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› Moiswell Defender XP235 Commercial Dehumidifier User Manual

## Moiswell XP235

# Moiswell Defender XP235 Commercial Dehumidifier User Manual

Model: Defender XP235

## 1. PRODUCT OVERVIEW

The Moiswell Defender XP235 is a high-capacity commercial dehumidifier designed for effective moisture removal in large spaces up to 8,000 square feet. It is ideal for environments such as crawl spaces, basements, industrial sites, and areas requiring water damage restoration. This unit features an advanced R32 dehumidification system, a built-in pump for continuous drainage, and an intuitive control panel for ease of use.



Figure 1: Front view of the Moiswell Defender XP235 Commercial Dehumidifier.

## Key Features:

- **High Capacity:** Removes up to 235 pints of moisture daily (at 95°F, 90%RH) or 100 PPD (at 80°F, 60%RH).
- **Large Coverage Area:** Effective in spaces up to 8,000 square feet.
- **R32 Dehumidification System:** Offers superior drying capabilities with reduced electricity consumption and environmental impact compared to traditional R410 systems.
- **Built-in Pump:** Provides automatic condensate drainage with a 16.5-foot drain hose and 16.5-foot vertical lift capability.
- **Smart Control Panel:** Allows for easy humidity level setting, automatic cycling, defrosting, and power outage restart.
- **Durable Construction:** Features a robust metal outer casing for enduring performance.

## 2. SETUP AND INSTALLATION

### 2.1 Unpacking and Placement

Carefully remove the dehumidifier from its packaging. Place the unit on a stable, level surface in the desired location. Ensure adequate clearance around the air inlet and outlet for optimal airflow. For crawl spaces or basements, ensure the unit is positioned to allow for proper drainage.



Figure 2: Dehumidifier placed in a crawl space environment.

### 2.2 Drainage Connection

The Defender XP235 includes a built-in pump and a 16.5-foot drain hose for continuous drainage. This eliminates the need for manual emptying of a water tank.

1. Locate the pump drain outlet on the unit.
2. Remove the pump stopper from the outlet.
3. Securely connect one end of the provided 16.5-foot drain hose to the pump drain outlet.
4. Route the other end of the drain hose to a suitable drainage point, such as a floor drain, sink, or outside. The pump can lift water up to 16.5 feet vertically.

Video 1: Demonstrates how to connect the drain hose for pump drainage. This video shows the process of removing the pump stopper and attaching the hose to the unit, then routing it to a sink for continuous water removal.

Alternatively, the unit also supports gravity drainage. For gravity drainage, ensure the unit is elevated above the drain point, and connect a hose to the gravity drain outlet.

# 100% Hands-free Drainage

with Built-in Pump & **16.5 ft** Drain Hose



Figure 3: Illustration of the built-in pump drainage system, showing the 16.5 ft drain hose and vertical lift capability.

## 2.3 Power Connection

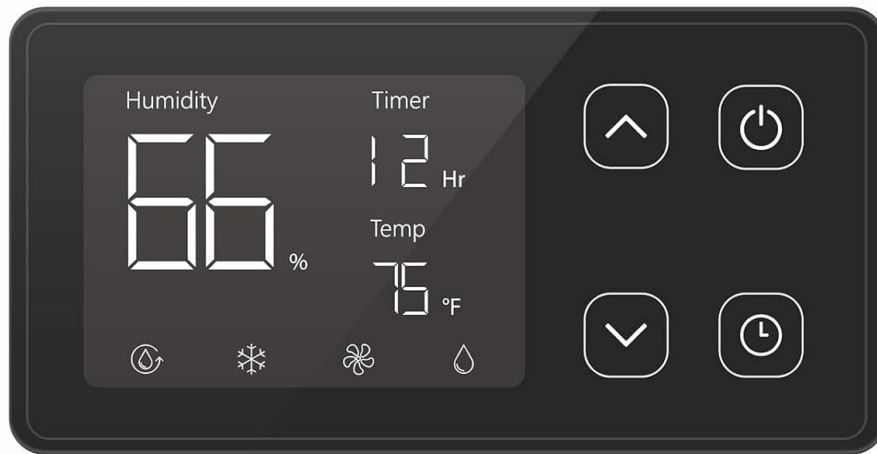
Plug the power cord into a grounded 120V electrical outlet. The unit is now ready for operation.

## 3. OPERATING INSTRUCTIONS

### 3.1 Control Panel Overview

The dehumidifier features a user-friendly control panel to manage its functions. The digital display shows current humidity and temperature, while buttons allow for setting desired humidity levels and activating various modes.

