

Lab Companion

Multi Layer Nitrogen Oven PV-150-4C

Custom Solution

Brief Introduction



Multi layer nitrogen oven is suitable for instruments, chemistry, plastic, electronics, food, clothing, vehicles, metal, chemical, building materials, aerospace and other parts or machine. With rapid temperature change, gradient adaptability test and temperature stress screening test functions, helps to test the performance and change under the proposed conditions, for the purposes of product design, improvement, identification and factory inspection.

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Particularities:

1. The structure design of the Test Chamber is advanced and reasonable, and the supporting products and functional components have the international advanced level, which can meet the long-term, stable, safe and reliable production needs.
2. A nitrogen oven can provide an oxygen free environment, which is crucial for materials and products that require avoidance of oxidation reactions.
3. A multi-layer nitrogen oven that can perform multiple tests simultaneously.
4. It adopts the perfect modeling design, the appearance has excellent texture and beautiful atmosphere.
5. The control system adopts special control system, with strong expansibility, simple operation, accurate control.

Technical Features:

Dimensions (mm)	Width	Height	Depth
Useful	600	500	500
Overall	1750	1800	1280

Temperature range

from RT°C to +100°C

Homogeneity and Regulation:

Temperature fluctuation:

$\leq \pm 0.5^\circ\text{C}$

Temperature deviation:

$\leq \pm 2.0^\circ\text{C}$

Temperature uniformity:

$\leq 2^\circ\text{C}$

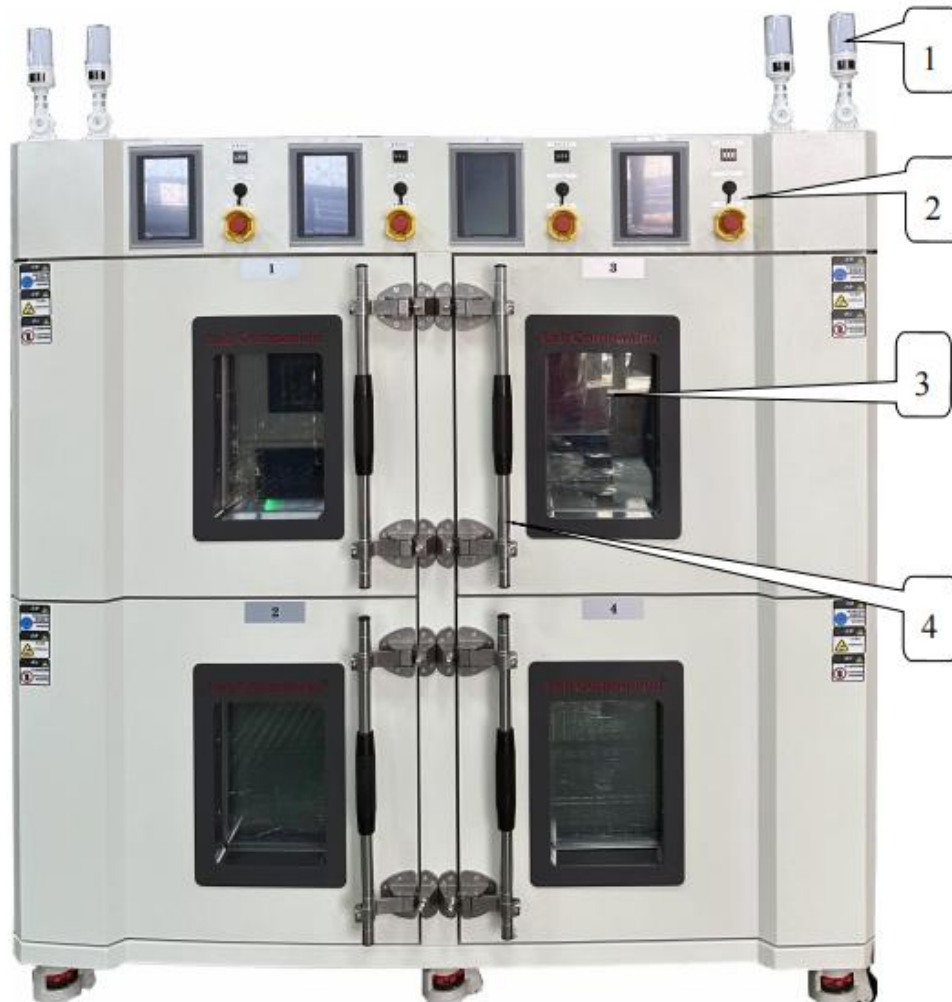
Temperature rise time:

