the dehumidifier, locate the drain port and remove its cover. Then unscrew the drain plug.

**Step Two:** Attach the included drain hose to the drain port, or directly connect it to your garden hose (not included).



**Note:**

1. If the dehumidifier has been inactive for an extended period, it is recommended to clean the port beforehand. Additionally, use a cup to catch any remaining water before removing the cover.
2. The hose should run smoothly downhill and remain at least 3.94 inches lower than the drain port level to prevent water leakage.



# TROUBLESHOOTING

In the event of product malfunctions, please refer to the guide below to troubleshoot common issues that may arise with general dehumidifiers. If problems persist, kindly disconnect the dehumidifier and promptly contact Kesnos Customer Service for assistance.

Problems	Possible Causes	Solutions
Unable to run the dehumidifier	Loose power connection	Check if the device is properly plugged into a working electrical outlet.
	The water tank is full or not properly placed.	Empty the water tank and make sure it's properly positioned.
	Space temperature out of the recommended 41–95°F range	The device can only operate in temperatures between 5°C (41°F) and 35°C (95°F).
	Defrosting in progress due to low temperature	No action required. Wait until defrosting is completed and it will resume operation.
	Space humidity is already below the preset humidity	Set the target humidity lower than the space humidity.
	3-minute compressor protection triggered	Compressor start delayed. Wait for 3 minutes and try again.
Not effectively dehumidifying the space	Blocked air inlet or outlet	Ensure that the inlet or outlet is kept clear of any objects.
	Poor air circulation	Maintain a min. 18-inch distance above and around the device.
	Open doors and windows	Keep windows and doors closed for efficient moisture removal.
	Space too large for the device	Consider adding an additional dehumidifier unit.
Much noise	Unstable device placement	Position the dehumidifier on a flat surface.
	Blocked filter or improperly positioned	Clean the filter and put it back into place.
Water leakage	Loose hose connection	Ensure that the hoses are firmly attached.
	Faulty full tank alarm	Check if the floater inside the water tank can still function.
	Blocked drain port	Clean the port and ensure the drain hose is clear and smooth.
Running for unusually long periods	Accidentally set to Continuous Mode	Switch to Dehumidifying Mode.
	Constant moisture buildup	Check for open windows or doors.
Humidity display error (always at 25% or 99% RH)	Humidity sensor failure	Contact the manufacturer for repair or replacement.

# MAINTENANCE & CLEANING

**Note:** Please remember to unplug the dehumidifier first before servicing or cleaning the unit.

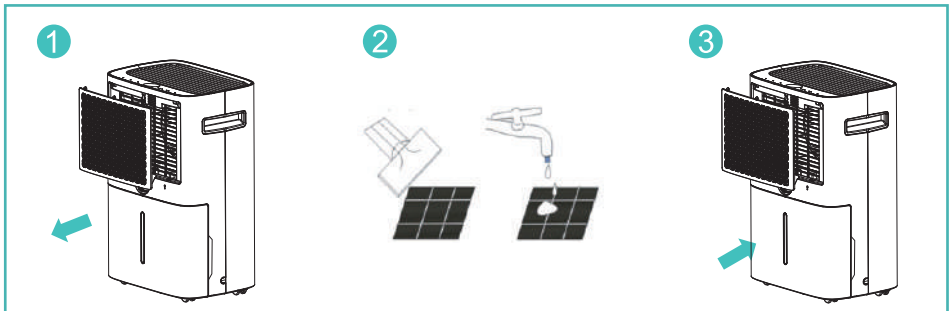
## Exterior Cleaning

Use a soft, damp cloth to wipe clean the dust buildup on the surface of the dehumidifier. Neutral detergents are acceptable for cleaning, but avoid abrasive cleaners or harsh chemicals as they may damage the finish.

Please do not spray water directly on the device as the dehumidifier isn't waterproof. Pay special attention to the air inlets and outlets to remove any dust or debris buildup that could obstruct airflow.

## Filter Cleaning

The dehumidifier comes with a removable filter. Please clean the filter regularly for dust, smoke, animal dander, mold spores, and pollen to reduce airborne allergens in the air.



The diagram illustrates the process of cleaning the dehumidifier's filter in three numbered steps. Step 1 shows the filter being pulled out of the top compartment of the dehumidifier. Step 2 shows the filter being cleaned with a brush and water. Step 3 shows the filter being pushed back into the compartment and locked in place.

1. The filter is located in the top compartment on the front side of the dehumidifier. Pull it outward to remove the filter.
2. Brush off any dust and debris from the filter, rinse it thoroughly, and let it dry completely. Avoid drying it in direct sunlight to prevent deformation.
3. Put the filter back into the compartment and make sure it's fully locked in place.

