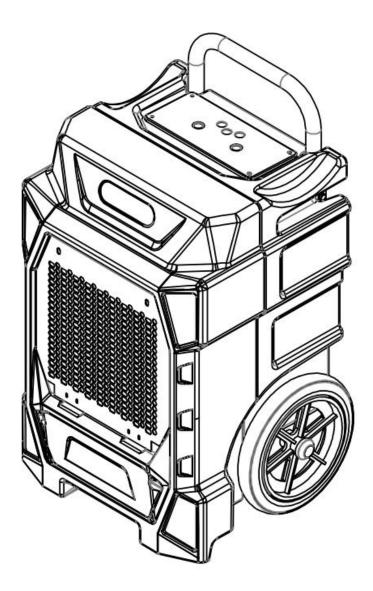
# **INSTRUCTION MANUAL**

## OMNIPRO OPD190 DEHUMIDIFIER



Please keep this manual for further reference

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# **BEFORE YOU BEGIN**

#### **1.1 PRODUCT DESCRIPTION**

This Low Grain Refrigerant (LGR) dehumidifier efficiently removes excess moisture from indoor spaces, making it an ideal solution for basements, warehouses, and other high-humidity environments. Designed for superior moisture extraction, it operates effectively even in low-temperature conditions, preventing mold growth, reducing musty odors, and protecting valuable assets from moisture damage. The environmentally friendly R32 refrigerant has no damaging environmental impacts.

Precautions must be taken into consideration due to the coolant's flammability.

#### 1.2 SYMBOLS FROM THE UNIT AND USER MANUAL



This unit uses a flammable refrigerant.

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

warning



Read the USER MANUAL carefully before operation.



Further information is available in the USER MANUAL



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

#### ■ THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- This appliance is intended for use by adults. It should not be operated by children or in dividuals with reduced physical, sensory, or cognitive abilities unless they have received proper supervision and instruction on its safe use. To prevent accidents, always ensure proper supervision when the appliance is in use.
- This appliance is designed to use indoor only.
- The unit is designed only for use with R32 (propane) gas as the designated refrigerant.
- The refrigerant loop is sealed. Only a qualified technician should attempt to service.
- Do not discharge the refrigerant into the atmosphere.
- The R32 (propane) refrigerant used in this unit is odorless, flammable and heavier than air.
  It collects first in low areas but can be circulated by the fans.
- If propane gas is present or even suspected, do not allow untrained personnel to attempt to find the cause. A lack of odor does not indicate a lack of escaped gas.
- If a leak is detected, immediately evacuate all persons from the room, ventilate and contact the local fire department to advise them that a propane leak has occurred. Do not let any persons back into the room until the qualified service technician has arrived and that technician advises that it is safe to return.
- No open flames, cigarettes or other possible sources of ignition should be used inside or in the vicinity of the units.
- Component parts are designed for propane and non-incentive and non-sparking.
- Component parts shall only be replaced with identical repair parts.
- FAILURE TO ABIDE BY THIS WARNING COULD RESULT IN AN EXPLOSION, DEATH, INJURY AND PROPERTY DAMAGE.

## FOR YOUR SAFETY

#### 2.1 OPERATIONAL PRECAUTIONS

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

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- The appliance must be disconnected from its power source during service.
- Always operate the unit from a power source of equal voltage, frequency and rating as indicated on the product identification plate.
- Always use a power outlet that is grounded.
- Unplug the power cord when cleaning or when not in use.
- Do not operate with wet hands. Prevent water from spilling onto the unit.
- Do not immerse or expose the unit to rain, moisture or any other liquid.
- Do not tilt or turn over the unit.
- Do not unplug while the unit is operating.
- Do not unplug by pulling on the power cord.
- Do not put objects on the unit.
- Do not climb or sit on the unit.
- Do not insert fingers or other objects into the air outlet.
- Do not touch the air inlet or the aluminum fins of the unit.
- Do not operate the unit if it is dropped, damaged or showing signs of product malfunction.
- Do not clean the appliance with any chemicals.
- Ensure the unit is far away from fire, inflammable, or explosive objects.

