

Lab Companion

High Temperature And High Humidity Test Chamber PHP-80

Custom Solution

Brief Introduction



The humidity test can be conducted at the same time as the temperature test, so that the test effect is closer to the natural climate, simulating a worse natural climate, so that the reliability of the tested sample is higher.

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Particularities:

* High-strength, high-reliability structural design - to ensure the high reliability of the equipment;

* The inner chamber material is SUS304 stainless steel - anti-corrosion, strong hot and cold fatigue function, and long service life;

* High density polyurethane foam insulation - ensures minimal heat loss;

* Plastic-sprayed surface – to ensure the lasting anti-corrosion function and appearance life of the equipment;

* High-strength temperature-resistant silicone rubber sealing strip – ensures the high sealing performance of the equipment door;

* A variety of optional functions (test hole, recorder, water purification system, etc.) meets the user's needs for various functions and tests;

* Large-area electric heating anti-frost observation window, built-in lighting - can provide good observation effect;

* Environmentally friendly refrigerants – to ensure that the equipment is more in line with your environmental protection requirements;

* Customized constant temperature and humidity test chamber, tell us any function you want and we will make it.

* Triple protection mechanism.

* USB interface and Ethernet communication function enable the communication and software expansion function of the device to meet various needs of customers.

* Adopting internationally popular refrigeration control mode, which can automatically adjust the refrigeration power of the compressor by 0%~100%, reducing energy consumption by 30% compared with the traditional heating balance temperature control mode.

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Technical Features:

Dimensions (mm)	Width	Height	Depth
Useful	400	500	400
Overall	680	1670	1100

Temperature range

RT~150°C

Humidity range

20~98%RH

Temperature rise time:

≥3.0°C/min

Suitable temperature for using:

5~30°C

Other parameters:

Controller model:

Q8 Touch screen controller

Temperature electric heating:

1.6 KW

Humidity electric heating:

2.0 KW

Power source:

AC220V, 50/60HZ, 1 ϕ 3 wire

Rated current:

AC 17 A

Rated power:

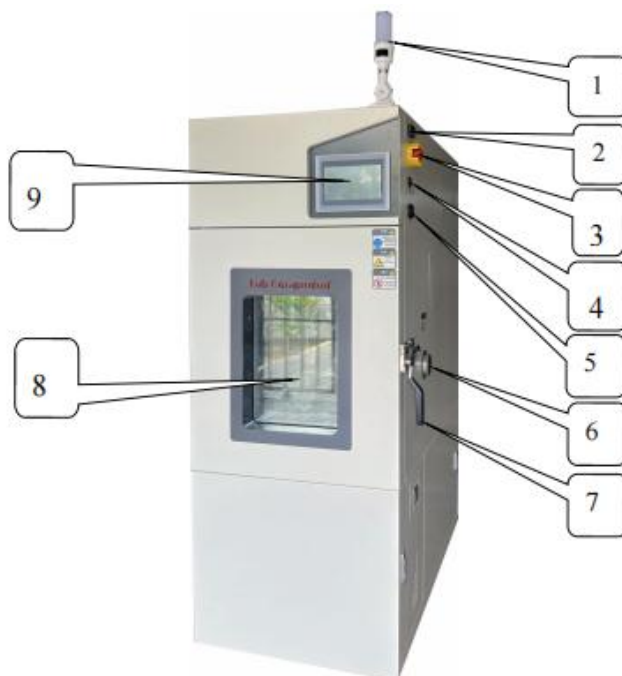
3.7KW

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.

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Appearance Introduction and Description:

