# **Lab Companion®**

### Fast temperature change test boxSE-600-10

#### Custom solutions

Rapid temperature change Test Chamber is suitable for instruments, chemistry, plastic, electronics, food, clothing, vehicles, metal, chemical, building materials, aerospace and other parts or machine, rapid temperature change or gradient adaptability test or temperature stress screening test, help to test the performance and change under the proposed conditions, for product design, improvement, identification and factory inspection.



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#### **Technical characteristics**

#### Performance:

Type: SE-600-10

Temperature range:-70  $^{\circ}$ C  $\sim$  + 150  $^{\circ}$ C

Temperature fluctuation degree:  $\pm$  0.5°C

Temperature uniformity:  $\leq 2^{\circ}\mathbb{C}$ Temperature deviation:  $\pm 2^{\circ}\mathbb{C}$ 

ingot)

Cooling rate:  $\geq 10^{\circ}$ C / min (85~ -40°C The whole average heating, load 30 KG aluminum

ingot)

Working volume: 600L

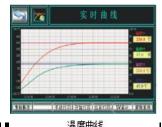
Dimensions (mm)	W	h	d
Use full	1020	860	670
Over all	1126	1920	1900

### Features of the quick-speed temperature test box:

- 1. The structure design of the Test Chamber is advanced and reasonable, and the supporting products and functional components have the international advanced level, which can meet the long-term, stable, safe and reliable production needs. It can meet the processing and production requirements of users for the above purposes, and is convenient to use, operation, maintenance, long service life, beautiful shape, have a good user interface, so that the user's operation and monitoring are more simple and intuitive.
- 2. Rapid temperature change Test Chamber is a Test Chamber that can apply temperature stress and can realize the change rapidly between the desired temperature values (such as +  $85^{\circ}40^{\circ}C$  temperature range, the lifting temperature rate is  $10^{\circ}C$  / min). It is composed of refrigeration system, heating system, control system, air circulation system, sensor system, etc.
- 3. The rapid temperature change Test Chamber has a large temperature control range, which can provide: high and low temperature rapid change test, one or more temperature change test (cycle); the rapid temperature change Test Chamber can also carry out low temperature (ultra-low temperature) and high temperature test separately.
- 4, the fast temperature change Test Chamber adopts the perfect modeling design, the appearance has excellent texture, beautiful atmosphere, strong and durable.
- 5. The control system adopts special control system for rapid temperature change test, with strong expansibility, simple operation, accurate control, stability and reliable.

refrigeration system:





显示界面

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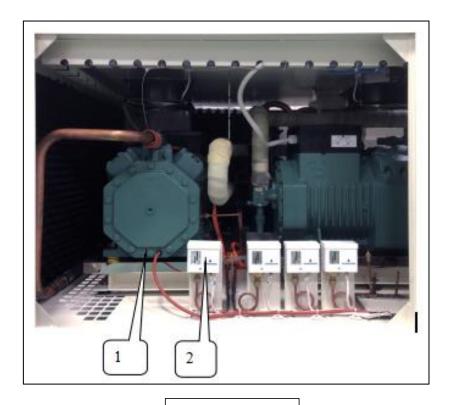
Display the interface

Temperature profile

### Refrigeration system.

The air supply mode in the Test Chamber is the upper air supply and lower cooling air cooling system cooling system and compressor: in order to ensure the cooling rate and minimum temperature requirements of the test box, this Test Chamber adopts a binary overlapping air cooling refrigeration system composed of Taikang fully closed compressor. The stacked refrigeration system includes a high-temperature refrigeration cycle and a low-temperature refrigeration cycle, the connection container is for the evaporative condenser, evaporation condenser is also to the role of energy transfer, the heat energy of the working room through the two-level refrigeration system, to achieve the purpose of temperature. The design of the refrigeration system applies the energy regulation technology. It is an effective treatment method that can ensure the normal operation of the refrigeration unit in the refrigeration system, so that the operation cost and failure rate of the refrigeration system can decrease to a more economical state.

number	name	illustrate
1	compression engine	compression refrigeration
2	Pressure protection controller	When the pressure in the pipeline is too high or too low. The equipment will call the police



Refrigerator room