

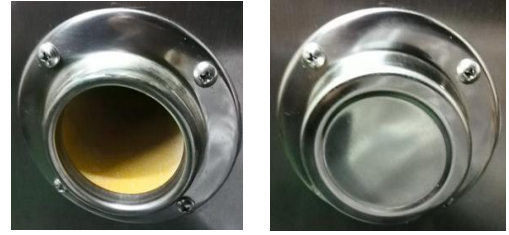


Standard Features

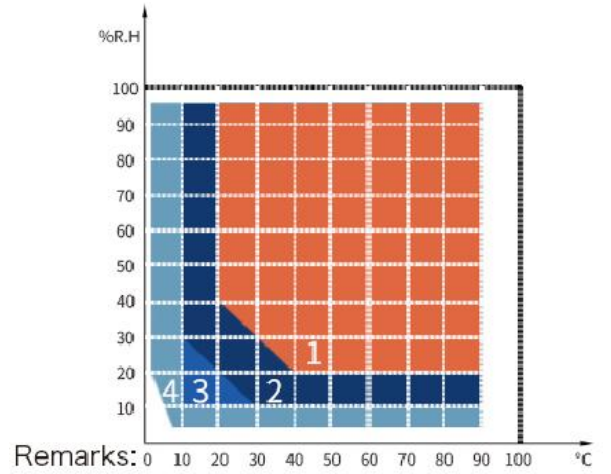
- ❖ Extremely low noise level
- ❖ Low energy consumption
- ❖ Safety to test specimens thanks to independent temperature measurement
- ❖ Easy to clean stainless steel test space
- ❖ Wide humidity range-extreme climate
- ❖ Stainless steel 304#1.2mm internally
With outernal steel with polymer coating
- ❖ Energy-efficient refrigeration with exclusive electronic expansion valve system
- ❖ Specialized humidity generation and control
- ❖ Unique thermal break construction for extreme testing
- ❖ 3" cable port,two shelf & casters included
- ❖ New USB port for uploading and down-loading programs and test data.
- ❖ 7"/10" imported "DELTA" touch screen controller
- ❖ Optional APP and WLAN port for attached with PC,remote data and programming anywhere, anytime.
- ❖ Russian & English interface



USB, RS232,WLAN and APP FUNCTION
OPTIONAL Function



Lateral porthole for energized testing



Temperature and humidity control range

Appearance Introduction for reference(80L same as 1000L)



4 Casters mounted under chamber for easy move

Technical Parameters

Interior Dimension (cm)		W50×D50×H60
Overall Dimension (cm)		W70×D135×H167
Machine weight(kg)		360
Parameter	Temp. range	-40°C~+120°C
	Humidity Range	20% ~ 98% R.H
	Humidity uniformity	±2~3%R.H
	Humidity fluctuation	±2.5RH
	Temp. fluctuation	±0.5°C
	Temp. uniformity	±2°C
	Cooling rate	0.7-1°C/min
	Heating rate	1.0-3.5°C/min
Material	Chamber body	Standard 1.5mm Electrolytic plate electrostatic spray painting
	Liner material	High-quality SUS304 stainless steel /1.2mm thickness
	Insulation materials	Hard urethane foam
Cooling model		Air cooled
Freezing Fluid		USA Honeywell environmental protection refrigerant (R23+R404)
Compressor		French Tecumseh(imported from French)
Water provide way		manual water refill is available.
Standard Configuration		Observe window with double-deck cavity toughened glass. 50mm test hole in the left side

Controller Imported from TW, DELTA brand	<ul style="list-style-type: none"> -Imported from TW DELTA 7" controller or traditional -150 program x 99segment and 100H/ segment setting capacity (each segment means specific temperature,humidity and test time)999cycles circulation setting,and enclose multiple sets of PID control function and RS232 PC connection interface control. - Available in Russian,LCD touch screen control. -Create or copy programs -Copy,edit,insert,and delete steps -Two nested loops repeat up to 999 times -Select-able end-of -test modes -Create pause steps within programs -Soak control delays timer until set point is reached <p>Additional Functions</p> <ul style="list-style-type: none"> - Alarm report details last 1000 alarms -Time signal relay control(with naming capability) -High/Low limit alarm functions -Audible alarm with on-screen help -Select-able restart modes after power failure -Auto start and stop functions -Key-lock protection and configuration lock-out -Service guide and help screens
Humidification	External isolated, stainless steel electric steam humidification mode occurs
De-humidification	Condensation method using the dew point temperature of the evaporator coil de-humidification mode laminar contacts
Security Devices	Power overload, leakage, grounding, over-temperature protection (with voice prompts), fast fuse, compressor over-voltage protection, buzzer alarm,compressor thermal protection
	Resistant to high and low temperature heat tempered glass hollow glass windows:
Power supply	AC220V±10%,50HZ