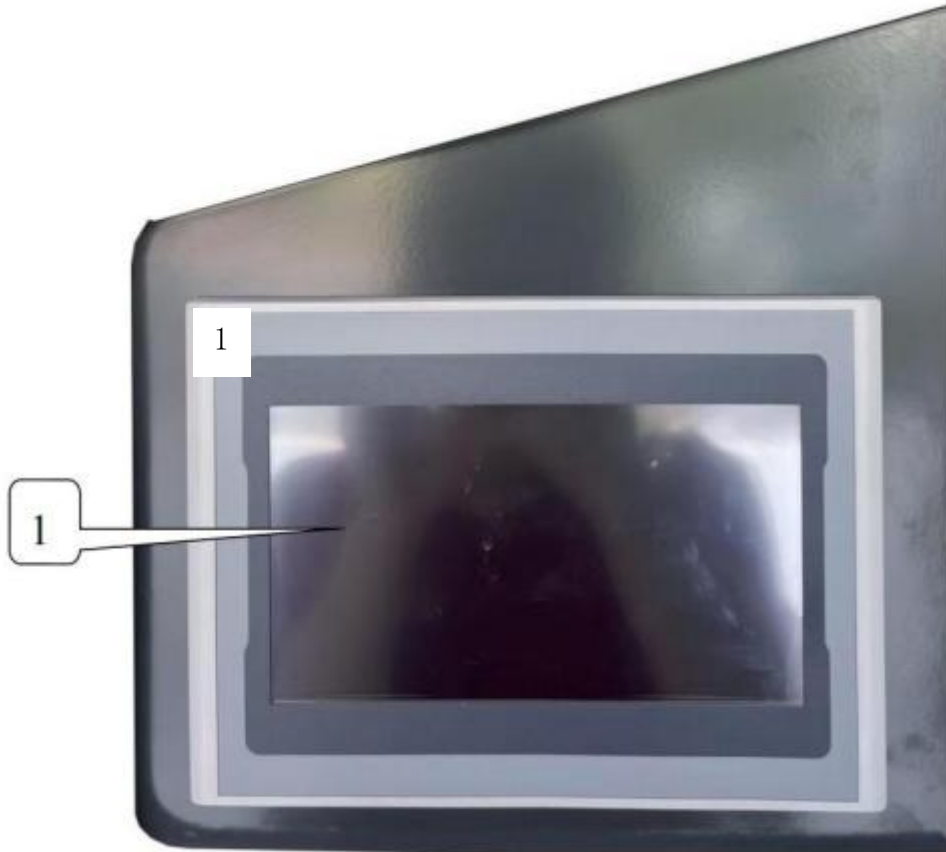
1. Front and side of the machine



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 the handle door to the right to open
8	Glass window	To observe the inner workings of the laboratory
9	Controller panel	The intelligent operating panel

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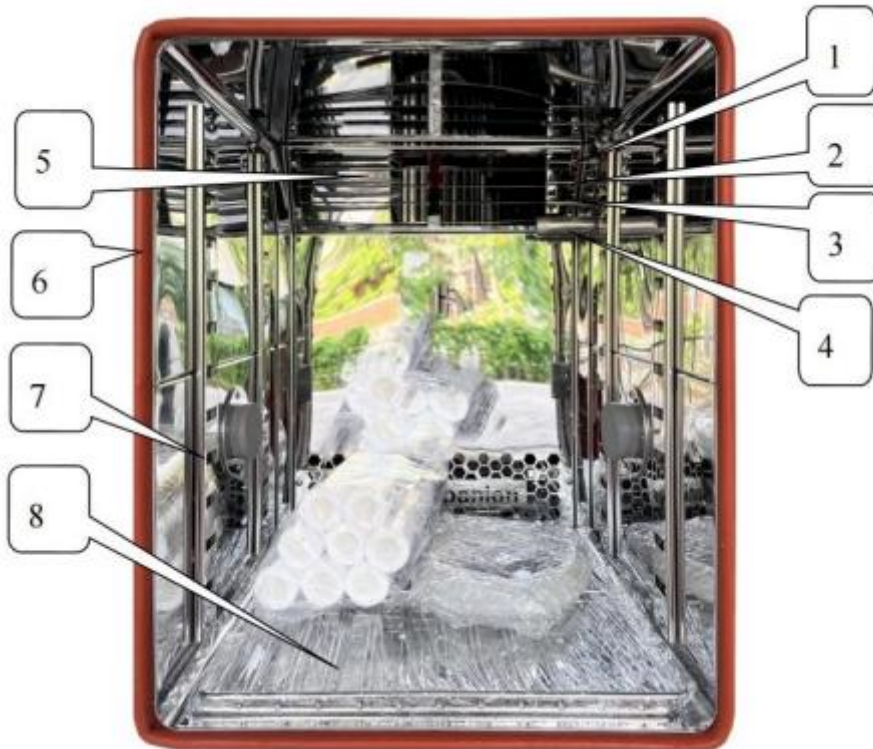
2. Control panel



Number	Name	Illustration
1	Controller	Touch screen programmable controller (Refer to controller manual)

