

## Safety Protection Devices

- 1. Equipped with power-off protection function
- 2. Equipped with upper and lower temperature alarm setting function
- 3. Low water level protection and alarm function
- 4. Temperature runaway protection and alarm function
- 5. The heating tube has functions to prevent dry burning and explosion due to low water level.

#### Optional Features Guide

- 1. Optional external PT100 temperature sensor with extended length, which can detect and control the temperature of the external system in real-time during external circulation.
- 2. Optional built-in 1-30 segment temperature control program, which can automatically control the temperature according to the programmed segments and display the set temperature-time program running status in real-time.
- 3. Optional RS232 or RS485 communication interface, which can easily connect to the upper computer with ModbusRTU communication protocol.
- 4. Optional design and installation of a magnetic stirring system, which can directly stir the sample in the beaker placed in the constant temperature tank, without the need for an external vertical stirrer. This reduces cumbersome operations and realizes closed processing, while reducing the fog loss generated during the stirring process.
- 5. Optional built-in cooling coils in the tank body for rapid cooling and control of the exothermic reaction of the system.
- 6. Optional height-adjustable immersed sample platform, which can easily adjust the liquid level height of the immersed sample.

#### **Elegant Mute**



#### Thermostat | Product Introduction

Thermostatic Bath adopts an international advanced refrigeration system with stable and reliable performance. It has both internal and external circulation functions: the internal circulation function can directly conduct constant temperature testing or testing on test samples or products in the tank, while the external circulation function uses a high-pressure pump to circulate and maintain the temperature of the liquid medium in the tank, increasing the uniformity of the temperature in the tank and reducing temperature fluctuations. The principle is to use the outlet to draw the constant temperature medium in the tank outside through the insulation hose to establish an external constant temperature, providing a constant temperature cooling liquid for testing or production, and creating a liquid environment with uniform and constant temperature. The constant temperature cooling liquid can be circulated and reused. This instrument is widely used in research departments such as petroleum, chemical, electronic instrumentation, physics, chemistry, bioengineering, medicine and health, life sciences, light industry food, physical property testing, and chemical analysis, as well as in higher education institutions, enterprise quality inspection and production departments. It can also provide users with a controlled liquid environment of cold and heat, with uniform and constant temperature, to conduct constant temperature testing or testing on test samples or products, and can serve as a power or cold source for direct heating or cooling, and auxiliary heating or cooling.

### Thermostat | Product Features

- Unique large-screen backlit LCD display, clear and intuitive display of set temperature, actual temperature, and independent control of "heating",
   "cooling", "internal circulation" and "external circulation" functions and work status information;
- The control part adopts ABS modular design, with a streamlined overall appearance and exquisite workmanship of the chassis front panel and table top. The unique humanized R-rounded corner design structure can prevent the operator from being accidentally injured by the sharp corners of the chassis. The whole set of packaging adopts molded foam plastic, which is moldable up and down, to avoid damage during transportation;
- High-performance mixing and circulating motor with low noise, low heat generation, fully enclosed and long service life; using a non-heat-circulating pump to avoid the influence of the traditional water pump's own heat production on the tank temperature field.
- The tabletop and inner liner are made of 304 stainless steel. In addition, the refrigeration coil has added positioning and surface treatment processes, which can effectively solve the problems of shaking, corrosion, and rust during transportation or use;
- The motor impeller is fully enclosed to prevent safety hazards; multiple safety protections: heating pipe low liquid level burning protection, alarm with light and sound at the same time;
- It has power failure protection and over-temperature alarm function, providing multiple safety measures;
- The fully enclosed compressor unit is used for refrigeration, and the refrigeration system has multiple protection devices such as overheating and overcurrent;
- The instrument is specially designed with flexible removable door panels on all sides. In order to achieve better cooling effect, after long-term work, it is convenient and simple to clean the dust, without the need for any disassembly tools;
- The instrument is stable and reliable in operation, easy to operate and safe, and the instrument has temperature calibration and self-tuning functions;
- The circulation interface and drain outlet all use 304 stainless steel tower joints, which are quick and reliable to install. The drain valve is designed to be hidden and internal, which is beautiful and elegant and can effectively avoid unnecessary damage during shipment or transportation;
- ◆ The instrument is equipped with two-section circulating silicone tubes + insulation sleeve as standard, for customers' flexible use;

