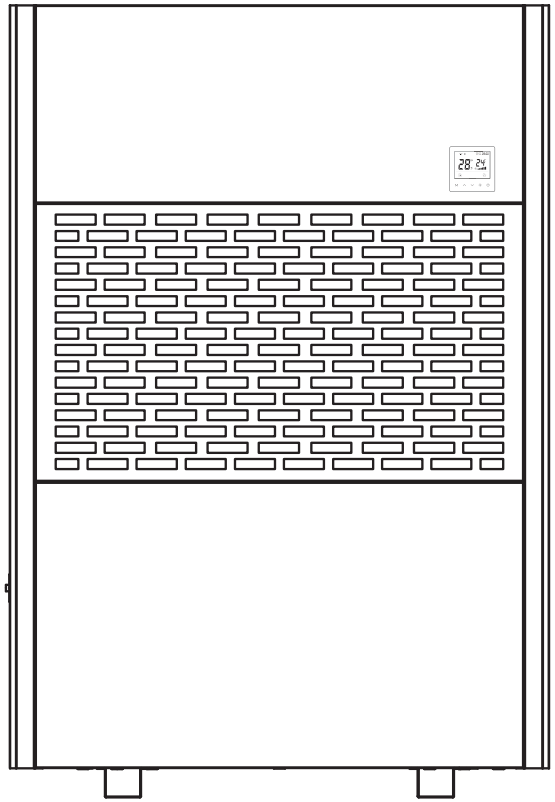
origin

INDUSTRIAL DEHUMIDIFIER
MODEL: OS 400



Thanks for choosing Origin de-humidifiers. We highly recommend you to have a careful reading of the instructions before using the devices. It will provide you with necessary information for proper use and maintenance.

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6. Trouble Shooting

Situation	Reason		Treatment method
Unit does not operate	No power supply displays out	Plug has not been put into the socket	Put the plug into socket
		No power supply	Recover power supply
		Fuse of control panel is burned out	Change new fuse
		Transformer of control panel is damaged	Change transformer
	Power supply displays out	Environment humidity is lower than target humidity	Set the humidity again
		Power socket is missing null line	Add null line
		Voltage of power is low	Recover right voltage
E1	Temperature sensor error		Change temperature sensor
E2	Humidity sensor error		Change humidity sensor
E3	Water full protection		Change water pump
E4	Low voltage protection fault		Change low-voltage switch
E5	Motor is abnormally working	Capacitance is damaged	Change capacitance
		Shaft is stuck	Change motor
		Inside loop is damaged	Change motor
	Compressor is abnormally working	Capacitance of compressor is damaged	Change capacitance
		Piston of compressor is stuck	Change compressor
		Inside loop is damaged	Change compressor
	Lack of refrigerant		Check the point of leakage, recover it. Create a vacuum again, add refrigerant
E6	Phase sequence error (an error in connection of the fire wires)		Firstly, disconnect the power supply, then exchange the positions of any two fire wires numbered “U","V","W"
	Lack of phase		Connect the lacking one or two phases of fire wires
Effect of dehumidification is not satisfying	Filter is blocked		Clean the filter
	There is barrier at intake or outlet holl		Wipe up the barrier
	The door or windows are open		Close door and windows
Noise	The position of machine is uneven		Put the machine on a steady place
	Filter is blocked		Clean the filter
Water leaked	The machine is oblique		Put the machine on a steady place
	Water pipe is blocked		Remove the front panel, clean the sundries

1.If the unit still can't operate correctly after the above checks, please contact local distributor. Forbid to disassemble or repair the unit without approval.
2.When the machine is running or stops running, you will hear a sound of refrigerant cycle, this is a normal phenomenon.

Contents

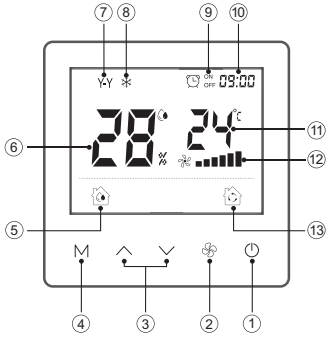
1. Product Introduction

The OS 400 series dehumidifier is built particularly for air drying in closed rooms. The dehumidifier can prevent the formation of condensation, eliminate too high air humidity and hold a specific air humidity constantly. The time which the dryer requires in order to achieve a specific humidity depends essentially on the environmental conditions. The attainable humidity value is equally dependent on the environmental conditions.

The OS 400 series dehumidifier works according to the condensation principle with heat recovery. The fan (shown indicatively below) sucks the moist air through a cool register (evaporator). The air becomes chilled under the point of condensation here, that the moist air condenses as water and flows into the water tank. The chilled and dried air is warmed up at the condenser again. Through the heat pump effect, the outlet air is warmer than the sucked room air. The absolute moisture of air is lowered continuously by the continuous circulation of the room air through the device. The surplus moisture is removed safely and efficiently.

2. Operation Instructions

2.1 Operation Panel:



① " ⏻ " ON/OFF: Press once to turn the unit ON or OFF.

② " " Fan Speed Button: Used to change the fan speed between high fan and low fan.

