



High-Low Temperature & Humidity Cabinet

This equipment simulates the environment of high temperature, low temperature and high and low temperature cycle, and is suitable for alternating high temperature, low temperature, high humidity, low humidity, high and low temperature and humidity for electrical and electronic products, lamps and lanterns, materials and electronic components in China, as well as the serviceability and storage adaptability under the condition of temperature cycle change, and can also be used to check the corrosion resistance of samples (non-nitric oxide acid and alkali substances).

Characteristics & standards

- Used for high and low temperature, high and low temperature gradient, constant damp heat and alternating damp heat tests of industrial products and parts;
- The refrigeration circuit can realize the automatic opening and closing of the compressor and the automatic adjustment of the output power;
- In addition to dry and wet balls, humidity sensor can also be used for humidity control;
- Adopt balanced temperature/humidity control mode, which has high temperature/humidity control accuracy and fast stability;
- The temperature control instrument has convenient operation and friendly interface;
- Standard test curve USB export port and LAN communication interface.

GB/T10586-2006	GB/T10589-1989	GB/T11158-2006	GB/T2423.1-2001	GB/T2423.2-2001
GB/T2423.3-2006	GB/T2423.4-1993	GB/T2423.1-2008	GB/T2423.2-2008	GBT10592-2008
GB/T2423.1-2008	GB/T2423.2-2008	GB/T2423.3-2006	GB/T2423.4-2008	GB/T2423.9-2001
GB/Y2423.22-2002	GJB150.3	GJB150.4	GJB150.9	

Name		High-Low Temperature & Humidity Cabinet -20℃					
Type		XTH-010A	XTH-020A	XTH-030A	XTH-040A	XTH-080A	XTH-100A
Power Supply		AC220V 50Hz					
Maximum current (A)		10	13	13	13	23	23
Maximum power (KW)		3	5.6	5.6	5.6	11.2	7.2
Control mode		Balanced temperature and humidity control (BTC) mode					
Performance parameter *1	Temperature range *2	- 20℃~ + 100（150）℃					
	Humidity range	20%~98%RH					
	Temperature fluctuation	±0.5~±1℃					
	Temperature uniformity	Within ±2℃					
	Temperature deviation	≤±2℃/+2~-3%RH					
	Heating rate	2-3℃/min					
	Cooling rate	0.7℃~1.5℃/min					
Material	Sheathing material	High-quality cold-rolled steel plate spray molding					
	Liner material	SUS304 2B stainless steel plate					
	Heat insulating material	Rigid polyurethane foam (+superfine glass wool)					
Refrigeration system	Refrigeration mode *3	Single compression refrigeration (air-cooled)					
	Refrigerator	Imported fully enclosed compressor					
	Compressor capacity (HP)	1.5	1.5	1.5	1.5	3	3
	Cooler	Radiant cooler (also used as dehumidifier)					
Humidifying system	Water supply mode	Electromagnetic pump					
	Water tank capacity	20L					
Heater		Nickel-chromium wire heater					
Blower		Centrifugal blower					
Temperature sensor *4		High precision platinum resistor (PT100)					
Controller		UMC1200 programmable touch LCD controller with remote monitoring and debugging software package.					
Internal product (L)		120	225	306	408	800	1000
Internal dimension (mm)	W	400	500	600	600	1000	1000
	H	500	750	850	850	1000	1000
	D	500	600	600	800	800	1000
Outer dimension (mm)	W	960	960	1060	1060	1460	1460
	H	1740	1890	1990	1990	2160	2160
	D	800	1000	1000	1200	1240	1440
Weight (Kg)		330	350	385	395	610	660