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without open flames, an operating gas appliance or an operating electric heater.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Be aware that refrigerants may not contain an odour.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than 4 m2.
- Compliance with national gas regulations shall be observed.
- Keep any ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.

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

#### 2.2 SAFETY PRECAUTIONS ON SERVICING

Please follow these warnings when to undertake the following when servicing an appliance with R32.

#### **2.2.1** Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, closely follow the precautions laid out above.

#### 2.2.2 Work procedure

Repair or maintenance shall be conducted under a controlled procedure to minimize the risk of a flammable gas or vapor being present while the work is being performed.

#### 2.2.3 General work area

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

#### 2.2.4 Checking for presence of refrigerant

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

#### 2.2.5 Presence of fire extinguisher

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

#### 2.2.6 No ignition sources

Anyone performing work on a refrigeration system that involves exposing pipework containing or previously containing flammable refrigerant must take precautions to prevent fire or explosion. No sources of ignition, including open flames, electrical sparks, or smoking, should be used in a way that could pose a fire risk. During installation, repair, or disposal, when flammable refrigerant may be released, all potential ignition sources must be kept at a safe distance. Before starting work, the surrounding area must be thoroughly inspected to ensure there are no flammable hazards or ignition risks.

#### 2.2.7 Ventilated area

Before opening the system or performing any hot work, ensure the area is either outdoors or adequately ventilated. Sufficient ventilation must be maintained throughout the duration of the work to safely disperse any released refrigerant. Whenever possible, ventilation should direct the refrigerant safely outside into the atmosphere to prevent accumulation in the workspace.

#### 2.2.8 Checks to the refrigeration equipment

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

Ensure that the refrigerant charge size complies with the room size where the refrigerantcontaining components are installed. Verify that ventilation systems and exhaust outlets are functioning properly and remain unobstructed.

• For systems using an indirect refrigerating circuit, check the secondary circuit for any presence of refrigerant.

• Ensure all equipment markings and safety labels are visible and legible; replace or correct any that are faded or illegible.

• Confirm that refrigeration pipes and components are positioned away from substances that could cause corrosion, unless they are made of corrosion-resistant materials or have been properly protected.

#### 2.2.9 Checks to electrical devices

Repair and maintenance of electrical components must include initial safety checks and thorough inspection procedures. If a fault is detected that could compromise safety, the electrical supply must not be connected until the issue is fully resolved. If the fault cannot be immediately corrected but continued operation is necessary, an appropriate temporary solution may be implemented. This must be documented and reported to the equipment owner to ensure all relevant parties are informed.

Initial safety checks must include:

- Ensuring capacitors are fully discharged in a safe manner to prevent sparking.
- Confirming that no live electrical components or exposed wiring are present while charging, recovering, or purging the system.
- Verifying continuity of earth bonding to maintain electrical safety.

#### WARNING!



Appliance shall be installed, operated and stored in a room with a floor area larger than 4  $m^2$ .

Do not install the unit in a place where inflammable gas may leak.

# **SPECIFICATIONS**

OMNIPRO DEHUMIDIFIER			
Model No.: OPD190			
Voltage & Hertz	AC115V / 60Hz		
Rated Input Current	6.8A @80°F, 60% RH		
MAX. Input Current	8.5A		
Refrigerant Charge	R32/13.06oz		
Dehumidify Capacity	95Pints/Day @80°F, 60% RH		
	190Pints/Day @95°F, 90% RH		
Maximum Design Pressure	High Side: 550psig		
	Low Side: 260psig		
BCSC	15A		
Compressor Input	RLA: 6.15A LRA:36A		
Fan Motor Power	0.75A/0.114HP		
<b>G</b> C 302422	CONFORMS TO UL STD.60335-1&60335-2-40 CERTIFIED TO CSA STD.60335-1&60335-2-40		

