INSTRUCTIONS FOR USING INDUSTRIAL DEHUMIDIFIERS

Model: DeAir.RE-150

This product is manufactured and distributed by DeAir Joint Stock Company

deair.com.vn 0925 977 579

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Thank you for choosing our product! This manual is essential for the installation, operation and maintenance of the device. Please follow all instructions in this manual to maximize the dehumidification efficiency, and to overcome any problems that may occur to extend the life of the device.

PRODUCT REGISTRATION

Record the dehumidifier serial number in the space provided below for future maintenance purposes.

Serial number:

IMPORTANT: Please keep a copy of your sales receipt and warranty card for DeAir warranty service.

WARRANTY POLICY

The warranty period is 24 months from the date of purchase.

Warranty is limited to free replacement of any defective part, or manufacturing defect occurring within the warranty period.

All warranty claims must state the model/serial number. These details are printed on the unit identification plate.

Read all instructions before using this dehumidifier. To reduce the risk of fire, electrical shock to persons when using the dehumidifier, follow basic precautions.

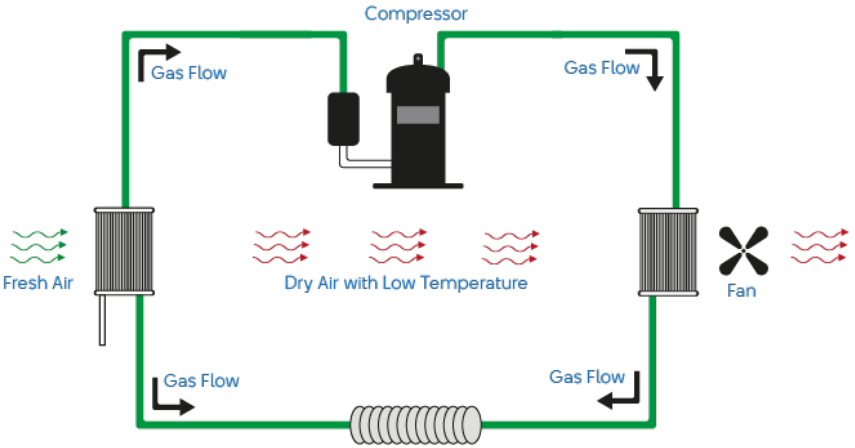
1. Place the dehumidifier in the installation location.
2. Move the machine to the installation location, connect the power source.
3. Install the drain pipe with a slope of 10°.
4. Identify the phase wires, neutral wires and ground wires.
5. Check if any electrical wires have been removed from the position during transportation.
6. Measure the order of the CB power source, make sure the phases are in order from 1-2-3 (from left to right).
7. Connect the machine's power cord to the automatic circuit breaker (CB).
8. Limit the use of the device when no one is around.
9. Keep this user manual carefully.

In case of any defect or damage to the product, please contact DeAir immediately at

Hotline: 0925 977 579

1. How it work

1.1. Principle of dehumidification



Our dehumidifiers apply the principle of dehumidification by using a refrigerant compressor, first the compressor compresses the refrigerant. When the evaporator cools the air to a temperature lower than the air dew point, the water vapor will condense and adhere to the tray, and finally escape through the pipes. In a cycle, the indoor humidity gradually decreases. The dehumidifier can be used not only with the ventilation duct and damper, but also alone.

1.2. The need for dehumidification

Living in a humid environment for a long time can lead to physical weakness, seriously affecting human health. In a humid environment, metal products, medicines, and collectibles are easily corroded, moldy, and bacteria can grow.

The relative humidity that humans feel comfortable with is around 60%. However, the preservation of an object depends on its properties, manufacturing method and usage. Therefore, dehumidification is necessary.

2. Product

2.1. Function

- **Time setting** : design 2-way on-off timer function, improve machine performance.
- **Drainage:** direct drainage without interruption, no need to frequently empty the water.
- **LCD screen:** displays the operating status of the device with an advanced temperature - humidity sensor system, helping to accurately control temperature - humidity.
- **Air filter:** nylon filter net is used to effectively filter dust from the input air.
- **Low temperature defrost:** to protect the compressor when the temperature drops, the device will automatically turn on defrost mode.
- **Self-diagnosis of faults:** if the device fails during operation, an error code will be displayed on the LCD screen.
- **Humidity setting:** the device is equipped with intelligent control system, free humidity value control, humidity setting range 10%-95%.
- **Power off memory:** when there is a sudden power loss, the user does not need to reset, the device will operate according to the original settings.
- **Maintenance:** Clean the air filter regularly.

