Lab Companion

Benchtop High And Low Temperature Test Chamber TC-20

Custom Solution

Brief Introduction

Table type high and low temperature test chamber mainly provides constant temperature and high and low temperature alternating test environment and test conditions for various small industrial products in the research and development, production, inspection and other aspects of the test. It can meet the wide application needs of electronic devices, mobile phone communication, materials and energy, aerospace, colleges and universities, scientific research institutions and other industries.

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Technical Features:

Dimensions (mm)	Width	Height	Depth
Useful	305	230	285
Overall	520	1420	830

Homogeneity and Regulation:

Temperature range
from -40°C to +120°C
Temperature fluctuation:
≤±0.5℃
Temperature deviation:
≤±2.0℃
Temperature uniformity:
≤2℃
Temperature rise time:
3.0℃/min (+25℃→ +100℃) The whole process of nonlinear heating, no-load)
Temperature drop time:
3.0℃/min (+25℃→-40℃) The whole process of nonlinear cooling, no-load)
Power supply specifications:
AC 220 V, 50/60 HZ, 1 ∮ 3 wire
Rated current:
AC 9 A, power 2 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.
Controller model:
Q8 color touch screen
Compressor model:
CAJ2464
Refrigerant:
R-404A
Temperature electric heating:
1.0KW

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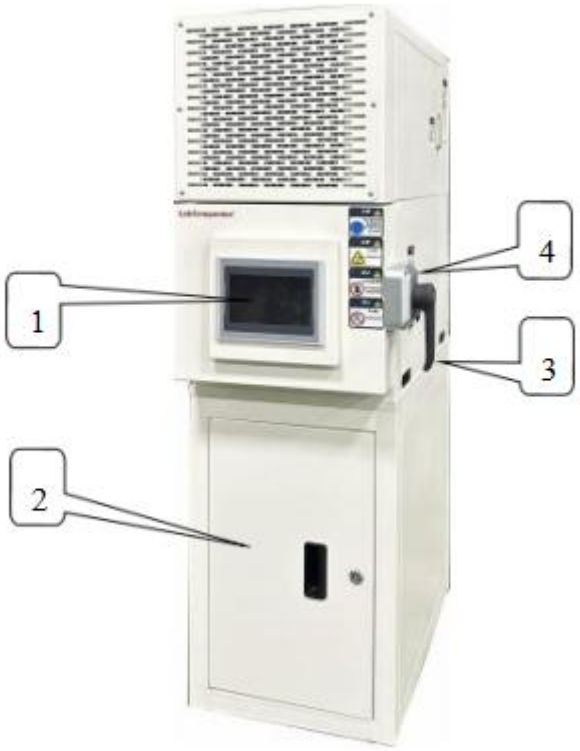
Appearance Introduction and Description:

1. **Front and side of the machine**

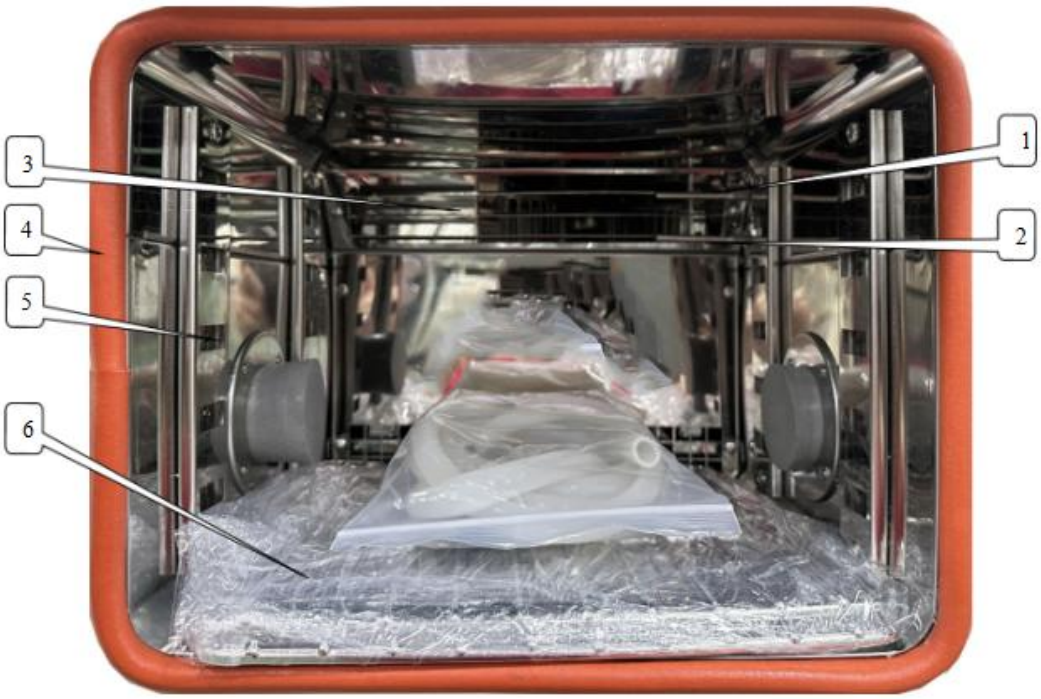


Number	Name	Illustration
1	Controller panel	The intelligent operating panel
2	Aluminum alloy support frame	Used to place the test chamber
3	Door lock	Pull on the handle to open the door
4	Test hole	An external power supply can be plugged in from the test hole for live product testing