Technical Specification

Name		High-Low Temperature & Humidity Cabinet -40℃					
Type		XTH-010B	XTH-020B	XTH-030B	XTH-040B	XTH-080B	XTH-100B
Power Supply		AC380V 3Φ 4W 50Hz					
Maximum current (A)		13	13	15	15	25	25
Maximum power (KW)		5.2	7.2	8.1	8.1	10.2	10.2
Control mode		Balanced temperature and humidity control (BTC) mode					
Performance parameter *1	Temperature range *2	- 40℃~ + 100（150）℃					
	Humidity range	20%~98%RH					
	Temperature fluctuation	≤±0.5℃					
	Temperature uniformity	≤2℃					
	Temperature deviation	≤±2℃/+2~-3%RH					
	Heating rate	- 40~+100℃≤45mins:-40~+150℃≤60mins					
	Cooling rate	+ 20~-40℃≤70mins					
Material	Sheathing material	High-quality cold-rolled steel plate spray molding					
	Liner material	SUS304 2B stainless steel plate					
	Heat insulating material	Rigid polyurethane foam (+superfine glass wool)					
Refrigeration system	Refrigeration mode *3	Single compression refrigeration (air-cooled)					
	Refrigerator	Imported fully enclosed compressor					
	Compressor capacity (HP)	1.5	3	4	4	6	6
	Cooler	Radiant cooler (also used as dehumidifier)					
Humidifying system	Water supply mode	Electromagnetic pump					
	Water tank capacity	20L					
Heater		Nickel-chromium wire heater					
Blower		Centrifugal blower					
Temperature sensor *4		High precision platinum resistor (PT100)					
Controller		UMC1200 programmable touch LCD controller with remote monitoring and debugging software package.					
Internal product (L)		120	225	306	408	800	1000
Internal dimension (mm)	W	500	500	600	600	1000	1000
	H	600	750	850	850	1000	1000
	D	400	600	600	800	800	1000
Outer dimension (mm)	W	960	960	1060	1060	1460	1460
	H	1740	1890	1990	1990	2160	2160
	D	800	1000	1000	1200	1240	1440
Weight (Kg)		335	385	415	425	650	700

Name		High-Low Temperature & Humidity Cabinet -70℃				
Type		XTH-020C	XTH-030C	XTH-040C	XTH-080C	XTH-100C
Power Supply		AC380V 3Φ 4W 50Hz				
Maximum current (A)		15	15	15	25	25
Maximum power (KW)		9.1	9.1	9.1	16.2	16.2
Control mode		Balanced temperature and humidity control (BTC) mode				
Performance parameter *1	Temperature range *2	- 70℃~ + 100 (150) °C				
	Humidity range	20%~98%RH				
	Temperature fluctuation	≤±0.5℃				
	Temperature uniformity	≤2℃				
	Temperature deviation	≤±2℃/+2, -3 %RH				
	Heating rate	- 70~+100℃≤60mins:-70~+150℃≤75mins				
	Cooling rate	+ 20~-70℃≤80mins				
Material	Sheathing material	High-quality cold-rolled steel plate spray molding				
	Liner material	SUS304 2B stainless steel plate				
	Heat insulating material	Rigid polyurethane foam (+superfine glass wool)				
Refrigeration system	Refrigeration mode *3	Single compression refrigeration (air-cooled)				
	Refrigerator	Imported fully enclosed compressor				
	Compressor capacity (HP)	3+3	3+3	3+3	6+6	6+6
	Cooler	Radiant cooler (also used as dehumidifier)				
Humidifying system	Water supply mode	Electromagnetic pump				
	Water tank capacity	20L				
Heater		Nickel-chromium wire heater				
Blower		Centrifugal blower				
Temperature sensor *4		High precision platinum resistor (PT100)				
Controller		UMC1200 programmable touch LCD controllerwith remote monitoring and debugging software package.				
Internal product (L)		225	306	408	800	1000
Internal dimension (mm)	W	500	600	600	1000	1000
	H	750	850	850	1000	1000
	D	600	600	800	800	1000
Outer dimension (mm)	W	960	1060	1060	1460	1460
	H	1890	1990	1990	2180	2180
	D	1040	1040	1240	1240	1440
Weight (Kg)		425	450	460	715	775

1. The above data were measured at ambient temperature of 23℃ and no-load condition.
2. 150℃ is an alternative model, and the standard product has a high temperature of 100℃
3. If water cooling is selected as the cooling method, please ask in advance.
4. Electrostatic capacitance humidity sensor is optional.



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