

Low Constant Temperature Water Bath

BBL101-115V BBL101-220V / BBL301-115V BBL301-220V

Temperature control range

-10~+80°C

Temp. distribution accuracy

±0.3°C

Internal capacity

8L BBL101 13L BBL301

Benchtop water bath with wide operating temperature range and sufficient bath capacity.



8L

BBL101-115V
BBL101-220V

13L

BBL301-115V
BBL301-220V

Benchtop constant low temperature water bath, with capacity 8L/13L and operating temperature range -10~80°C

- Precision control with temperature adjustment accuracy of ±0.1°C
- More applications available with larger tank space
- Internal / External Circulation can be changed easily
- Shelf height is 2 stage adjustable for different flask sizes
- Standard equipped with auto stop, auto start, RS485 communication function, temperature output terminal (4~20mA)
- Enhanced safety features includes self diagnostic function, over-current circuit breaker, refrigerator overload relay, empty boiling prevention float switch, refrigerator protection delay timer function

Specifications

| Model | BBL101-115V BBL101-220V | BBL301-115V BBL301-220V |
|--|---|---|
| System | Pump circulation cooling / external circulation system | |
| Temperature control range *1 | -10~+80°C (at room temperature 20°C) | |
| Temperature adjustment accuracy *1 | ±0.1°C | |
| Temperature distribution accuracy *1 | ±0.3°C | |
| Cooling capacity *1 | ~370W (320Kcal/h) (at liquid temp. 15°C) | ~410W (350Kcal/h) (at liquid temp. 15°C) |
| Ambient temperature *1 | 5~30°C | |
| Temperature control | PID control | |
| Operation function | Fix temperature, Auto stop, Auto start | |
| Temperature sensor | Double sensor: Pt100Ω (for temp. control) and K-thermocouple (for overheat prevention device) | |
| Refrigerator / coolant | 160W Air-cooled fully closed compressor R134A | 300W Air-cooling sealed rotary R404A |
| Circulation method | Magnet pump circulation | |
| Circulation system capacity (50/60 Hz) | Maximum flow rate (pump capacity): 3.7/4.7L/min. (11.0/12.0L/min.) Maximum pump head (pump capacity): 1.0/1.5m (1.5/2.1m) | |
| Heater | 700W | 900W |
| Safety device | Earth leakage breaker, refrigerator overload relay protecting circuit, refrigerator pressure detection, empty boiling prevention float switch, delay timer for refrigerator protection, overheating prevention device, power failure protection function, key lock function | |
| Other function | Drain port, condenser filter, RS485 communication function, temperature output terminal, refrigerator pressure switch indicator, calibration offset | |
| Bath dimensions *2 | W300 x D150 x H177.5 (Effective dimensions 238 x 100 x 85mm) | W300 x D240 x H177.5 (Effective dimensions 238 x 190 x 85mm) |
| Internal (effective) capacity | 8 (6.95) L | 13 (11.5) L |
| External dimensions *2 | W500 x D530 x H500mm (water bath height 330mm) | W502 x D603 x H500mm (water bath height 330mm) |
| Power source (50/60Hz) | AC115V 8A AC220V 4A | AC115V 11A AC220V 6A |
| Weight | ~50kg | ~55kg |
| Accessories | Bottom shelf 1 pc., lid, drain hose 0.5m 1pc., over flow hose 0.5m 1pc. | |

*1. Performance data tested at RT20°C, no load, rated power 50Hz, performance might vary in different conditions

*2. Projections not included

Note: Refrigerator turns OFF when setting temperature higher than 40.1°C.

Max. quantity of erlenmeyer flask

| Model | 300mL | 500mL | 1000mL |
|--------|--------|--------|--------|
| BBL101 | 3 pcs. | 2 pcs. | -- |
| BBL301 | 5 pcs. | 3 pcs. | 2 pcs. |

Optional items

| Product name | Description | Product code |
|--------------------------------|-------------------------|--------------|
| External communication adapter | RS485-RS232C conversion | 281387 |
| Shelf for BBL101 | Shelf support 4pcs. | 221586 |
| Shelf for BBL301 | Shelf support 4pcs. | 221587 |

Control Panel



Monitoring indicator for pump and refrigerator

Side View

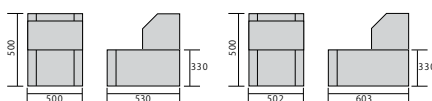


Equipped with water switch valve for easy switch ON/OFF the external circulation. Nozzle diameter 10.5mm.

Example of Application



Dimensions (mm)



BBL101

BBL301