BIOSPECTRIX

ADVANCED LABORATORY SOLUTIONS

BS RTC-B

HEATING MAGNETIC STIRRER

Precise heating and powerful magnetic stirring
for accurate and reliable laboratory results.



RT – 300°C	100 – 1500 RPM	10 L	SAFE & STABLE
Heating Range	Speed Range	Stirring Capacity	Reliable Performance Long Service Life

RTC-B Heating Magnetic Stirrer

- Brushless DC motor – maintenance-free;
- Digital temperature control, max temperature up to 350°C;
- Max speed up to 2500 rpm;• Max stirring capacity (H_2O) up to 20 L;
- Overheat reminder – When heating is stopped, if the plate temperature exceeds 50°C, the overhead warning will trigger (even if the unit is powered off but remains plugged in) to prevent burns and protect operator safety;
- Adjustable safety circuit – When the plate temperature exceeds the set value, heating will stop immediately, protecting sensitive samples during experiments;
- Sensor disconnection detection – When using an external temperature sensor, the system effectively prevents abnormal temperature rise caused by accidental sensor detachment, ensuring experimental safety;
- Multiple stirring modes – Forward/reverse rotation with one-touch selection. Alternating forward/reverse mode ensures more uniform mixing;
- Heating modes – Rapid heating mode for quick temperature ramp-up; precise constant temperature mode for more accurate temperature stability;
- Timer function – frees up operator time;
- Wide timing range – accurate timing from 1 second to 99 hours 59 minutes 59 seconds;
- Glass control panel – high-transparency display window with excellent corrosion resistance, easy to clean;
- High-definition 4.5-inch LCD display simultaneously shows actual temperature and speed, with time display according to settings;
- Touch + encoder knob combination control – simple, convenient, and quick response to setting changes;
- One-touch screen lock – quickly locks set parameters to prevent accidental operation.
- External PT100 temperature sensor optional – precisely controls sample temperature with accuracy up to ±0.2°C;
- Stainless steel / high-thermal-conductivity aluminum plate with ceramic coating – excellent chemical resistance and high thermal conductivity;
- Remote control function – connect to a PC for data transmission (optional);
- Eco-friendly aluminum housing – reduces environmental impact;
- Compatible with a wide range of accessories.

Model		BSRTC-B
Temperature	Setting range	Ambient +5°C to 350°C (plate surface temperature)
	Setting method / Accuracy	Encoder knob operation for fast and precise setting; accuracy 0.1°C
	Display	4.5-inch LCD display (0°C–400°C)
	Temperature control accuracy	Without external sensor: ±1°C;
		With external sensor: ±0.2°C
	Control method	Fuzzy P.I.D. control (heating surface or external temperature sensor)
	Control modes	Rapid heating / Precise constant temperature – easy selection
Stirring	Stirring capacity	20L / H_2O
	Setting range	0-50 ~ 2500rpm
	Setting method / Resolution	Encoder knob operation for fast and precise setting; resolution 1 rpm
	Display	4.5-inch LCD digital display (0–2500 rpm)
	Control method	Feedback control ensures stable speed even when viscosity changes
	Stirring modes	Forward / Reverse / Alternating forward & reverse
Time	Setting range	1 second to 99 hours 59 minutes 59 seconds
	Setting method / Minimum time	Touch setting + encoder knob for fast and precise setting; minimum 1 second
	Display	4.5-inch LCD digital display (99h:59m:59s)
	Time modes	Timer – easy selection
Safety	Power-on self-test	
	Adjustable over-temperature protection	
	External sensor disconnection detection	
	Hot surface burn prevention warning	
Specifications	Heating power	550W
	Motor power	DC brushless motor, output 30W
	Heating plate diameter	Φ135 mm
	Heating plate material	Stainless steel / Aluminum alloy with ceramic coating
	Weight	2.3 kg
	Overall dimensions (L×W×H)	270 × 160 × 75 mm
	Power supply	2.87A、600VA· AC220V 50/60Hz (customization available)

Standard Accessories

Description	Specifications	Qty
External temperature sensor	Φ3mm, insertion depth 210mm	1 pc
SUS304 support rod	Φ10mm, length 300mm	1 pc
Sensor fixing clamp	360° adjustable, max extension 55mm	1 pc
Power cord	Copper 0.75mm², length 1.5m	1 pc
Magnetic stirring bar	Φ8mm × L30mm	1 pc

2022-11-10 V1.3