30min (-RT°C → +100°C) Under no load

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Appearance Introduction and Description:

1. Front and side of the machine



Number	Name	Illustration
1	Tower Light	Green light-operation Yellow light-standby Red light-alarm
2	The control panel	Operation panel for machine operation
3	Glass window	To observe the inner workings of the laboratory
4	The door lock	Pull the vertical door to open it

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2. Control panel



Number	Name	Illustration
1	Controller	Touch screen programmable controller (Refer to controller manual)
2	Overtemperature setting	Set the upper temperature limit within the testing area
3	USB interface	Used to copy curves or document-related data
4	Scram switch	Used to connect the device and cut off the power supply

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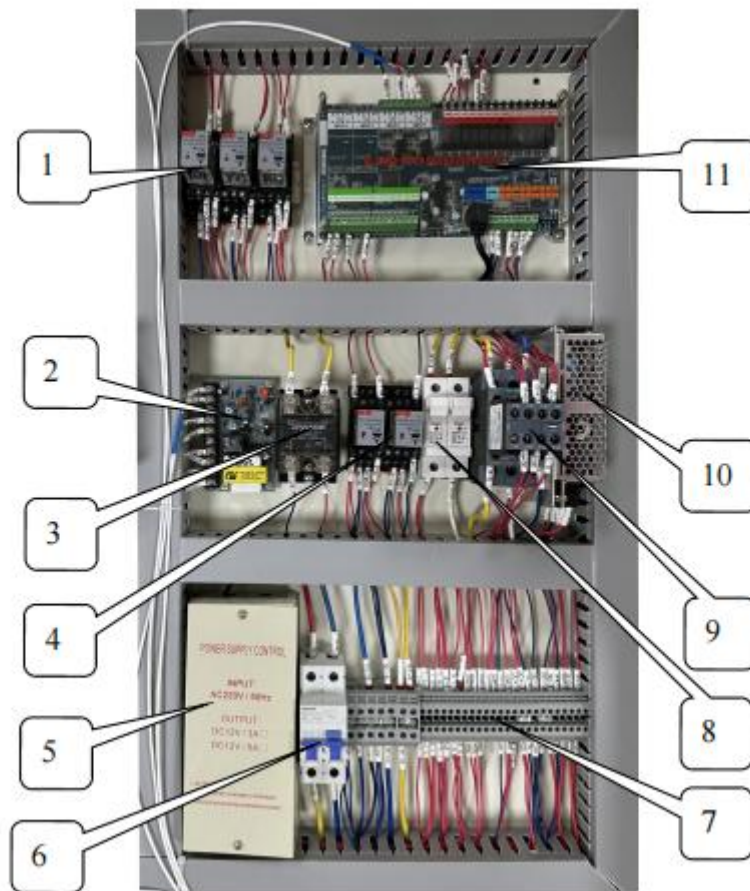
3. Test area



Number	Name	Illustration
1	Sealant	Insulation and prevention of air leakage
2	Test hole	The live test of the product can be connected to an external power source through the test hole
3	Sample rack track	Used to secure the sample holder
4	Shelf	Used to place test products

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4. Power distribution room



Number	Name	Number	Name
1	Intermediate relay	7	Connecting wire terminal
2	Overtemperature plate	8	Fuse
3	Solid state relay	9	Auxiliary contact+AC contactor
4	Intermediate relay	10	DC power supply
5	Electromagnetic lock power supply	11	Temperature controller
6	Circuit breaker		

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Test Report:

Temperature °C \ Sensor	85°C	125°C	200°C
A	85.0	124.8	200.5
B	85.3	125.0	200.1
C	85.2	125.1	200.0
D	85.0	125.5	199.8
E	85.6	125.7	199.6
F	85.8	125.3	200.0
G	85.9	125.6	200.3
H	85.4	125.2	200.5
O	85.6	125.0	200.4
Temperature deviation	0.9	0.7	0.5
Temperature uniformity	0.9	0.9	0.9