

Vacuum Oven

Model:DZF-6210

Operation Manual



- The operation manual please sent to the operator hands!
- Please read and understand the product specification before operate instrument.
For adverse consequences caused by wrong operation, our company is not responsible for.
- The contents of the operation manual may make changes and improvement in the future, there will be not the notice, please understanding.
- If found abnormal phenomenon in the process of use, please do not hesitate to contact our company.
- Please keep the operation manual, at the same time, please be sure to fill in and send the warranty card to our after-sales service center.

Product model: **DZF-6210**

Serial number:

Manufacturing date:

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1. Safety instruction

Dangerous !

1. Must be connect with the ground.
2. When the instrument is smoking vacuum or heating, do not allow to touch the door and window, must stand at more than one-meter distance from door.
3. Shall not dry inflammable, explosive, volatile and corrosive substances.
4. When need not to smoke air continuously, should shut off the vacuum valve firstly, then close the vacuum motor power switch, in order to prevent the vacuum pump oil flow backward to tank.
5. If the oven is broken, must be repaired by professional maintenance person.
6. If need to repair electrical parts, must be repaired by electrical engineer.

Warning! (May cause a serious property damage or loss of life)

1. Must fully read and understand operation manual, before operate the instrument.
2. When replace the fuse and electric parts, must pull the plug.
3. When the instrument is not used for long time, must pull the plug.
4. **The top bearing capacity of the container does not exceed 30KG.**



This mark indicates that the surface of the device is hot. Beware of scalding.

6. There shall be a statement in the instructions that if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
7. If applicable , manufactuer's documentation shall instrust against replacing detachable mains supply cords by inadequately RATED cord.
8. A warning about any possible HAZARDS of explosion implosion or the release of toxic or flammable gases arising from the materials being heated see also.

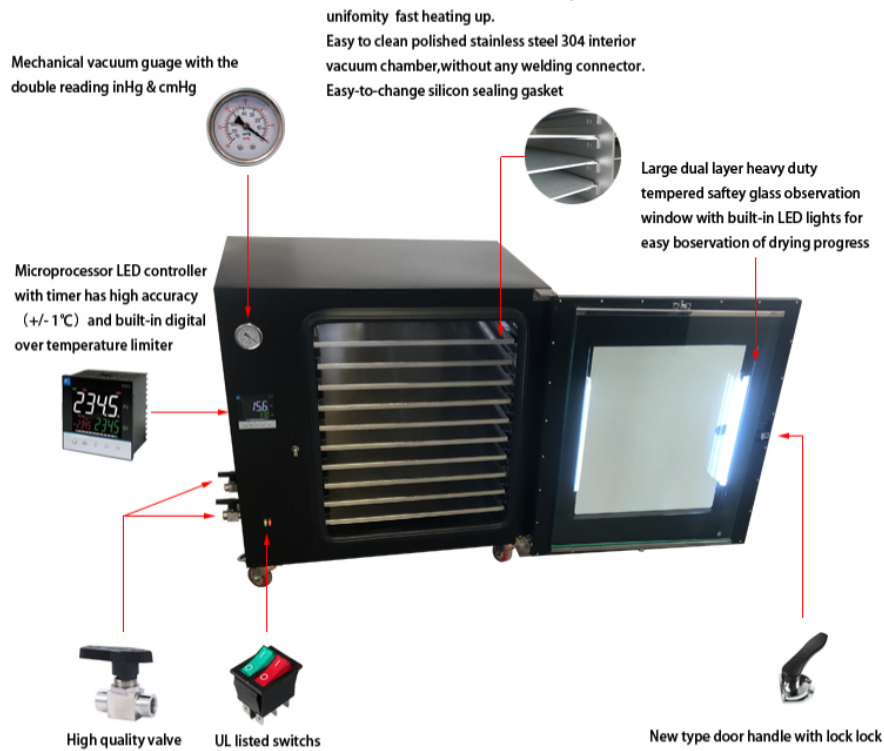
2. Application

The vacuum oven is widely used in biochemistry, chemical and pharmaceutical, health care, agricultural research, environment protection and other areas of research and application for powder drying, baking and all kinds of glass containers' disinfection and sterilization. Especially for those drying heat-sensitive, labile, oxidizing material and decomposed to carry on fast and effective drying process.

3. Structure

DZF-6210 is with 20 Removal shelves heating. The oven body is made from high quality carbon steel stamping, the surface is electrostatic spraying and the chamber is stainless steel. Thermal insulation layer is made of high-quality silicate cotton, there is a high temperature resistant silicon rubber sealing ring between the chamber and the window, which ensure the sealed performance between the chamber and the door, increase substantially the vacuum degree in the oven.

Temperature control system use the PID temperature controller with touch button, do not need to adjust temperature control parameters, control precision and no overshoot. Temperature control system has the function of timing and over temperature protection, which improve the equipment safety.



4. Working condition

- (1). Environment temperature: +5~40°C
- (2). Relative humidity: ≤85%RH
- (3). Atmospheric pressure: 86~106Kpa
- (4). Around without intense shaking, clearance is more than 50 cm.
- (5). There are not direct sunlight and heat radiation.
- (6). There is not a strong airflow blowing straight body.
- (7). There is not high concentration of dust and corrosive materials.