## Device Storage

While it's recommended to run the dehumidifier year-round for a comfortable environment, follow these steps for proper storage during extended periods of non-use to preserve performance and lifespan.

## MAINTENANCE & CLEANING

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1. Firstly, unplug the unit and allow it to cool.
2. Empty and clean the water tank. If a drain hose is attached, detach the drain hose and clean the drain port.
3. Clean and dry the filter.
4. Wrap the power cord neatly around the integrated cord wrap.
5. Cover the device with a breathable cloth to protect it from dust.
6. Store it in a dry and well-ventilated place, away from direct sunlight.

## Warnings Regarding the Safe Use of Flammable Refrigerants

### PD10A and PD10A-80



**Refrigerant R32**  
**Safety Group A2L**

### PD08A-18



**Refrigerant R290**  
**Safety Group A3**

The dehumidifiers covered in this shared user manual are equipped with flammable refrigerants: refrigerant R32 for models PD10A and PD10A-80, and refrigerant R290 for model PD08A-18.

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

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## **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.

# MAINTENANCE & CLEANING

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- 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.

# MAINTENANCE & CLEANING

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## 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 put 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.

# MAINTENANCE & CLEANING

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## 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.

# MAINTENANCE & CLEANING

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## **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

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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:

# MAINTENANCE & CLEANING

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- 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	PD08A-18
Power Source	120V~60Hz
Rated Power	350 W
Rated Current	3.2 A
Moisture Removal (65°F, 60%RH)	15.50 Pints/Day
Moisture Removal (80°F, 60%RH)	23 Pints/Day
Moisture Removal (86°F, 80%RH)	40 Pints/Day
Moisture Removal (95°F, 90%RH)	52 Pints/Day
Input Power (65°F, 60%RH)	174 W
Input Current (65°F, 60%RH)	1.53 A
IEF (65°F, 60%RH )	1.75 Liters/kWh
Motor FLA	0.23 A
Motor Compressor	RLA: 3.0 A/LRA: 14.0 A
Refrigerant	R290/60 g (2.12 ozs)
Max. Allowable Pressure	5.5 Mpa
Max. Allowable Discharge Pressure	2.6 Mpa
Max. Allowable Suction Pressure	1.0 Mpa

Model	PD10A
Power Source	120V~60Hz
Rated Power	720 W
Rated Current	6.5 A
Moisture Removal (65°F, 60%RH)	35.00 Pints/Day
Moisture Removal (80°F, 60%RH)	50 Pints/Day
Moisture Removal (86°F, 80%RH)	78 Pints/Day
Moisture Removal (95°F, 90%RH)	95 Pints/Day
Input Power (65°F, 60%RH)	380 W
Input Current (65°F, 60%RH)	3.4 A
IEF (65°F, 60%RH )	1.80 Liters/kWh
Motor FLA	1.5 A
Motor Compressor	RLA: 6.1 A/LRA: 18.8 A
Refrigerant	R32/130 g (4.59 ozs )
Max. Allowable Pressure	6.5 Mpa
Max. Allowable Discharge Pressure	4.0 Mpa
Max. Allowable Suction Pressure	1.7 Mpa



# SPECIFICATIONS

Model	PD10A-80
Power Source	120V~60Hz
Rated Power	440 W
Rated Current	4.0 A
Moisture Removal (65°F, 60%RH)	23.00 Pints/Day
Moisture Removal (80°F, 60%RH)	35 Pints/Day
Moisture Removal (86°F, 80%RH)	60 Pints/Day
Moisture Removal (95°F, 90%RH)	80 Pints/Day
Input Power (65°F, 60%RH)	258 W
Input Current (65°F, 60%RH)	2.3 A
IEF (65°F, 60%RH )	1.75 Liters/kWh
Motor FLA	1.2 A
Motor Compressor	RLA: 3.8 A/LRA: 11 A
Refrigerant	R32/125 g (4.4 ozs)
Max. Allowable Pressure	6.5 Mpa
Max. Allowable Discharge Pressure	4.0 Mpa
Max. Allowable Suction Pressure	1.7 Mpa

## Note:

While the manual is shared among all models, each model has its own unique specifications. Please refer to the corresponding table for specifications particular to your model.

Recommended working temperature for the dehumidifier: 41°F to 95°F.  
The device may experience malfunctions outside this temperature range.

The company 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](http://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.kesos.com](http://www.kesos.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](mailto:support@kesnos.com)

Tel: +1-(213)-895-4871

Live Chat: [www.kesos.com](http://www.kesos.com)

24/7 Full-Time Response

\*Have your Order Number ready before contacting customer support.





# KESNOS



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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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