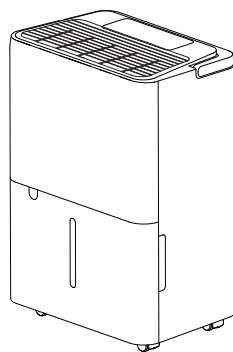


KESNOS

USER MANUAL

Home Dehumidifier



CTH30B >

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. 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.

We may not be superheroes for life—but we can be your HERO for this dehumidifier. Just reach out anytime.

Not collecting water? Missing parts?
Need setup help or missed the return window?
No worries – we've got your back!
Kesnos Customer Support – Available 24/7

✉ support@kesnos.com 📞 (213)-895-4871



Note: The product diagrams in this manual are for illustration purposes only. The actual products may vary slightly in shape and appearance.

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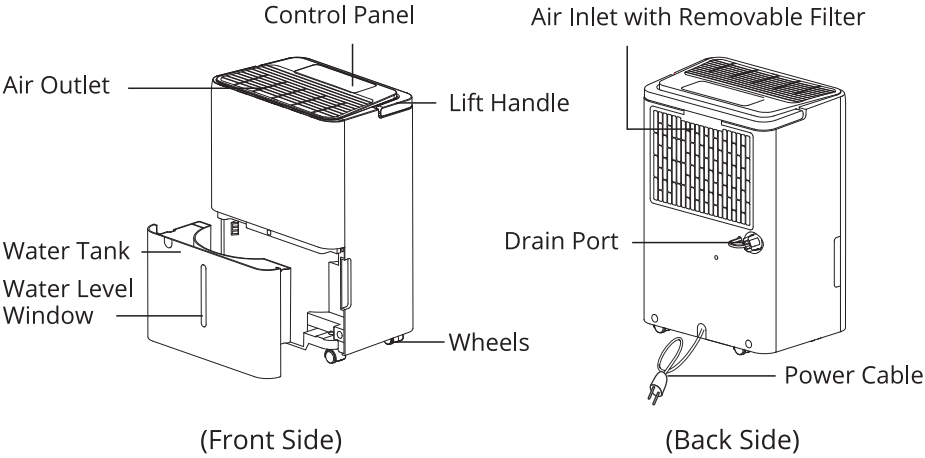
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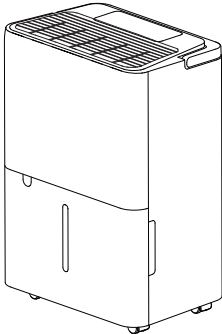
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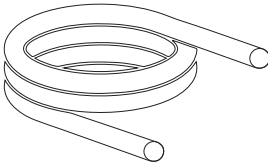
PARTS ILLUSTRATION



PACKAGE CONTENTS



1 × Dehumidifier



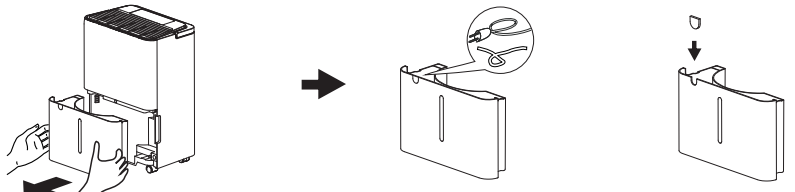
1 × Drain Hose



1 × Tank Seal Chip

The tank seal is packed separately in a PE pouch and attached to the inside of the water tank. Please remove it before use.

PACKAGE CONTENTS



The diagram consists of three sequential illustrations. The first shows a hand pulling a water tank out of the bottom of a dehumidifier unit. The second shows a pair of pliers removing a power plug from a cord. The third shows a small chip being inserted into a slot on the side of the water tank.