2. Control panel

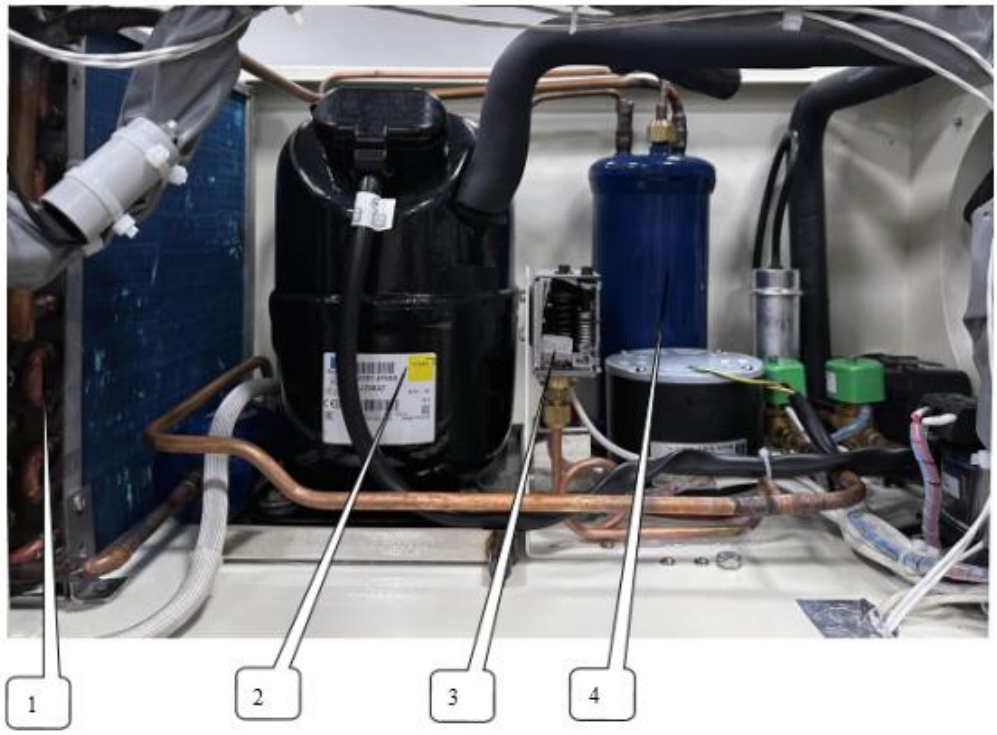
Number	Name	Illustration
1	Controller	Touch screen programmable controller

3. Test area



Number	Name	Illustration
1	Thermal resistance sensor	Used for panel overtemperature sensing the temperature of the inner chamber
2	Thermal resistance sensor	Used for the controller to sense the temperature of the inner chamber
3	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

4. The cooling machine room



Number	Name	Illustration
1	Condenser	Cooling refrigerant
2	Compressor	Compression refrigeration
3	Pressure protection controller	When the pressure in the pipeline is too high or too low, the controller will alarm
4	Oil separator	Separate refrigerant and refrigerant oil

5. Power distribution room

Number	Name	Number	Name
1	Dc power supply	5	Circuit breaker
2	Solid state relay	6	Intermediate relay
3	Ac contactor	7	Connector terminal
4	Fuse	8	Temperature controller

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Test Report:

Temperature Sensor ℃	-40℃	-20℃	0℃	40℃	85℃	120℃
1	-39.4	-19.4	0.5	40.2	85.0	119.8
2	-39.6	-19.7	0.9	40.0	84.8	119.5
3	-38.9	-20.0	1.0	39.8	85.2	199.7
4	-38.7	-20.4	1.2	40.1	85.4	200.0
5	-38.5	-20.1	1.0	40.5	85.1	200.3
6	-38.2	-19.8	0.8	40.3	85.7	200.1
7	-38.0	-19.6	0.5	40.7	86.1	200.0
8	-38.3	-19.9	0.7	41.0	85.6	119.8
9	-38.1	-20.1	0.9	40.9	85.4	199.5
Temperature deviation	2.0	0.6	1.2	1.0	1.1	0.5
Temperature uniformity	1.6	0.8	0.7	1.2	1.3	0.8