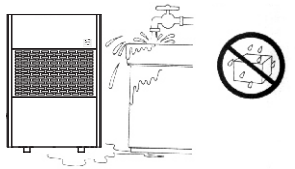
③ " ∧ " up and " ∨ " down.

a. Used to set the target humidity, the value will rise or drop 1% by each pressing down. from 20%-21%-22%-----95%.

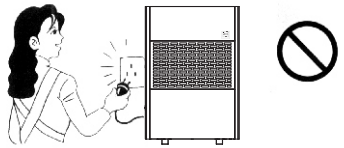
b. Used to set the current time and target timer on/off, the value will rise or drop 1 hour or 1 minute by each pressing down from 00:00-23:59.

④ " M " Mode Button: Press once to switch between manual mode and ventilation mode, keep pressing this key for 10 seconds to enter timing mode. Press and hold the key for 10 seconds to enter timer mode.

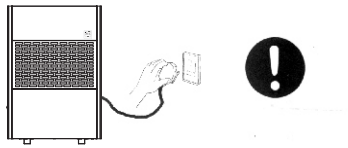
Do not use this appliance in the place where may have water.



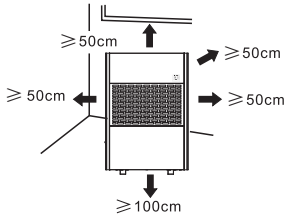
Turn off the unit before disconnecting the power supply.



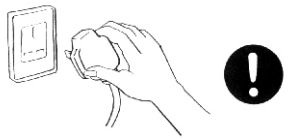
Turn off the unit and cut off the power if any accident happens.



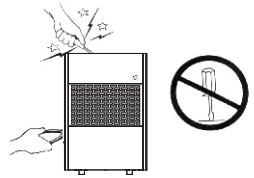
The suitable place.



Turn off the unit and cut off the power before cleaning.



Do not repair and disassemble this appliance by yourself.



5. Technical Specifications

Model	OS 400
Moisture Removal Capacity	400L/day(30°C RH80%)
	235L/day(27°C RH60%)
Power Supply	380V 3N~ 50Hz
Rated Power	4900W
Rated Current	10A
Refrigerant	R410A/1.45kg×2
Operating Temperature	5~35°C
Product Size	46.9 × 21.5 × 68.9 in

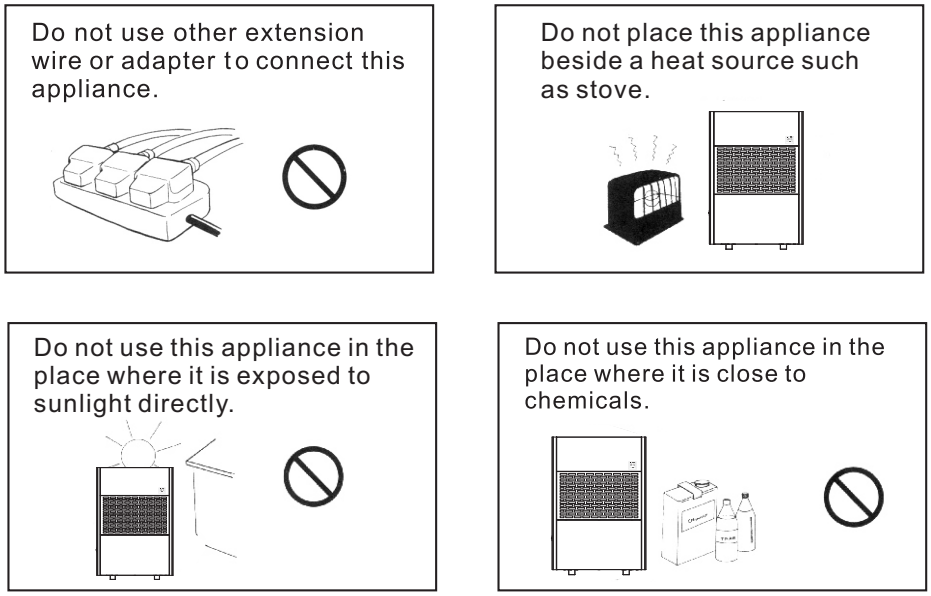
3.2 Protection of Phase Sequence:

When the power is on, if there is a phase sequence error or phase failure, all indicators except time indicator will not light, the display shows "E4" , and the unit can not be switched on normally.

