



Laboratory Equipment Manufacturer  
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## Operation Manual Auto Dry Keeper

# 0003



**PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATION**

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**MRC. 6.15**

## Dry Keeper Introduction (Auto type)

This product is designed to automatically keep inside humidity at 30% to 40% under the environment of 5°C to 35 °C and 70% to 80% humidity.

To ensure that your items are being placed into a dry environment, we suggest you to operate 24 hours without put anything in the dry keeper before start using.

### Specification

Control scheme: Hours of operation specified by timer

50Hz----- 1cycle 6 hours

60Hz-----1cycle 5 hours

Rated power consumption: **AC100V**, Average 11/9W (50/60Hz)

### Warnings

- **Before connecting with the electrical supply, check the voltage is within the range stated at the rating label.**
- **Make sure to connect this dry keeper only to 110VAC power outlet.**
- **If your electricity in the power outlet is 230VAC, you must use the AC converter that supplied with this dry keeper.**

**Connecting this dry keeper directly to 230VAC without AC converter, will cause irreversible damage**

### Caution

1. It will be more efficiency to use after one night from first setting.
2. Do not put flammable item, moisture item inside.
3. Do not use it in the environment which is full of dust.
4. Do not put it under direct sunlight, hot and moisture place.
5. Do not put things within 10cm from front panel.
6. After switch on, you might hear timer's sound or shutter switching sound, it is not fails.
7. Do not use solvent chemical and stiff cloth for cleaning, it will damage the product.

## **Notice**

The hygrometer supplied with this desiccator cabinet is not a precision instrument. It registers high or low humidity, but it is not an accurate indicator of the percent of relative humidity shown on the dial. If the hygrometer reading becomes lower after the unit has been plugged in for one complete cycle (5 hours or more), the drying mechanism is working. If a more precise measure of the actual relative humidity in the cabinet is required, a portable hygrometer may be placed in the cabinet

## **Operation instruction:**

1. Set shelf plates according to your item size.
2. Close the door and plug into 110V outlet or use the AC converter
3. Red light and green light will turn on. (Green light will turn on during moisture absorption). Then it will be kept inside humidity at 30% to 40% automatically.

Note: It is better to put your item inside after 1 cycle.

Please keep door opening time as short as possible.

## **Humidity display**

Please use hygrometer just as a guide. (The hygrometer is metal wind-up type, so might be error by shock)

## **Dehumidification principle**

This product repeats moisture absorption and unit dry according to timer. It depends on your Hz, but usually it does 30 minutes units dry after four and a half to five and a half hours moisture absorption. This is 1 cycle of its operation.

Red light turn on means it is doing unit dry, Green light turn on means it is doing moisture absorption. It will be energized to heat element when red light turns on and heat element will go up to 100°C. Then drying agent starts to dry. After 30 minutes, green light will turn on and do moisture absorption. The two doors will be used efficiently to do this action.

## **Green light will keep its light after switch**

## Substances that are prohibited for use

Substances that may adversely affect the dehumidifying element and substances that may react with the dehumidifying element and cause harm are listed below.

It is mainly on the anode side that is affected. Additives of materials may also be affected. Therefore, if new substances or manufacturers are changed, a sufficient evaluation is required.

Classification	Substance name	Properties	Remarks
Mineral	Hydrochloric acid gas	Gas	
	Nitric acid gas	Gas	
	Other corrosive gases	Gas	
	SOX gas	Gas	
	NOX gas	Gas	
	Chlorine gas	Gas	
	Sulfite gas	Gas	
	Other Pollutant Gases	Gas	
	Concentrated hydrochloric acid	Liquid	
	Concentrated nitric acid	Liquid	
	Substances that produce other corrosive gases	Liquid	
	Divalent metal ion	Liquid	
	Organic	Siloxane gas	Gas
Oxime gas		Gas	
Oil smoke		Gas	
Diethylamine		Gas	
Other amine gases		Gas	
Various amide-based low-molecular compounds		Gases, liquids	
Methylene chloride		Liquid	
Perchlene		Liquid	
Trichlene		Liquid	
Perchloroethylene		Liquid	
Tetrachloroethylene		Liquid	
Other chlorinated solvents		Liquid	
Oil mist		Liquid	
Dimethylsulfoxide		Liquid	
Other sulfur-based organic solvents		Liquid	
Silicon sealant		Solid	Siloxane gas is given out. Heat treatment (baking) is required to remove unreacted low molecular siloxane.
Silicone grease		Solid	
Silicone rubber		Solid	
Silicone sealant		Solid	
Other siloxane compounds		Solid	
Paranace		Solid	
Camphor		Solid	
Other insect repellents		Solid	
Paradichlorobenzene		Gases, liquids	
Other chlorinated insect repellents		Gases, liquids	
Vaporizing rust inhibitor		Liquid, solid	
Rust preventive agent added to the material		Liquid, solid	
Tar component of tobacco		Gases, liquids	
2,6-Di-t-butyl-4-methylphenol (BHT)		Liquid	Antioxidants added to the packing

The above information is as of September 22, 2017, but not all.

The electrolyzed dehumidifier Before using Rosal, verify it beforehand and evaluate it thoroughly.

Please note that we are not responsible for any Unknown events or events caused by poor handling, such as the generation of hazardous gases, loss of performance, or damage to stored items.