

## Ultra-Low Temperature Test Chamber



### Introduction

This type is used for testing specimens in Ultra-low temperature environment. We designed the low temperature as  $-85^{\circ}\text{C}$ .

The controller is 7.0 inch larger color PLC controller, it can realize remote controlling, and users can set programs and sections parameters for cycle testing.

The max high temperature is  $+180^{\circ}\text{C}$ , the heating rate can be up to  $2-3^{\circ}\text{C}/\text{min}$ .

### Using Areas

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

### The advantages of TCT Ultra-Low Temperature test chamber

- Technical is best mature, production process is modularized.
- Temperature controlling is 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)	
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
	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
	Connect Port	RS232 communication port
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
Noise	≤65 dB
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
CDW-100L	450×450×500mm (101.2 Liters)	-85℃ ~ +180℃
CDW-225L	500×600×750mm (225 Liters)	
CDW-350L	630×700×800mm (352.8 Liters)	
CDW-500L	800×700×900mm (504 Liters)	
CDW-800L	800×1000×1000mm (800 Liters)	
CDW-1000L	1000×1000×1000mm (1000 Liters)	

**If you have the more requirements, please contact us!**