Temperature & Humidity Test Chamber

This type added humidity test function based on Temperature test chamber. The humidity test range is from 20% ~ 98% RH.

Users can set only temperature value, or set only humidity value, or both set temperature and humidity values in the controller.

The humidity system is designed by TCT itself, the water steam is controlled steadily, the accuracy of humidity sensor is high.

Using Areas

- Electrical and Electronic Factories
- Automobile Manufacturers
- Aerospace Research Institutions
- Testing Laboratories
- Universities of Technology
- Others

The advantages of TCT Temperature & Humidity test chamber

- SUS304 stainless steel water tanker with observation water level scale.
- Temperature and humidity controlling are accurate, and it can run continuously.
- It uses famous components, the performance is good, the failure rate is lower.
- RS232 communication ports realize the remote controlling with PC.
- 1 year warranty period for machine + 3 years free providing for spare parts.

Production Standards

- GB/T2423.1-2001 GB/T2423.3-1993 GB/T2423.2-2001.
- IEC60068-3-5, IEC60068-2-03, MIL-STD-810F, MIL-STD-883C, JIS-C60068
- JESD22-A101-B-2004, JESD22-A103-C-2004, JESD-A119-C-2004

Common Specifications

Internal materials	SUS304 stainless steel (1.2mm thickness)
External materials	High quality cold rolled steel sheet (1.5mm thickness)
Temperature fluctuation	±0.5℃
Temperature uniformity	±2.0℃
Heating rate	2.0~3.0℃ / min (no-load)
Cooling rate	1.0~2.0℃ / min (no-load)

Humidity Control	PID + SSR	
Humidity fluctuation	±2.0%RH	
Humidity uniformity	±2.0%RH	
Observation window	Non-condensation observation window with light	
Test hole	Stainless steel test hole, 1 set × 50mm diameter	
Test shelf	Stainless steel test shelf, 2 pieces (height-adjustable)	
Movement wheel	4 sets movement wheels (fixation function)	
Sealing material	Silicon rubber sealing ring	
Heat insulating material	PU FOAM + Glass fiber cotton	
Air supply system	Fan	Axial flow fan + centrifugal fan
	Circulation mode	Forced air circulation
Refrigeration system	Compressor	Hermetic compressor
	Refrigerant	R404A/R23
	Evaporator	Warped type evaporator
	Heat exchanger	BPHE
	Refrigerator oil	3GS/32H
	Cooling way	Air cooling way
Control system	Controller	PLC touch screen controller
	Running mode	Fix and Program running
	Program capacity	100 groups
	Section capacity	120 sections / group
	Sensor	PT100
Safety function	Over-temperature protection	
	Electric leakage protection	
	Power phase protection	
	Over-current protection	
	Fuse protection	
	Over-pressure protection for compressor	
	Over-heating protection for compressor	
	Over-current protection for compressor	
	Water shortage protection	
	Ground protection	
Using environment	Temperature	≤+30℃
	Humidity	≤85% RH
	Atmosphere	86 ~ 106 kPa
Noise	≤65 dB	
Water source standard	Purified water	
Power supply standard	120V/220V/240V/380V/415V, 50Hz/60Hz, Single or three phases	

Standard Model

Model	Working room size(W×D×H)	Temperature Range	Humidity Range
GDWS-50A	350×360×400mm (50.4 Liters)	-20 ~ +180℃	20% ~ 98% R.H
GDWS-100A	450×450×500mm (101.2 Liters)		
GDWS-225A	500×600×750mm (225 Liters)		
GDWS-350A	630×700×800mm (352.8 Liters)		
GDWS-500A	800×700×900mm (504 Liters)		
GDWS-800A	800×1000×1000mm (800 Liters)		
GDWS-1000A	1000×1000×1000mm (1000 Liters)		
GDWS-50B	350×360×400mm (50.4 Liters)	-40 ~ +180℃	20% ~ 98% R.H
GDWS-100B	450×450×500mm (101.2 Liters)		
GDWS-225B	500×600×750mm (225 Liters)		
GDWS-350B	630×700×800mm (352.8 Liters)		
GDWS-500B	800×700×900mm (504 Liters)		
GDWS-800B	800×1000×1000mm (800 Liters)		
GDWS-1000B	1000×1000×1000mm (1000 Liters)		
GDWS-50C	350×360×400mm (50.4 Liters)	-70 ~ +180℃	20% ~ 98% R.H
GDWS-100C	450×450×500mm (101.2 Liters)		
GDWS-225C	500×600×750mm (225 Liters)		
GDWS-350C	630×700×800mm (352.8 Liters)		
GDWS-500C	800×700×900mm (504 Liters)		
GDWS-800C	800×1000×1000mm (800 Liters)		
GDWS-1000C	1000×1000×1000mm (1000 Liters)		

If you have the more requirements, please contact us!