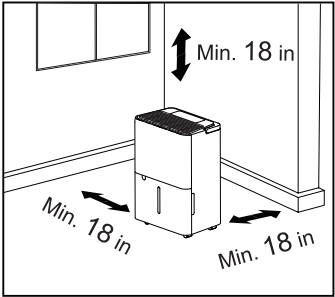
Remove the water tank.	Take out the power plug and any included accessories.	Insert the tank seal chip properly to prevent water spills.
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Note: These graphic drawings are for demonstration purposes only.
The actual items may vary slightly in size and shape.

DEVICE POSITIONING

Set the dehumidifier on a flat and stable surface.

The operational temperature range for the dehumidifier must be maintained between 41°F to 90°F (5–32°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.

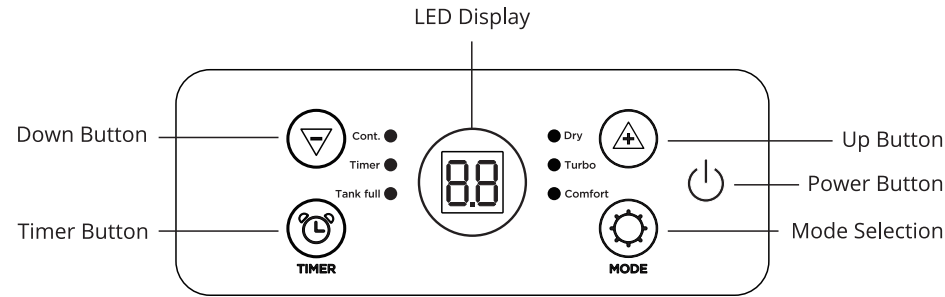


When positioning the dehumidifier, please ensure it is not placed too close to walls or other objects, as this could obstruct the air vents. Maintain a minimum clearance of 18 inches above and around the device, as depicted in the diagram.

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

FUNCTION OVERVIEW

Control Panel Illustration



Button Description



Power Button
Turns the dehumidifier on or off.



LED Display
Displays humidity level and timer settings.



Up Button
Increases the humidity or timer setting.



Down Button
Decreases the humidity or timer setting.



Timer Setting
Sets or cancels a timer for automatic operation.



Mode Selection
Switches between Dry, Turbo, Comfort, and Continuous modes.

Indicator Description

Cont	Continuous Mode Activated		Dry	Dry Mode Activated	
	●	Default target: 15%RH. Runs continuously until target reached.		●	Target humidity adjustable from 35%RH to 80%RH.
Timer	Timer Indicator		Turbo	Turbo Mode Activated	
	●	On: Timer is or being set.		●	Default target: 35%RH (adjustable).
		Flashing: Confirming duration			Fan runs at high speed.
Tank full	Full Tank Indicator		Comfort	Comfort Mode Activated	
	●	Flashing: Tank full or tank misplaced.		●	Automatically adjusts humidity based on room temperature.

FUNCTION OVERVIEW

Features

Power-Off Delay

A 20-second countdown appears only after the compressor has started. If powered off before compressor activation (within 3 minutes), the unit shuts down immediately.

Auto Defrosting

The dehumidifier automatically detects and addresses frost build-up on its coils to optimize energy efficiency and enhance operation in low temperatures. During defrosting, the compressor will stop running, but the fan continues to operate. The dehumidifier automatically resumes normal operation once the defrosting process is completed.

Smart & Efficient Humidity Control

This dehumidifier is designed with built-in humidity sensor to detect space humidity and enable smart humidity control.

When the space humidity falls below your preset humidity level by more than 5% RH, the dehumidifier automatically pauses its operation, with the compressor and the fan pausing consecutively.

The compressor and the fan will 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 a desired level in an energy-efficient and convenient way.

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.

OPERATION INSTRUCTIONS

Power On/Off

When the unit is plugged in, all indicators on the screen will briefly illuminate to confirm the unit is connected to power. Next, the dehumidifier enters standby mode with the "--" symbol on the display.

Press the [b] button to turn the dehumidifier on or off. For powering off, a 20-second countdown will appear on the display before the dehumidifier turns off.

During the countdown, the fan keeps running to dry internal components and prevent rust.