# Easy to Control & Monitor



Auto Operation



Auto Drain



Auto Defrost



Auto Restart

Figure 4: Detailed view of the control panel for setting and monitoring the dehumidifier.

## 3.2 Setting Desired Humidity

1. Press the Power button to turn on the unit.
2. Use the Up/Down arrow buttons to adjust the desired humidity level. The recommended range for most applications is between 45% and 55% relative humidity.
3. The unit will automatically cycle ON/OFF to maintain the set humidity level.

## 3.3 Automatic Functions

- **Auto Defrost:** The unit is equipped with an automatic defrost function to prevent ice buildup on the coils, ensuring efficient operation in cooler temperatures.
- **Auto Restart:** In the event of a power outage, the dehumidifier will automatically restart with the previous settings once power is restored.
- **Continuous Drainage:** With the drain hose connected to the built-in pump, the unit will continuously remove collected moisture without manual intervention.

## 3.4 Ducting and Remote Control (Optional)

The Defender XP235 is ductable, allowing for flexible installation and application in various setups. An optional remote control is also available for convenient operation from a distance. These accessories are sold separately.



Figure 5: The dehumidifier configured for ducting and showing the optional remote control.

## 4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Moiswell Defender XP235 dehumidifier.

### 4.1 Air Filter Cleaning

The unit is equipped with a washable air filter. It is recommended to clean the filter regularly (e.g., monthly, or more frequently in dusty environments) to prevent dust blockage and maintain efficiency.

1. Turn off and unplug the dehumidifier before performing any maintenance.
2. Locate the air filter access panel, typically on the side or back of the unit.
3. Carefully remove the filter.
4. Wash the filter with warm, soapy water. Rinse thoroughly and allow it to air dry completely before reinserting.
5. Reinstall the dry filter and close the access panel.

Video 2: Demonstrates the process of removing and cleaning the air filter. This video provides a visual guide for users to easily maintain their dehumidifier's filter.



Figure 6: Visual guide for removing and cleaning the washable air filter.

## 4.2 General Cleaning

Wipe the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the unit is dry before plugging it back in.

## 5. TROUBLESHOOTING

If you encounter issues with your dehumidifier, refer to the following common troubleshooting steps:

- **Unit Not Turning On:** Check if the power cord is securely plugged into a grounded outlet. Ensure there is power to the outlet.
- **Dehumidifier Not Collecting Water:** Verify that the desired humidity level is set lower than the current room humidity. Check if the air filter is clean and not blocked. Ensure the unit is operating within its recommended temperature range.
- **Water Leakage:** Inspect the drain hose for kinks, blockages, or improper connection. Ensure the drain hose is correctly routed to a suitable drain point.
- **Unusual Noise:** Check for any obstructions in the fan or around the unit. Ensure the unit is placed on a stable, level surface.
- **Error Codes:** If an error code appears on the display, refer to the full product manual (if available) or contact customer support for specific guidance.

If these steps do not resolve the issue, please contact Moiswell customer support.

## 6. SPECIFICATIONS

Feature	Specification
Brand	Moiswell
Model Name	Defender XP235
Dehumidification Capacity (95°F, 90%RH)	235 Pints/Day
Dehumidification Capacity (80°F, 60%RH AHAM)	100 Pints/Day
Coverage Area	Up to 8,000 Square Feet
Air Flow Capacity	353 Cubic Meters Per Minute
Refrigerant	R32
Drainage	Built-in Pump (16.5 ft hose, 16.5 ft vertical lift), Gravity Drain
Voltage	120 Volts
Wattage	1400 watts
Product Dimensions (D x W x H)	25.4" x 15.9" x 17.2"
Item Weight	90.4 Pounds
Material	Alloy Steel
Special Features	Auto Drain by Gravity, Auto Drain by Pump, Automatic Defrost, Ductable

## 7. WARRANTY AND SUPPORT

### 7.1 Warranty Information

The Moiswell Defender XP235 Commercial Dehumidifier comes with a reliable 5-year limited warranty. This warranty covers defects in materials and workmanship under normal use and service. Please retain your proof of purchase for warranty claims.

### 7.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Moiswell customer support:

- **Website:** [www.moiswell.com](http://www.moiswell.com)
- **Email:** [service@moiswell.com](mailto:service@moiswell.com)

Our dedicated support team is available to assist you with any questions or concerns regarding your dehumidifier.