## **FEATURES**

\*Hot Gas Valve system for fast defrost

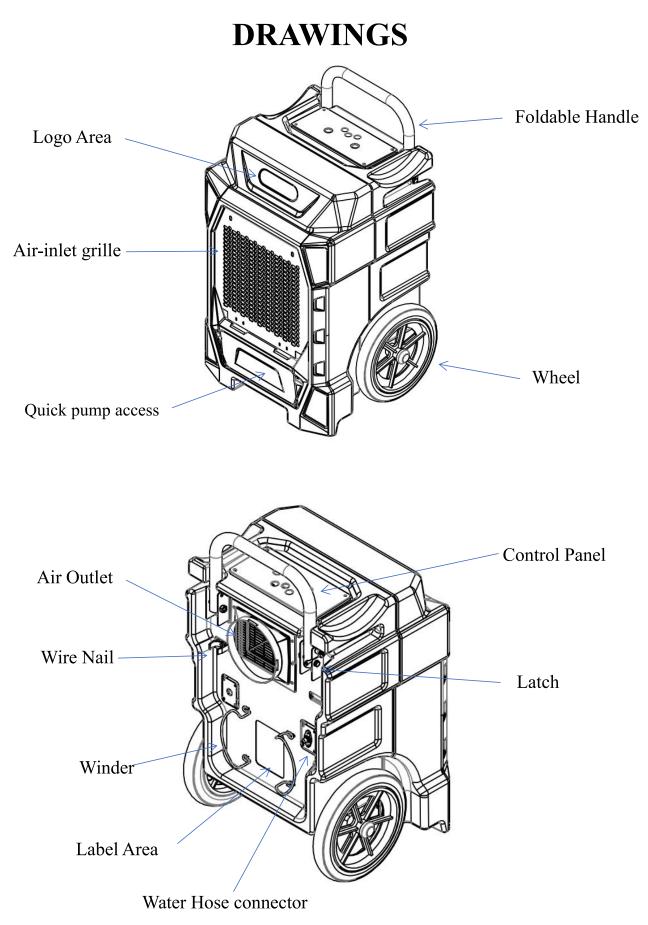
\*Easy to assemble and disassemble the housing for repair

\*With fast connector of hose , convenient for assembly and disassemble

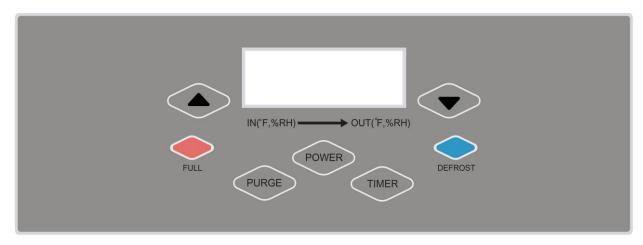
\*Foldable handle ,easy to operate

\*Quick pump access in front for easy servicing

\*Tough semi-pneumatic wheel



### **OPERATION**





**Power Button:** When the machine is in the standby mode, the display screen will be displayed in low light LED.

To start the dehumidifier, press the power button. Concurrently, the display screen will light up and the unit will run in Auto mode ,the default humidity setting data is 10%RH,and the machine will start if the humidity condition meets the requirement of compressor operation.

Press the power button again to turn off the machine, and the fan will shut down in 1 minute later.



**Timing Button:** Press the timing button ,the display screen will show the current timing data, and then press

Add button

to increase the timing data or press Minus

button to decrease the timing data. Press one time to increase or decrease one hour . The timing indicator will light up after setting. When the machine is in the standby mode, press the timing button to set the start-up time; when the machine is running, press it to set the shutdown time. The timing setting range is from 0 to 24 hours. If you set the timing data as "00", it will cancel timing function , the timing indicator will turn off.

