LISUN GROUP

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Product Categories

- Goniophotometer
- Spectroradiometer
- Integrating Sphere
- LED Test Instruments
- CFL Testing Instruments
- Photometer and Colorimeter
- EMI and EMC Test Systems
- Electronic Ballast Tester
- Electrical Safety Tester
- Environmental Test Chamber
- Plug and Switch Testing
- AC and DC Power Supply
- Object Color and Glossiness Test
- Mask Produce and Test Machine
- Electronic Components Test

Related Technical Articles

Why can't the High and Low Temperature & Humidity Chamber be opened during it working

High and low temperature and thermal shock test

High and Low Temperature Thermal Shock Chamber
Product No: HLST-500D

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Description | Video

High and Low Temperature Thermal Shock Chamber can be used in the temperature shock test and fast-changing temperature test in a wide range such as aviation, air space, electronic components and material research.

HLST-500D has two separate chambers: high temperature chamber and low temperature chamber.
HLST-500T has three separate chambers: high temperature chamber, low temperature chamber and test chamber.

Operation Principles:
HLST-500D: The sample moves back and forth between the high temperature chamber and the low temperature chamber automatically during the measurement.
HLST-500T: The sample always stays in the test chamber during the measurement. High temperature chamber prepares high temperature air and low temperature chamber prepares low temperature air. The sample chamber will connect with high temperature chamber for high temperature test and will connect with low temperature chamber for low temperature test. Then, the air in test chamber will reach your target temperature in several minutes ("recover time").

Main Technical Parameters
• Test chamber size can be designed according to your request
• Temperature range in high temperature chamber: Ambient temperature ~ +150℃
• Temperature range in low temperature chamber: Ambient temperature ~ -70℃
• Temperature deviation: ≤±2℃
• Temperature fluctuation: ≤±0.5℃
• Temperature range in test area: -55~ +100℃
• Temperature resuming time: ≤5 mins
• Temperature Setting Accuracy: 0.1 ℃
• Refrigerating Mode: air cooling

Chamber Structure
• External Material: BAO STEEL cold-rolled electrostatic sprayed steel plate
• Test Area Material: ThyssenKrupp SUS304 stainless steel plate
• Insulation material: Superfine glass wool, at least 100mm thick
• Window: An electroplate heating vacuum frost-proof glass window on the door
• Illumination: Domestically-made illumination lights
• Door: Single-door, flat handlebars
• Door seal: Antifreeze & high temperature resistant door seal
• Test/wire hole: a φ50mm stainless steel wire hole together with a lid on the wall of test chamber
• Water Outflow: There is a water outflow hole at the bottom

Refrigerating System
• Refrigerating compressor: TECUMSEH totally-closed hermetic compressor imported from France; mechanical refrigeration
• Refrigerant: R404a and R23 refrigerant
• Refrigerating mode: Air-cooling
• Condenser: Domestically-made plate-type dipole condenser
• Other refrigerating components: expansion relief valve, electromagnetic control valve, drying filter, pressure controller, oil separator

Heating System
• Controller of the heater: SSR solid-sate relay
• Heater: Nickel-chromium alloy heating wire, and electric relay with over-heat protection

Air-circulation System
• Air circulation mode: Compulsory air circulation and Balance
• Blower: Stainless steel long-axial fan

Controlling System
• Controller: LCD-touch screen intellectual programmable temperature controller
• Imported from South Korea with PID function that automatically corrects deviation
• Controller language: English
• Display of controller: temperature deviation, system parameters, program curve, operating time, Status of the heater......
• Setting Accuracy: Temperature: 0.1 ℃ Time: 1min
• Operating mode: Automatic programmable and Manual constant
• Program volume: 1~120 programs, no more than 1200steps, each step has 99 hour 59mins, each program can be linked, Each program can cycle for 999 times
• Maximum test data and storage time: 10 years

Measuring System
• Temperature sensor: Pt100
• Other controlling components: SCHNEIDER, OMRON, DELIXI or SIEMENS AC contactor, thermal, overload relays, intermediate relay, signal and switch, breaker.