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Laboratory Lines > Ovens > Natural Convection Ovens

## **Natural Convection Ovens**



Model : YR0173-1 Natural Convection Ovens Manufacturer : Kalstein

Price : \$ 0.00

**Description :** 

Having the right laboratory oven is a key factor in your daily workflow. A natural convection oven works with a fan that has a heating element around, providing the heat. Natural convection is a type of heat transport where the fluid motion is not generated by an external source. In this process the fluid that surrounds a heat, becomes less dense and rises. Then, the cooling fluid moves to replace it and this process continues until a convection current is formed. You should also know that in this process the energy is transferred from the bottom of the convection cell to the top.

#### Natural convection drying

The way a laboratory oven works is by the principle of convection. This means that the heating element is not located in the oven chamber with the specimen, it is located in a separate external envelope. This way, heat will not affect the sample because it will be located in the oven walls being this enough for heating or dehydrating a specimen. This method provides the needed uniform heat distribution. There are many different types of drying ovens for different needs. Gravity convection or forced air convection drying ovens provide a greater degree of evenness, control of temperature, rapid drying capabilities, and many newer models are programmable.

This oven type has a microprocessor controller with a timing function. Among its features, you can find that it is made from a stainless-steel chamber with semicircular arcs at the corners, specially built to clean it easily. Another great aspect is that the space between the shelves in the chamber is adjustable. This natural convection oven has an inspection window with a Rainbow brand manual controller. In addition, you can program the controller the following ways: 15 periods 30 steps, 1 to 99 hs 99mins for each period with a fan speed from 0 to 100% adjustable. You must know that this is an optional feature. Moreover, there is another optional feature such as an RS485 connector that can be connected to the computer to record the parameters and temperature variations.

Natural convection oven for laboratory

If you are looking to purchase this oven type, you should know that there are three different models. These three models are YR0173-1,YR0173-2 and YR0173-3. The three of them have a temperature range of RT-10~200?. The temperature uniformity is 2.50% and their electrical requirement is 220V 50HZ.



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## **Natural Convection Ovens**

Features of the Natural Convection Ovens

- Microprocessor controller(with timing function)
- Stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- With inspection window
- Rainbow brand(Korea) manual controller
- Programmable controller: 15 periods 30 steps, 1 to 99 hs 99mins for each periods, fan speed 0 to 100% adjustable. (option)
- RS485 connector can connect computer and printer to record the parameters and the variations of temperature (option)

Options

- PID controller
- Intelligent Programmable temperature controller
- Printer
- RS485 connector

Parameters by Model



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# **Natural Convection Ovens**

Drying oven			
Model:	/R0173-1	YR0173-2	YR0173-3
Temperature Range:	RT-10~200°C		
Temperature Uniformity:		2.50%	
Power Consumption:	00W	900W	1200W
Electrical Requirement:		220V 50HZ	
Interior Dimension (W×D×H, mm): 2	280*280*350	350*350*460	430*430*520
Chamber Volume: 2	27L	56L	96L
Shelves: 1	I(PCS)	1(PCS)	2(PCS)
Remark:		Natural convection	



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## **Natural Convection Ovens**

### **Options available for Natural Convection Ovens :**

Capacity (Liters)

(YR0173-3) 96L (+\$ 1,166.65), (YR0173-1) 27L, (YR0173-2) 56L (+\$ 388.90).