

# Lab Companion

High And Low Temperature Test Chamber T-150-100B

Custom Solution

Brief Introduction



The equipment is mainly for industrial products reliability test in high and low temperature condition. The adaptability test of electronic, electrical, automobile, aerospace, Marine weapons, scientific research units and other materials in the environment of high temperature and low temperature storage, transportation and use. The test equipment is mainly used for the product in accordance with the national standard requirements or user-defined requirements. At high and low temperature, the physical and other related characteristics of the product experience environmental simulation test. Through testing to determine the performance of the product and whether it can still meet the predetermined requirements for product design, improvement, identification and factory inspection.

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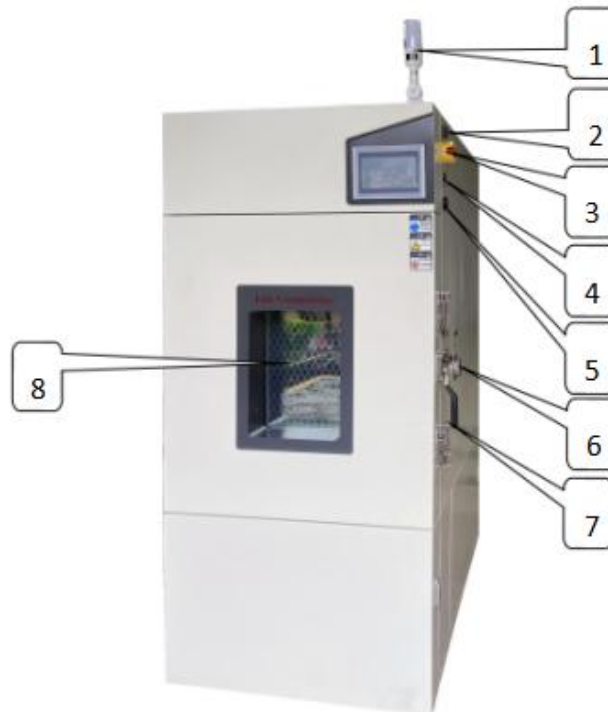
## Specifications and parameters:

Model	T-150-100B
Power source	AC380V, 50/60HZ, 3 $\phi$ 5 wire
Rated current	AC 14.5 A
Total power	5.5 KW
This machine is dedicated to the above marked power supply, please use according to the rated power distribution.If the use area is changed, please contact our company. Service phone 400-628-2786.	
Temperature Range	-100~+25 °C
Temperature fluctuation	$\leq\pm 2^{\circ}\text{C}$
Temperature uniformity	$\leq\pm 5^{\circ}\text{C}$
Cooling rate	RT $\rightarrow$ -100°C, Nonlinear no-load approx. 1.0°C/min
Internal Dimension	W500*H600*D500 (mm)
External Dimension	W880*H1870*D1430(mm)
Suitable temperature for using	5~30°C
Controller model	Q8 color touch screen
Heating in test area	3.2KW
Heating in evaporation chamber	2KW

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## Appearance Introduction and Description:

### 1. Front and side of the machine



Number	Name	Illustration
1	Three color lights	Green running, yellow standby, red fault
2	Over temperature Setting	To Set the upper temperature limit in the test area
3	Scram switch	Used to connect the device and cut off the power supply
4	USB interface	Used to copy curves or document-related data
5	Network interface	The computer can be connected to the controller through the network cable for remote operation
6	The test hole	An external power supply can be plugged in from the test hole for live product testing
7	The door lock	Pull on the handle to open the door
8	Glass window	To observe the inner workings of the laboratory

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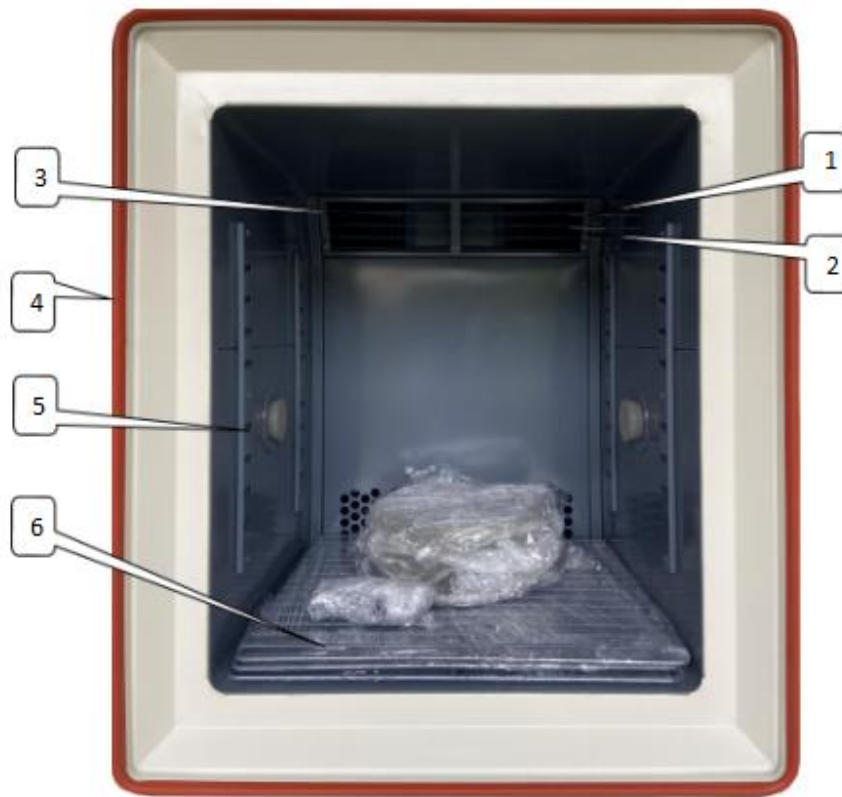
## 2. Control panel