5. Technical parameters

Model	DZF-6210
Power Requirement	AC220V 50Hz 1Phase
Power Consumption	1100W
Temperature Range	RT~150°C
Temperature Stability	±1°C

Display Resolution	0.1 °C
Vacuum Range	≤133Pa
Timing range	1~9999min
Chamber Size	560*610*635mm(L*W*H)
Oven Size	880X810X880 (WXDXH mm)
Volume	210L
Standard Shelves	5pcs (Removal Pans)

6. Use method

(1). Installation

- Welcome to use our oven products. For better use of the oven, please follow the operating instructions of the oven.
- Make sure that the machine is properly grounded before starting up.
- Connect the matching power supply according to the power configuration of the machine.

(2). Basic operation

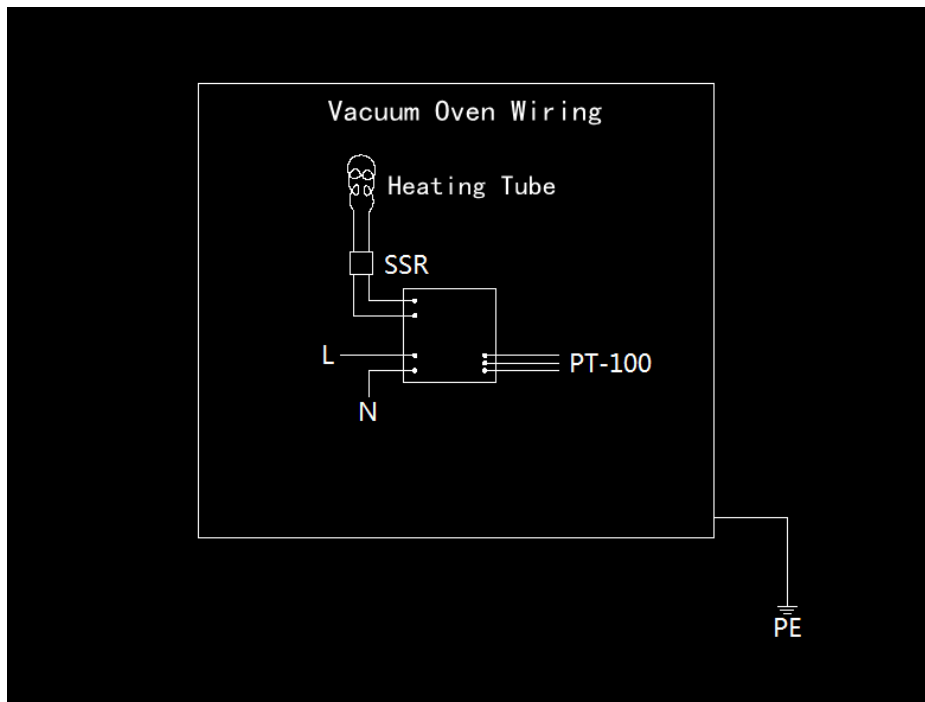
- After the oven is placed in the designated area, the vacuum pump and power cord need to be connected. Put the sample to be vacuum-dried into the working chamber of the oven, close the door and check whether it is sealed. First you need to close the air release valve, open the vacuum valve, turn on the vacuum pump power and start vacuuming so that the vacuum in the working chamber of the oven reaches -30 inch Hg.
- After completing the vacuum, you need to heat the oven. Turn on the power switch and set the required temperature (heating time). The temperature inside the oven will start to rise. When the temperature inside the oven chamber is close to the set temperature, the heating indicator Suddenly turned on and off, and slowly entered the constant temperature state after repeated many times. Set different drying time according to the humidity of the sample. If the drying time is longer and the vacuum degree is lowered, it is necessary to pump again to restore the vacuum degree. The vacuum pump power should be turned on first, and then the vacuum valve should be turned on. If the sample is too humid, you need to install a condenser

and a vacuum water storage tank to prevent liquid water from corrosive to the work chamber for a long time.



When Drying Process is completed, the power of the drying box should be turned off, the air release valve should be opened, the vacuum state inside the box should be released, and then the door of the box should be opened to take out the items.

8.Wiring



9. Maintenance

- (1). The oven should be kept clean, use soft cloth to wipe the door, avoid using chemical solvent, lest produce chemical reaction.
- (2). If do not use the instrument for long time, must clean the instrument, put on the plastic dust cover and placed in the drying chamber.

10. Problem solution

Fault phenomenon	Cause	Solution
no electricity	plug without electricity	repair the plug
	fuse broken	detect fault, ruled out fault or replace fuse
temperature not rise	set temperature as low	adjust set temperature
	electric heater broken	replace electric heater broken (external heating)
	temperature controller broken	replace temperature controller
	temperature sensor loose	rotation sensor nut
temperature difference	temperature sensor broken	replace sensor
	set temperature displacement potentiometer displacement	adjust set temperature adjust potentiometer
no vacuum	bleed valve not close	close bleed valve
	vacuum valve not open	open vacuum
	vacuum tube not connect	connect vacuum tube
	vacuum pump broken	replace vacuum pump
	the door not close	close the door
	rubber seal broken	replace rubber seal
	vacuum gauge broken	replace vacuum gauge
air leakage	rubber seal broken	replace
	rubber tube aging	replace
	vacuum valve broken	replace vacuum valve