Corresponding standard

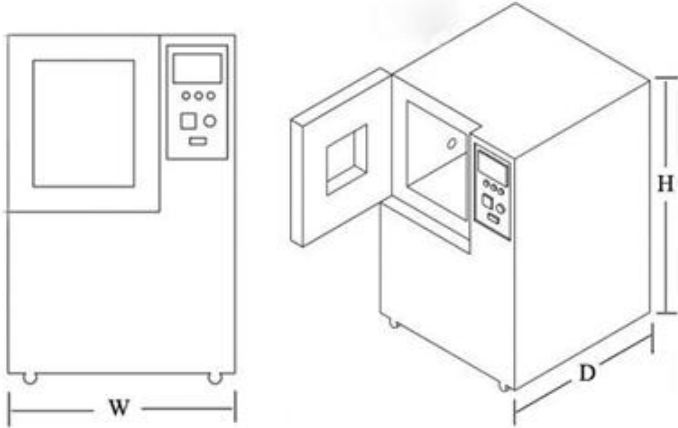
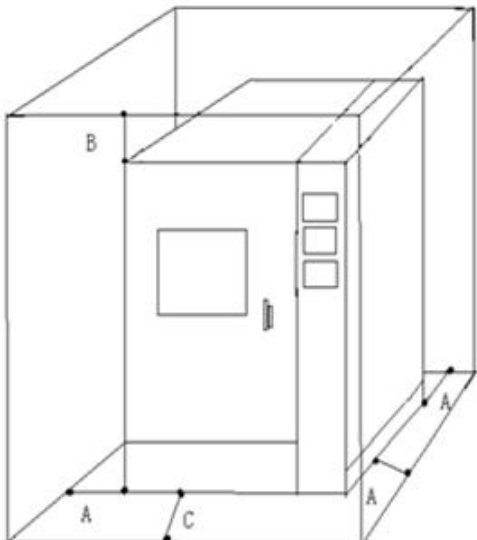
1. IEC60068-2-1.1990 Low Temperature testing method
2. IEC60068-2-2.1974 High-temperature testing methods
3. GJB150.3 High Temperature testing method
4. GJB150.4 Low temperature testing method
5. GB11158 Technical conditions for high-temperature testing box
6. GB10589-89 Technical conditions for Low temperature testing box
7. GB/T2423.1-2001 Low temperature testing methods
8. GB/T2423.2-2001 High-temperature testing methods
9. GB/T2423.22-2001 Temperature testing method
10. GB10592-89 Technical conditions for high and low temperature testing box

COMPANY FILE

1. Insulation material: Rigid polyurethane foam box+thin glass fiber
2. Heaters:Nickel-chromium alloy stainless steel pipe heater
3. Air circulation system: 60W high temperature motor,wind round stainless steel multi-wing,special air circulation system with adjustable.
4. Door:Single door>window size 400mm x 300mm x 40 mm.
5. Refrigeration system and heating system:

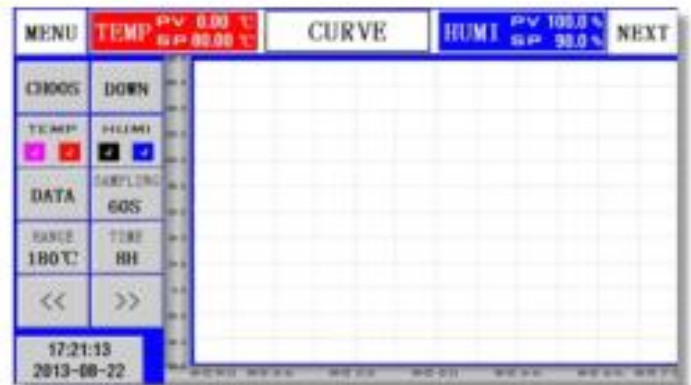
Installation environment

- > RT 0°C ~35°C,Relative humidity: $\leq 85\%$,atmospheric pressure:86kPA~106KPA.
- > Installation site should be ground flat,and ventilation.
- > Equipment without a strong vibration around.
- > No strong magnetic fields affect the surrounding equipment.
- > The equipment around the non-flammable,explosive,corrosive substances,and dust.
- > Left around the proper use of equipment and maintenance of space.