2.2. Device Features

- **Fast dehumidification:** using quiet centrifugal turbine fan and famous brand compressor, quickly reach the set humidity.

- **Smart dehumidifier:** uses computer control technology, automatically starts and stops when outside the set temperature range.
- **Low noise operation:** reasonable structure design, strict selection standards, components produce low noise efficiency.
- **Device body:** the device body is made of high-strength metal, reasonable bending strength, difficult to deform, the surface is coated with anti-rust and anti-corrosion, baked at high temperature, difficult to fall.
- **Low pressure protection:** when there is gas leakage in the equipment pipeline and the pressure in the liquid copper pipe return line is lower than 0.05 Mpa, the compressor will automatically stop protection. When the pressure in the liquid copper pipe return line is higher than 0.05 Mpa, the compressor can start working.

2.3. Device specifications

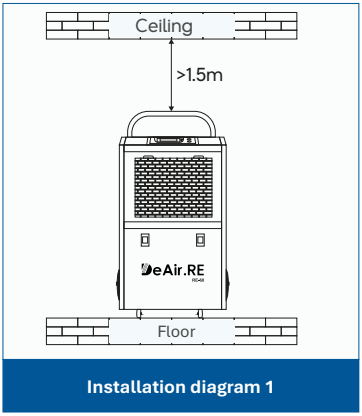
Model		DeAir.RE-150
Operating temperature	°C	15-40
Dehumidification capacity @30°C/80%	kg/day	150
Air flow	CMH	1,500
Noise	dBA	55
Gas type		R410A
Gas charge volume	Kg	1.9
Power supply	V/Ph/Hz	220/1/50
Power consumption	kW	1,5
Dimensions (Width x Depth x Height)	mm	690x530x985
Weight	kg	45

2.4. Device structure

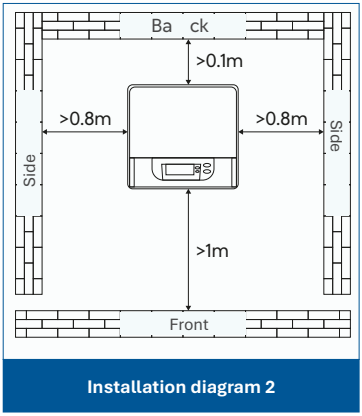
3. Operating Instructions

3.1. Note

- The compressor in the body must be placed upright for operation. If transporting the machine over long distances, the machine must be left upright for at least 3 hours before starting and running the machine.
- When the compressor operates for a long time at temperatures below 15°C, the radiator fins will become covered with snow, affecting the dehumidification efficiency and lifespan of the machine.
- The dehumidifier is not a cooling fan. When the machine is running, the fan will dissipate heat. In a closed environment, the room temperature will increase slightly.
- Make sure the external connection pipe or water fitting is securely installed.
- Make sure the machine is installed with the minimum space recommended.



Installation diagram 1

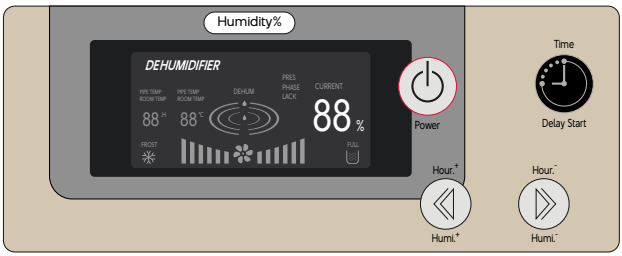


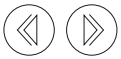
Installation diagram 2

3.2. Application

- The humidity is maintained at 60% which is relatively comfortable for human perception, the humidity should be set close to this range. The humidity should not be set too low, due to the large difference between indoor and outdoor humidity, the rapid diffusion of humidity will lead to frequent machine start-up, reducing the life of the machine.
- In harsh weather (rainy season), the machine should be used for a long time, close the doors and windows when the machine is running, otherwise the humidity will be difficult to decrease.
- When using a dehumidifier to help with dry problems, the device should be placed at a certain distance, not close to the air outlet.