Mode Selection

This versatile dehumidifier is designed with four modes available: Dry, Turbo, Comfort and Continuous Modes. Press the [⊙] button to cycle through these four modes, and the matching indicator will illuminate when a mode is selected.

Mode	Dry Mode	Turbo Mode	Comfort Mode	Continuous Mode
Purpose	Efficiently removes moisture in humid conditions	Maximizes drying efficiency, ideal for laundry	Automatically maintains a comfortable humidity level for sleeping	Operates continuously at 15% RH to keep you space dry
Indicator	● Dry	● Turbo	● Comfort	Cont. ●
Fan Speed	Defaults to Low Not Adjustable	Defaults to High Not Adjustable	Defaults to Low Not Adjustable	Defaults to Low Not Adjustable
Default Humidity Display	Target Humidity Flickers, Then Converts to Space Humidity	Default 35% RH Flickers, Then Converts to Space Humidity.	Space Humidity Displayed	Default 15% RH Flickers, Then Converts to Space Humidity.
Humidity Setting	35%–80% RH Humidity Adjustable	35%–80% RH Humidity Adjustable	Not Manually Adjustable, Auto Change under Different Temp.	Not Adjustable
Timer Setting	Supported	Supported	Supported	Supported

Auto Humidity Setting under Comfort Mode

Space Temp.	Below 18°C/64°F	18–25°C/64–77°F	Above 25°C/77°F
Auto Humidity	55% RH	50% RH	45% RH

In Comfort Mode, when the tank is full, the compressor stops and the fan continues running for about 3 minutes. The Full Tank indicator flashes only when any button is pressed to wake the display.

OPERATION INSTRUCTIONS

Note: In Comfort Mode, the screen will automatically dim to save power and turn off after 60 seconds of inactivity, while the Comfort Mode Indicator remains illuminated. Press any button except the Power Button to reactivate the screen.

Humidity Setting

You can adjust the target humidity level when the unit is in **Dry Mode** and **Turbo Mode**. Please note that the target humidity cannot be manually adjusted in **Comfort Mode** or **Continuous Mode**.

After selecting Dry or Turbo mode, press the [▲] or [▼] button to enter humidity setting. The display will switch from showing the current humidity level to the target humidity, which will flash on the screen. Use the [▲] or [▼] buttons to set the target humidity between 35% RH and 80% RH in 5% RH increments.

Once the desired level is selected, wait a few seconds for the settings to confirm. The unit will automatically exit humidity setting mode and revert to displaying the current room humidity.

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, please 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 begin to flicker with the timer length displayed as "00".
2. Adjust the timer duration from 0 to 24 hours using [▲] or [▼] with increments of half an hour before 10 and one hour after 10.
3. After selecting the timer length, wait until it auto-exits, indicated by flashing three times. The Timer indicator will remain illuminated.
4. To cancel the timer, press [⏻] button and the indicator will turn off.

OPERATION INSTRUCTIONS

Programmed Start-up:

1. In standby mode, the [⏻] button is still functional for auto-on timer for the dehumidifier.
2. Press [⏻] and select a duration using the [▲] or [▼] button. The Timer indicator will remain lit once a timer is successfully set.
3. The auto-on timer will restore the previous humidity setting from before the last power-off.

Error Code Explanation

Error	Phenomenon	Possible Cause	Recommended Action
EH	Humidity sensor failure	Damaged humidity sensor or loose connection	Contact the manufacturer for solutions.
E2	Temperature sensor failure	Damaged temperature sensor	Contact the manufacturer for solutions.
E3	Frequent auto power-on/off, flickering display, or abnormal noise	Abnormal voltage	Try a different power outlet. If the issue persists, consult an electrician.
		Household wiring issue	Have an electrician inspect the home's wiring and power supply.
		Voltage fluctuations or internal component issue	Ensure a stable power source. If noise persists, contact a technician.
	No water condensation after 24 hours of continuous operation	Possible refrigerant leak	Contact the manufacturer or a professional technician for inspection and repair.

