



## Programmable Thermal Shock Chamber

### Product Specifications

Product model: IE31A series

## Equipment Overview:

**Programmable Thermal Shock Chamber** is used for users to conduct **corresponding climate mutation tests** on complete products (or components), electrical appliances, instruments, materials, coatings, plating, etc.

It is suitable for **high and low temperature testing** on electrical, electronic, mechanical industries and other products, components, materials, etc. .

**Humidity and heat test:** conduct hot and cold shock test under simulated temperature and humidity changes to evaluate the quality of the test product.

## Applicable standards:

- GB/T2423.1-2001Low temperature test method;
- GB/T2423.2-2001;
- GB/T2423.22-1989Temperature change test;
- National Military StandardGJB150.3-86;
- National Military StandardGJB150.4-86;
- National Military StandardGJB150.5-86;
- GJB150.5-86Temperature shock test
- GJB360.7-87Temperature shock test;
- GJB367.2-87 405Temperature shock test;
- J/T10187-91Y73 Temperature change test chamber—three-box type;
- Meets the standard IEC68-2-14\_Test method N\_Temperature change.

## Specificities:

- **Energy saving and consumption reduction:** Use gas-liquid bypass mode to adjust the cooling capacity to achieve constant temperature and humidity.
- **Easy to operate:** Programmable color LCD touch controller can be combined with PID control; experimental data recording and processing methods are flexible.
- **High reliability:** all key components are imported to ensure service life and reliability.

## Specification:

Model	IE31A80L	IE31A100L	IE31A150L	IE31A225L	IE31A408L
Temperature range	-55°C ~ +150°C				
Temperature fluctuation	±1°C				
Temperature uniformity	≅2.0°C				
Temperature recovery time	Within 5Minc				
Heating rate (heat storage area)	It takes about 40 minutes to rise from RT to +150°C		It takes about 50 minutes to rise from RT to +150°C		
Cooling rate (cold storage area)	It takes about 65 minutes to drop from RT to -55°C		It takes about 70 minutes to drop from RT to -55°C		
Inner box size: WxHxD(mm)	500x400x400	500x400x500	500x600x500	500x750x600	600x850x800
Carton size: WxHxD(mm)	1480x1450 x1950	1480x1485x2050	1500x1750x2150	1600x1900x2250	1800x2000x2500
Insulation box	<ul style="list-style-type: none"> <li>● Outer wall material: high-quality carbon steel plate, surface treated with electrostatic color spraying. The left side of the box has a diameter of φ50mm.</li> <li>● Inner wall material: SUS304# matte stainless steel plate.</li> <li>● Insulation material: rigid polyurethane foam insulation layer + glass fiber.</li> </ul>				
Chamber door	For single-door doors, install a door frame heating wire at the door frame to prevent condensation on the door frame at low temperatures.				
Observation window	Install a W 300×H 400mm observation window on the door. The multi-layer hollow electrothermal coated glass can effectively preserve heat and prevent condensation.				
sample holder	Stainless steel sample rack with 2 layers, adjustable layer height, load capacity 30kg/layer.				
Refrigeration Compressors	French Taikang fully enclosed compressor	German Bitzer semi-closed compressor	German Bitzer semi-closed compressor	German Bitzer semi-closed compressor	German Bitzer semi-dense type compressor
Refrigerant	Non-fluorine environmentally friendly refrigerant R404A R23 complies with environmental regulations, safe and non-toxic				
Condenser method	Air-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Safety protection device	Heater anti-air fire protection; heater over-current protection; circulation fan over-current and overload protection; compressor high-voltage protection; compressor over-heat protection; compressor over-current protection; over-voltage reverse phase protection; line circuit breaker; leakage protection.				
Power supply	AC380V;50Hz;18KW	AC380;V50Hz;18KW	AC380;V50Hz;22KW	AC380;V50Hz;22KW	AC380;V50Hz;25KW