Number	Name	Illustrate
1	Controller	Touch screen programmable controller

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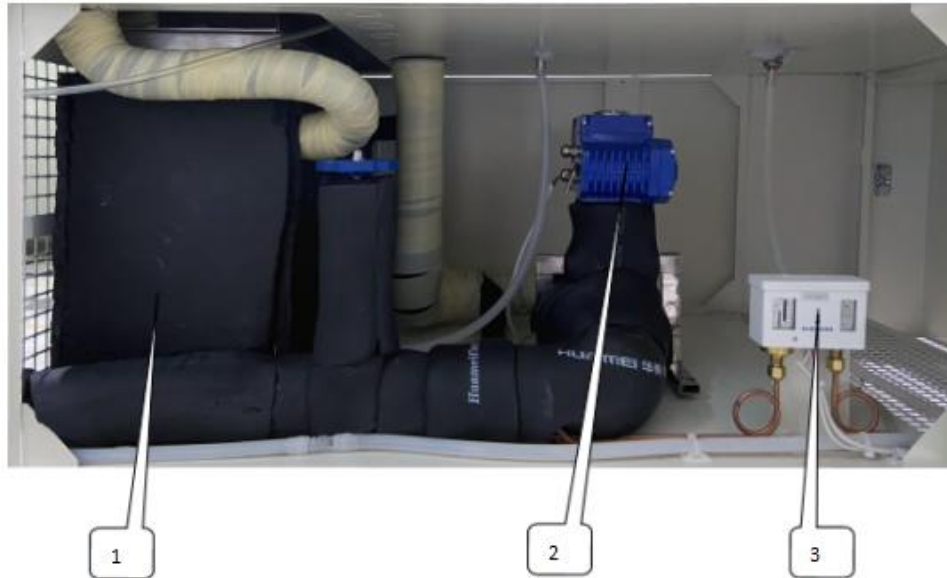
## 3. Test area



Number	Name	Specification
1	Thermal resistance sensor	Used for panel overtemperature sensing the temperature of the inner box
2	Thermal resistance sensor	Used for the controller to sense the temperature of the inner box
3	The air outlet	Test area circulates air outlet
4	Sealant	Heat preservation and air leakage prevention
5	Sample rack track	Used to secure the sample holder
6	Sample holder	Used to place test products

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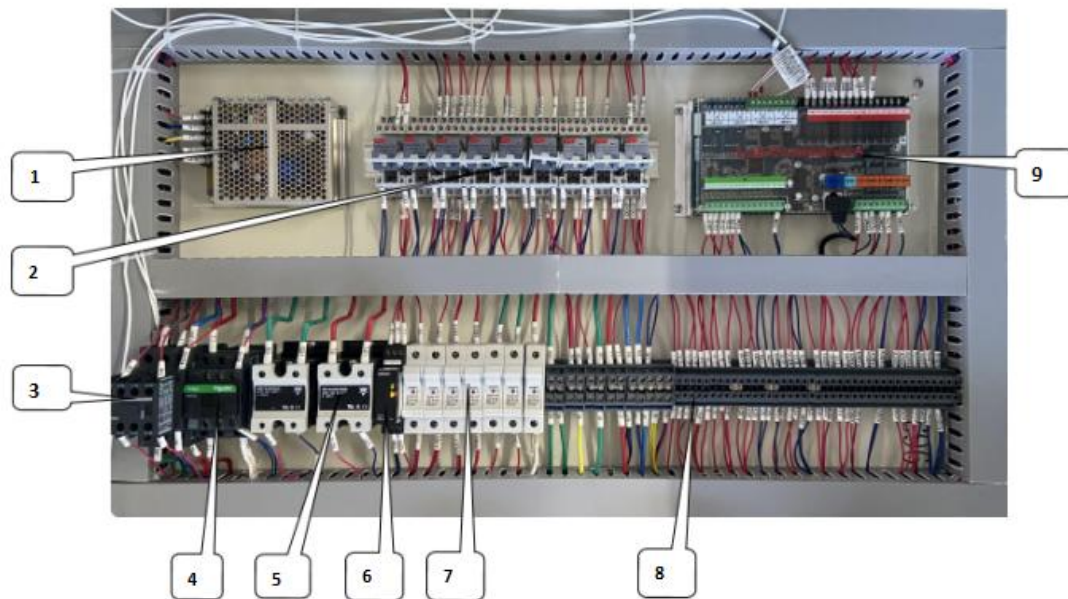
## 4. The cooling machine room



Number	Name	Illustrate
1	Evaporation chamber	Evaporation of excess liquid nitrogen after cooling in the test area, it is converted into a gas and discharged into the atmosphere
2	Electric ball valve	The amount of liquid nitrogen flowing into the test area is calculated by the controller
3	Pressure protection controller	When the pressure is too high, the machine will alarm

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## 5. Power distribution room



Number	Name	Number	Name
1	Dc power supply	6	Underinverting phase protector
2	Intermediate relay	7	Fuse
3	Auxiliary contact	8	Connector terminal
4	Ac contactor	9	Temperature controller
5	Solid state relay		

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## Test Report:

Item Name	High And Low Temperature Test Chamber
Item No.	T-150-100B
Factory number	5963
Power source	AC 380 V 50HZ 3 $\phi$ 5 wire
Date of manufacture	2024 年 09 月