Optimal Operating Conditions for the Dehumidifier

- Environment Temperature: 5°C–32°C (41°F–90°F)
- Environment Humidity: 15% RH–90% RH

WATER DRAINAGE

Water Tank Drain

This dehumidifier includes a 1.5L (0.39 gal) water tank for efficient water collection, enhancing mobility and convenience.

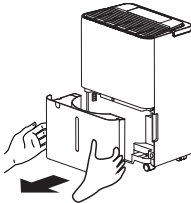
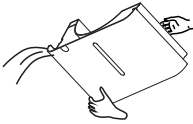
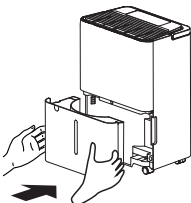
Full Water Protection

The water level inside the tank can be easily monitored through the Water Level Window. To prevent overflow, the dehumidifier is equipped with a full tank alarm and automatic shutdown.

When the water tank reaches full capacity, the compressor will automatically shut off, followed by the fan pausing. A beep alarm will sound three times, and the "Tank Full" indicator will flash to alert you. Empty the tank before resuming operation.

Water Tank Cleaning

It's recommended to empty and clean the water tank before turning on the dehumidifier each time.

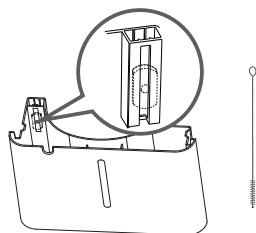
		
Use both hands to grasp the tank by its connection points and slide it outward.	Take it to a sink and pour water out.	Place the water tank back into its compartment.

Note:

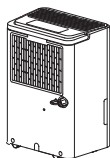
1. The dehumidifier cannot be turned back on until the water tank is emptied and properly reinserted.
2. The full tank alarm will also activate in standby mode or if the water tank is removed.

Floater Cleaning

Use a brush to remove dust from the floater slot. After cleaning, ensure the floater moves freely to prevent false alarms.



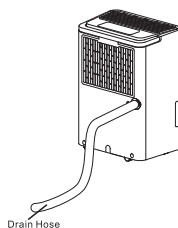
In addition to collecting water in the tank, you can also connect the dehumidifier's drain port to a drain hose for continuous water outflow via (1) the included drain hose (Ø12.7 mm in diameter), or (2) a standard garden hose (NOT Included).



1. Locate the drain port on the back of the unit.

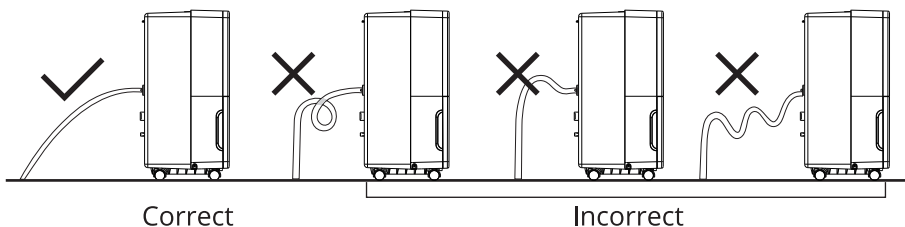


2. Rotate the drain plug cap counterclockwise to remove it, then pull out the plug.



3. Connect the provided drain hose to the drain port and place the other end into a sink or suitable container.

1. If no hose is connected for continuous gravity drainage, please make sure to tighten the drain plug to prevent water leakage.
2. The hose should run smoothly downward and remain at least 3.94 inches lower than the drain port level to prevent water leakage.
3. A twisted, crooked, or blocked drain hose could impede water flow and cause the condensate water to accumulate in the water tank.



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 41–90°F range	The device can only operate in temperatures between 5°C (41°F) and 32°C (90°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 a different mode as needed.
	Constant moisture buildup	Check for open windows or doors.