3.3 Memory Function:

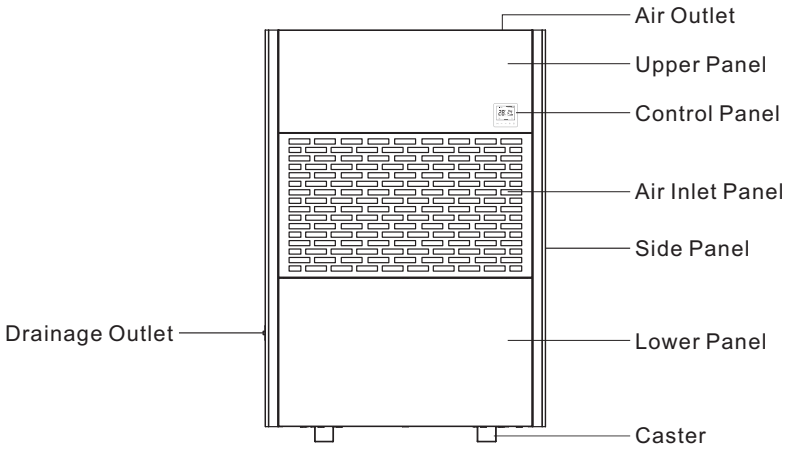
When switched on or the power is reset, the unit can automatically recover to its previous status.
Note: After power failure, the working mode, target humidity and fan speed setting all keep its previous status.The timing setting has been cancelled and needs to be set again.

4. Safety Instructions



⑤ " " Manual Dehumidifying Indicator：Keep light in manual mode.
⑥ " 28 " Humidity Reading: Real-time display of current ambient humidity.
⑦ " Y-Y " Control panel and main control board connection indicator: Flashes when the control panel is disconnected from the main control board
⑧ " " Defrost Indicator: Keep light in defrost mode.
⑨ " " Time Indicators: Keep light in timer mode.
⑩ " 09:00 " Clock Indicator: Real-time display of time.
⑪ " 24 " Temperature Indicator: Real-time display of current ambient temperature.
⑫ " " Fan Speed Indicators: Display the fan speed.
⑬ " " Ventilation Indicator: Keep light in ventilation mode.

2.2 Components



2.3 Procedures of Basic Operation

1. OS 400 uses an external power supply of 380V/50Hz (needs to connect null line and also the ground). Connect the fire wires with three wires numbered “U”, “V”, “W”, and the wire mark of “ ⏚ ” to the ground. (the unit should have an air switch of 20A to achieve an independent control).

2. Power on, with a buzzer sound, and running “ ” indicator flashes.
Note: Switch on the unit, if the screen shows “ E4 ”, disconnect the power and exchange the positions of any two fire wires of “U, V, W”.

3. Press the power " ⏻ " button once to turn on the unit, the unit runs by default mode on manual dehumidifying with high fan speed.

2.4 Fan Speed:

Press fan speed " 🌀 " button to change the fan speed between high fan and low fan.

2.5 Humidity Setting:

Press the up " ∧ " / down " ∨ " buttons to select your preferred humidity from 20%-21%-22%-23%-24%-25%----95%.

2.6 Multifunction Optional

2.6.1 Ventilation mode

Press the mode " M " button once to select ventilation mode, unit runs with high fan speed without dehumidifying.

2.6.2 Manual Mode

Press the mode " M " button 2 times to select Manual mode.

2.6.3 Clock Setting

Press timer on "M" button for 5s to switch on the clock setting, the original value is 00:00, press up or down button to set the target hours, it ranges from 00 to 24 hours, after the setting is completed, press the "M" button again to switch to the minute setting. Repeat the same operation to set the target minutes, it ranges from 00 to 59 minutes.

2.6.4 Timer Setting

Press "M" button for 5s, the "⏰ ON OFF" timer indicator will light on, and then press the "M" button twice to switch on timer setting, the original value is 00, press up or down button to set 01, the unit will run for 5 hours and 45 minutes, and shut down within 15 minutes for a cycle to run normally. Auto timer setting will be canceled if the value setting on 00.

Note: The default timer mode is switched on when the unit is powered on for the first time

2.7 Automatic Defrosting:

When the unit has started for a long time at a low temperature, moisture in the air would condense into frost which will adhere in the evaporator, so it will reduce the dehumidification effect; In order to effectively solve the problem, automatic defrosting according to the temperature set in the unit. When the unit defrosts, the compressor stops running, the fan motor runs at high fan, and defrost " ❄ " indicator lights.

2.8 Compressor Delay Protection

In order to ensure the appliance to normally operate for a long time in a safe condition, the compressor 3 minutes delay protection function is designed for this unit to ensure that the time between operating and stopping of the compressor is not less than 3 minutes.

3. Service & Maintenance

3.1 Error Code Display

Displayed Code	E1	E2	E3
Error	Temperature Sensor Error	Humidity Sensor Error	Water full protection
Display	Flash "E1" every 30s for 2s	Flash "E2" every 30s for 2s	Slowly flash "E3"
Working State	The unit keeps running at previous humidity setting status, defrosting mode changes into timing defrosting.	The unit keeps running at continuous dehumidifying status.	The unit automatically judges that the refrigeration effect is poor and cannot normally dehumidify, the unit will stop working.
Displayed Code	E4	E5	E6（This function is not available for Single-phase electric power models）
Error	Low voltage protection fault	Abnormal refrigeration system	Phase sequence error
Display	Slowly flash "E4"	Slowly flash "E5"	Slowly flash "E6"
Working State	The machine determines that the low pressure switch is disconnected and cannot be dehumidified ， the unit will stop working.	The unit automatically judges that the refrigeration effect is poor and cannot normally dehumidify, the unit will stop working.	Machine judgment phase sequence error, unable to start