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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	Thermal resistance sensor	Used for the controller to sense the temperature of the inner chamber
4	Water tank	When hanging a wet cloth, one end of the wet cloth should be penetrated about half of the sensor, and the other end should be completely immersed in the water tank
5	Air outlet	Test area circulates air outlet
6	Sealant	Heat preservation and air leakage prevention
7	Sample rack track	Used to secure the sample holder
8	Sample holder	Used to place test products

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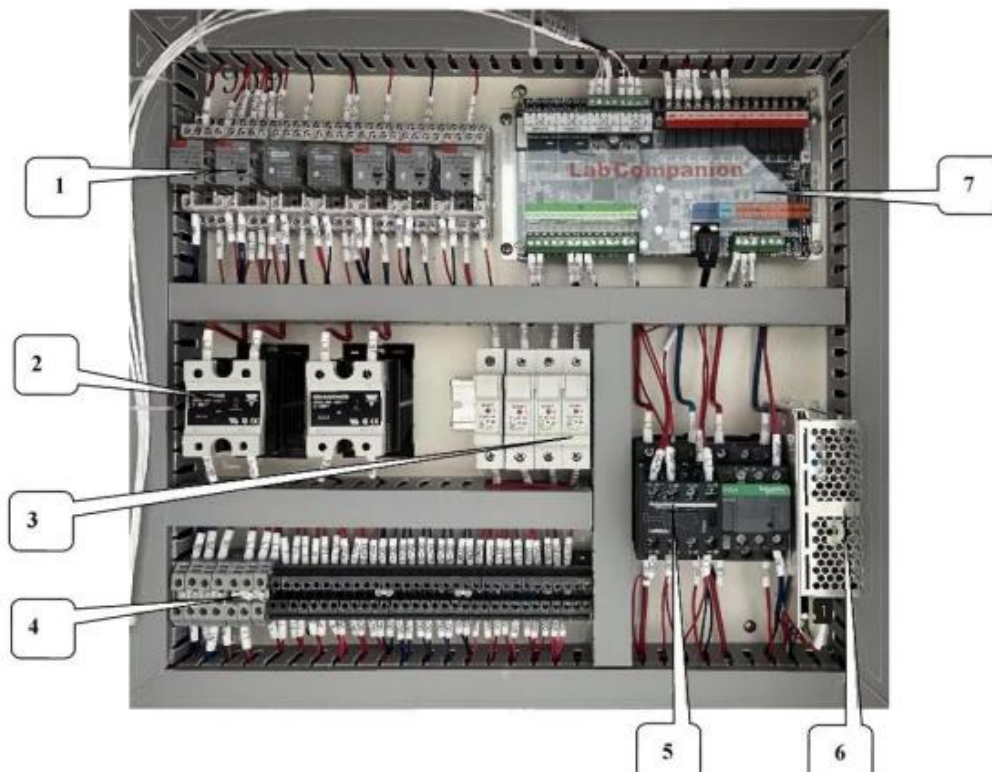
4. The cooling machine room



Number	Name	Illustration
1	Cooling fan	Balance the heat generated in the chamber while doing the high temperature and high humidity test
2	Cistern	When the humidity test is performed, water is pumped from the water tank into the inner tank. After the humidity test, water is returned to the water tank
3	Filter	The device filters impurities in the water when doing humidity test

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5. Power distribution room



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

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Test Report:

Temperature Sensor °C	85°C	125°C	150°C	25°C 30%	50°C 50%	60°C 85%
1	85.7	125.2	150.5	25.3	49.8	60.1
2	85.4	125.5	150.1	25.0	49.6	60.4
3	85.6	125.8	150.3	25.2	49.9	60.2
4	85.8	125.9	150.6	25.5	50.0	60.3
5	86.0	126.1	150.9	25.7	50.4	60.6
6	86.1	126.3	150.5	26.0	50.1	60.1
7	86.3	126.0	150.2	26.2	50.6	59.9
8	86.5	126.4	150.0	26.3	50.7	60.3
9	86.0	126.6	150.4	26.1	50.9	60.5
Temperature deviation	1.5	1.6	0.9	1.3	0.9	0.6
Humidity display				24.5%	49.6%	85.2%
Temperature uniformity	1.1	1.4	0.8	1.1	1.3	0.7