MAINTENANCE & CLEANING

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

Exterior Cleaning

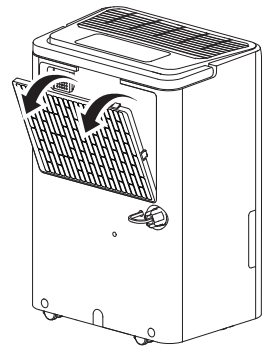
Use a soft, damp cloth to wipe clean the dust buildup on the surface of the dehumidifier. Neutral detergents are acceptable for cleaning, but avoid abrasive cleaners or harsh chemicals as they may damage the finish.

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.

1. The filter is positioned in the top compartment at the back of the dehumidifier.
2. Locate the opening between the filter and the compartment, tap it, and gently pull the filter outward to remove it.
3. Brush off any dust and debris from the filter, rinse it thoroughly, and let it dry completely.
4. Avoid drying it in direct sunlight to prevent deformation.
Insert the bottom tabs of the filter into the slots



Device Storage

For extended storage, unplug the unit and allow it to cool. Empty and clean the water tank, disconnect and clean the drain hose and drain port, and wash and completely dry the filter. Cover the unit with a breathable cloth and store it in a dry, well-ventilated area away from direct sunlight.

GENERAL SAFETY PRECAUTIONS

- 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.
-
- 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.

WARNING

Do not use means to accelerate the defrosting process or to clean, 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 odour.



- **WARNING** – Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.
- **WARNING** – Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.
- **WARNING** – Risk of Fire or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner's Guide Before Attempting To Service This Product. All Safety Precautions Must Be Followed.
- **WARNING** – Risk of Fire or Explosion due to Flammable Refrigerant Used. Follow Handling Instructions Carefully in Compliance with National Regulations.
- **WARNING** – Risk of Fire or Explosion – Store in a Well-Ventilated Room Without Continuously Operating Flames or Other Potential Ignition Sources.
- **WARNING** – Risk of Fire or Explosion – The Appliance Shall Be Installed, Operated, and Stored in a Room With a Floor Area Larger Than 5 m² (54 ft²).

GENERAL SAFETY PRECAUTIONS

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.

GENERAL SAFETY PRECAUTIONS

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.

GENERAL SAFETY PRECAUTIONS

- 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.

GENERAL SAFETY PRECAUTIONS

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.

GENERAL SAFETY PRECAUTIONS

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.

GENERAL SAFETY PRECAUTIONS

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.

GENERAL SAFETY PRECAUTIONS

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:

GENERAL SAFETY PRECAUTIONS

- 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	CTH30B
Rated Voltage/Frequency	115V~60Hz
Rated Current	1.8 A
Rated Input Power	165W
Moisture Removal Capacity(at 65°F, 60%RH)	9.2 Pints/Day
Moisture Removal Capacity(at 80°F, 60%RH)	13.3 Pints/Day
Moisture Removal Capacity(at 86°F, 80%RH)	23.2 Pints/Day
Moisture Removal Capacity(at 95°F, 90%RH)	30.0 Pints/Day
Integrated Energy Factor (IEF, at 65°F, 60%RH)	1.7 L/kWh
Motor FLA	0.11 A
Motor Compressor (RLA/LRA)	1.67 A/8.5 A
Refrigerant/Charge	R290/40 g (1.41 oz)
Max. Allowable Pressure	4.2 Mpa (609 psig)
Suction Pressure	1.2 Mpa (174 psig)
Discharge Pressure	2.3 Mpa (334 psig)

Note:

Recommended working temperature for the dehumidifier: 41°F to 90°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.

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 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

📍 221 York Rd, Blacksburg, SC 29702 USA

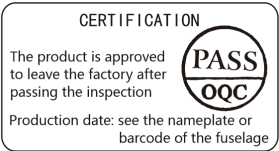
✉ Email: support@kesnos.com

☎ Tel: (213)-895-4871

💬 Live Chat: www.kesos.com

🕒 24/7 Full-Time Response

*Have your Order Number ready before contacting customer support.



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