Dimension Illustration:	Installation site
 <p>The diagram shows two views of the equipment. On the left is a front view with a control panel on the right side, showing width (W). On the right is a perspective view with the door open, showing height (H) and depth (D).</p>	 <p>The diagram shows the equipment placed inside a larger rectangular enclosure. Dimension B is the height of the enclosure. Dimension C is the clearance in front of the equipment. Dimension A is the clearance on the left and right sides of the equipment.</p> <p>A, b, c more than 30cm</p>

Control system

1. Heating and cooling mode:PID constant way of cooling capacity to control SSR,larger than the cooling capacity of the heating temperature,heat flux less than the cooling capacity of the cooling.
- 2.Normal mode:Balanced temperature control system(BTC),to PID mode control SSR, so that heated system is equal to amount of heat loss.
- 3.The temperature controller:DELTA 7" programmable LCD display temperature controller,total 269 groups 1200 sections of programs,together with groups of PID control.
- 4.Dynamic real-time changes in program editing curves,machine is able to re-call with out interrupting the test curve by power failure,all these data can be set,print and store on the control software on the computer.



Brand & Origin country for core components

SN	Parts Name	Brand	Country	Photos
1	Compressor	Tecumseh	French	
2	Refrigerant R404/R23	Honeywell	USA	
3	Drying Filter	Danfoss	Danish	
4	Controller	Delta	Taiwan	
5	Over temperature protector	Autonics	Korea	
6	Air-cooled condenser	Ultra low power	High efficiency	
7	Over temperature protector	Autonics	Korea	

Standard Accessories

- Two of shelf sample holders made of stainless steel SUS304# ,load for each holder is 20kg/layer.
- Perspective vacuum glass windows,corrosion-proof type.
- Wide-angle lighting inside the viewing window using energy-saving high-efficiency fluorescent light.
- Cable port:One cable test hole on the left body
- One copy of English operation instruction.
- One testing video for reference.





Denso layout

International first-class imported brand electronic components, durable, tidy line / rigorous, each line has a unique number, easy to troubleshoot



Bending technology

High efficiency, energy saving, stable performance, reduced 1/3 of welding points, reduced failure rate, energy attenuation to the lowest noise, optimal control, low vibration



Oversized window

Large observation window with lighting, keep the box bright, clearly observe the test items and the inside of the box, the four-layer glass can not maintain the fog and can not afford water drops



Test lumen

High-end SUS#304 2B stainless steel material, inner box and test stand height adjustable, user-friendly design, long-term use does not yellow / no pitting, easy to clean



One-piece precision hinge

125*80MM widened and long precision stainless steel door hinges, long-term use guarantees that the door does not sag, durable, corrosion-resistant, no rust



Vaisala Humidity Sensor

Optional Finnish electronic humidity sensor from Finland, Vaisala sensor in Finland represents the world leader in environmental and industrial measurement



Explosion-proof pressure relief window

Optional explosion-proof pressure relief window, overall mold design, durable



Intelligent power supply

With intelligent external power control



Door lock

European style new door lock for durability

WARRANTY & SERVICE ASSURANCE

1. Warranty Coverage.

The warranty period for the machine is one year under normal use since the delivery date.

2. After-sales service

- > The free lifetime technical support will be provided.
- > Any problems or malfunction of the machine should be emailed to matteo.scalcione@metaf.com in time for the right solutions by our maintenance engineers or technicians.

3. The following situations will not covered by the warranty

- > The failure or damage caused due to abnormal operation and man-made or natural disaster.
- > The failure or damage caused due to improperly operation.
- > The failure or damage caused due to improper supply.
- > The failure or damage caused due to disassemble or modification of any part(Such as machine part,line,etc) without our consent.