



Introduction

Benchtops is the mini temperature & humidity test chamber, they can realize all test functions the same as vertical temperature & humidity test chamber.

Benchtops can save more space in your laboratory, its appearance is compact and humanized, most users can operate it independently and successfully.

Users can choose more powerful programs controller to realize program alternation test, and realize remote control with RS232 communication port.

Using Areas

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

The advantages of TCT Benchtops

➤ It can save using space, and can be put on the table
➤ The famous controllers are from Korea or Japan, the performance is more reliable
➤ It uses famous Tecumseh compressor of France and environmental refrigerant
➤ The cooling rate can be up to 2.0°C/min based on IEC60068 standard
➤ Benchtops series passed the CE certificate, use is more safe
➤ 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 A3(1.5mm thickness)
Temperature fluctuation	±0.5°C
Temperature uniformity	±2.0°C
Heating rate	1.0~2.0°C / min (no-load)
Cooling rate	1.0~2.0°C / min (no-load)

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	Tecumseh Hermetic compressor
	Refrigerant	R404A
	Evaporator	Warped type evaporator
	Heat exchanger	BPHE
	Refrigerator oil	3GS/32H
	Cooling way	Air cooling way
Control system	Controller	PLC touch screen controller PLC Program controller (Option)
	Running mode	Fix or Program running
	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 (humidity function)	
	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
BT-27 T2	300×300×300mm (27 liters)	-20 ~ +180℃	
BT-27 T4		-40 ~ +180℃	
BT-27 T7		-70 ~ +180℃	
BT-50 T2	370×370×370mm (54 liters)	-20 ~ +180℃	
BT-50 T4		-40 ~ +180℃	
BT-50 T7		-70 ~ +180℃	
BT-74 T2	420×420×420mm (74 liters)	-20 ~ +180℃	
BT-74 T4		-40 ~ +180℃	
BT-74 T7		-70 ~ +180℃	
BT-27 L2	300×300×300mm (27 liters)	-20 ~ +180℃	20% ~ 98% R.H
BT-27 L4		-40 ~ +180℃	
BT-27 L7		-70 ~ +180℃	
BT-50 L2	370×370×370mm (54 liters)	-20 ~ +180℃	
BT-50 L4		-40 ~ +180℃	
BT-50 L7		-70 ~ +180℃	
BT-74 L2	420×420×420mm (74 liters)	-20 ~ +180℃	
BT-74 L4		-40 ~ +180℃	
BT-74 L7		-70 ~ +180℃	

If you have the more requirements, please contact us!