3.3. Control Panel



Button	Describe
	Press the POWER button to turn the machine on/off.
	Press the Humi.+ / Humi.- or Hour+ / Hour- button to turn the machine on / off to set the humidity or time respectively.
	Press the "Time / Delay Start" button in conjunction with the time increase/decrease buttons to set the time. ➢ Press once to enter humidity mode. ➢ Press a second time to enter the delayed start timer mode. ➢ Press a third time to enter the auto-off timer mode. ➢ Press a fourth time to exit defrost mode.

Note: When the set humidity is 3% lower than the current humidity, the dehumidifier will operate; otherwise the dehumidifier will stop operating.

3.4. User manual

- **Power on:** the control panel beeps, the LCD screen lights up and displays the current ambient temperature and humidity. The machine starts up according to the memory status and settings.
- **Press ON/OFF button:** start or turn off the device.
- **Humidity control:** when the ambient humidity is greater than the set value of 3%, the fan and compressor will start. When the ambient temperature and humidity are less than the set value, the fan and compressor will stop (intelligent adjustment).

4. Maintenance

4.1. Safety indications

- Do not handle electrical cords, plug or unplug with wet hands.
- Do not stop the device by disconnecting the power directly.
- Do not use power source with high voltage.
- Do not insert sticks or fingers into the air vent.
- Do not drop or dent the device.
- Do not use wastewater from the machine for drinking or feeding livestock.
- Do not open the case while the machine is in operation.

- Do not use the dehumidifier in the following environments: near heat sources (or temperatures above 80°C), flammable gas environments, dusty environments, sunny environments, and rough surfaces.
- It is necessary to wait at least 3 minutes to restart after shutdown to protect the compressor.
- Stop the machine and disconnect the power before cleaning and maintenance.

4.2. Equipment maintenance

Maintenance and servicing must be done periodically and in compliance with the manufacturer's regulations to ensure the machine operates durably and efficiently. Perform maintenance and servicing promptly to avoid interrupting the production process.

No.	Content	Day	Month	Quarter	Year
1	Cleaning the surface of the device	√	√	√	√
2	Clean the dust filter		√	√	√
3	Compressor cleaning		√	√	√
4	Compressor flow measurement		√	√	√
5	Copper pipe inspection			√	√
6	Cleaning gutters		√	√	√
7	Check the water pipes		√	√	√
8	Check the surface of the rack		√	√	√
9	Cleaning the fan		√	√	√
10	Clean electrical cabinets and check electrical equipment		√	√	√
11	Check the screws securing the device in the machine.			√	√
12	Check the overall equipment in the machine		√	√	√
13	Replacement equipment provision			√	√

5. Error checking and troubleshooting

5.1. Error message board

Error code	Phenomena	Treatment
E1	Temperature sensor error	Replace temperature sensor
E2	Humidity sensor error	Replace humidity sensor

5.2. Troubleshooting

Phenomena	Reason	Solution
Dehumidifier not working	➢ No power supply ➢ Out of phase, phase loss ➢ Fuse blown	➢ Check power supply ➢ Replace fuse
Ineffective moisture separation	➢ Dust clogged filter ➢ Obstructions to the air inlet and outlet ➢ The main door or window of the room is open or the room has a large gap ➢ The refrigerant gas system in the dehumidifier is leaking, in this case the air in the dry air supply line is not warm.	➢ Clean the dust filter ➢ Check and remove obstructions from the air inlet and outlet ➢ Check and close all doors, seal gaps ➢ Contact supplier for support
Water Leak	➢ The machine is tilted. ➢ Drain pipe is clogged	➢ Adjust the machine to balance. ➢ Drain pipe cleaning
Other unusual phenomena	➢ The machine should not be placed on a hard, solid surface. ➢ Filter is disabled	➢ Place the machine on a stable surface. ➢ Clean the filter

FOR ANY QUESTIONS, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER

DeAir

Total Climatech Solution!

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