55 I LAWSON LAWSON I 56



#### **Technical Parameters**

Model	Temperature Range (°C)	Numerical Display Resolution (°C)	Internal Tank Capacity Length*Width* Height (mm)	Circulation Pump Flow (L/min)	Working Tank Opening (mm)	Total Capacity (L)	Net Weight (kg)	Dimensions Depth*Width* Height (mm)
DC-0506N	-5~100	0.1/0.01	270 · 200 · 130	10	180 · 140	6	29	440 · 300 · 750
DC-1006N	-10~100	0.1/0.01	270 · 200 · 130	10	180 · 140	6	29	440 · 300 · 750
DC-2006N	-20~100	0.1/0.01	270 · 200 · 130	10	180 · 140	6	29	440 · 300 · 750
DC-3006N	-30~100	0.1/0.01	270 · 200 · 130	10	180 · 140	6	37	515 · 435 · 820
DC-4006N	-40~100	0.1/0.01	270 · 200 · 130	10	180 · 140	6	38	515 · 435 · 820
DC-0510N	-5~100	0.1/0.01	270 · 200 · 130	10	180 · 140	10	30	440 · 300 · 750
DC-1010N	-10~100	0.1/0.01	270 · 200 · 130	10	180 · 140	10	30	440 · 300 · 750
DC-2010N	-20~100	0.1/0.01	270 · 200 · 130	10	180 · 140	10	30	440 · 300 · 750
DC-3010N	-30~100	0.1/0.01	270 · 200 · 130	10	180 · 140	10	39	515 · 435 · 820
DC-4010N	-40~100	0.1/0.01	270 · 200 · 130	10	180 · 140	10	40	515 · 435 · 820

57 I LAWSON

# **Technical Parameters**

Model	Temperature Range (°C)	Numerical Display Resolution (°C)	Internal Tank Capacity Length*Width* Height (mm)	Circulation Pump Flow (L/min)	Working Tank Opening (mm)	Total Capacity (L)	Net Weight (kg)	Dimensions Depth*Width* Height (mm)
DC-0515N	-5~100	0.1/0.01	300 · 250 · 210	10	235 · 160	15	35	520 · 380 · 830
DC-1015N	-10~100	0.1/0.01	300 · 250 · 210	10	235 · 160	15	35	520 · 380 · 830
DC-2015N	-20~100	0.1/0.01	300 · 250 · 210	10	235 · 160	15	35	520 · 380 · 830
DC-3015N	-30~100	0.1/0.01	300 · 250 · 210	10	235 · 160	15	40	500 · 400 · 1000
DC-4015N	-40~100	0.1/0.01	300 · 250 · 210	10	235 · 160	15	40	500 · 400 · 1000
DC-0520N	-5~100	0.1/0.01	300 · 250 · 270	10	235 · 160	20	37	520 · 380 · 830
DC-1020N	-10~100	0.1/0.01	300 · 250 · 270	10	235 · 160	20	37	520 · 380 · 830
DC-2020N	-20~100	0.1/0.01	300 · 250 · 270	10	235 · 160	20	37	520 · 380 · 830
DC-3020N	-30~100	0.1/0.01	300 · 250 · 270	10	235 · 160	20	47	500 · 400 · 1000
DC-0530N	-5~100	0.1/0.01	400 · 325 · 230	10	310 · 280	30	47	618 · 540 · 1090
DC-1030N	-10~100	0.1/0.01	400 · 325 · 230	10	310 · 280	30	47	618 · 540 · 1090
DC-2030N	-20~100	0.1/0.01	400 · 325 · 230	10	310 · 280	30	47	618 · 540 · 1090
DC-3030N	-30~100	0.1/0.01	400 · 325 · 230	10	310 · 280	30	47	618 · 540 · 1090

LAWSON I 58