Add Button: Press the Add button to increase humidity data or increase timing data .

When setting the humidity data , press the button for one time to increase 5%RH , you can set the humidity range from 10%-90% RH, and 5% RH for one step , it will cycle as below :

10%-15%-20%-25%-30%-35%-40%-45%-50%-55%-60%-65%-70%-75%-80%-85%-90%-10% ····

When setting the timing data, press the button for one time to increase 1 hour, you can set the timing range from 1-24 hours, and 1 hour for one step. it will cycle as below:

01-02-03-04-05---23-24-00-01-02---

Minus Button: Press the Minus button to decrease humidity data or decrease timing data .

When setting the humidity data , press the button for one time to decrease 5%RH , you can set the humidity range from 90%-10% RH, and 5% RH for one step , it will cycle as below :

90%-85%-80%-75%-70%-65%-60%-55%-50%-45%-40%-35%-30%-25%-20%-15%-10%-90% ···· When setting the timing data, press the button for one time to decrease 1 hour, it will cycle as below:

24-23-22-21-20--02-01-00-24-23---



Purge Button (Manual Drainage): Press and hold the purge button for 3 seconds, the machine will drain the water automatically by the built-in pump. After 30 seconds, the pump stops draining, then the indicator will turn off.



**Defrosting Indicator:** When the machine is defrosting, this indicator turns on. After defrosting, it turns off.



Water Full Indicator: When the water pump is full of water, the indicator light turns on to remind the user to drain



The default Display Screen: temperature display is Fahrenheit temperature. When the machine is in standby mode, press the power

button for 5 seconds to switch to Celsius temperature. When the machine is running, it shows the temperature and humidity of the inlet air and outlet air. It displays the running time when it is in running mode; and displays the setting timing and setting humidity data when users set.

**Memory Function:** If there is a power outage or the unit shuts off ,it will auto restart to default humidity setting (10%RH) ,once power is restored .

Note :

when humidity of air inlet  $\geq$  setting humidity data +3%RH ,and the compressor is out of 3 minutes delay start protection , the fan will start immediately and the compressor will start in 3 seconds later when humidity of air inlet  $\leq$  setting humidity data -3%RH , the compressor will stop working immediately ,and the fan will stop working in 1 minute later

## AUTO DRAINAGE AND MAINTENANCE Please disconnect the power supply before cleaning or conducting maintenance.

**Cleaning:** Clean the unit body with a soft damp cloth. Do not submerse or place water on the unit or control panel. Water may damage the electronic components of the unit. Do not use chemical solvent such as benzene, alcohol, gasoline or other heavy-duty cleaner. The surface may become damaged or deformed.

### **Cleaning the Air Filter:**

Step 1: Pull out the air filter gently.

Step 2: Use a vacuum cleaner to remove the dirt on the surface of the air filter. If the air filter is exceptionally dirty, immerse it gently into warm water (about 40°C) with a neutral detergent, rinse and dry it thoroughly. Step 3: Insert the filter back into the unit.

### **Dehumidifier Storage:**

1. Push the purge button to empty the water before transportation or storage.

2. Transport and store the machine upright.

3. Stack machines in warehouse to save space.

# **TROUBLE SHOOTING GUIDE**

Trouble	Possible Cause	Solution
Error Code: E1	Copper head sensor failure	Replace it
Error Code: E2	Air inlet temperature and humidity sensor failure	Replace it
Error Code: E3	Air outlet temperature and humidity sensor failure	Replace it
Error Code: E4	Water pump failure or Water tank of water pump is full	Replace it or check the water pump
Error Code: E5	4-way valve failure	Replace it

### **Cautions:**

### If unit malfunctions turn off the unit and unplug it immediately. Please contact your distributor for service issues.



Do not dispose of electrical appliances in local landfills, or municipal waste locations. Many parts are recyclable. Contact your local government for information regarding the

collection systems available in your area.