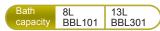
Water Bath (Low Constant Temp.)

±0.3°C

BBL101/301

Operating temp. range -10~+80°C



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

Operation and functions

- Precise temperature control accuracy of ±0.1°C.
- Can easily operate the water valve to switch internal and external circulations.

Temp. distribution accuracy

- Adjustable shelf plate height up to 2 sections.
- Fixed temperature, auto stop and auto start operation functions with auxiliary functions such as RS485 communication function and temp. output terminal (4~20mA).



BBL101

BBL301

Specifications

Product code	221379	221591			
Model	BBL101	BBL301			
System	Pump circulation cooling / External closed circulation				
Operating temp. range*1	-10 to +80°C (at room temperature 20°C)				
Temp. control accuracy*1	±0.1°C				
Temp. distribution accuracy*1	±0.3°C				
Cooling capacity*1	Approx. 370W (320Kcal/h), at fluid temp.15°C Approx. 410W (350Kcal/h), at fluid				
Usable ambient temp.range	5 to +30°C				
Temperature control	PID control				
Operation function	Fixed temp., auto stop , auto start				
Temperature sensor	Double sensor: Pt100Ω (Temp. controller) + K Thermocouple (Overheat prevention device)				
Refrigerator / Refrigerant	160W, air-cooled sealed rotary / R134a	300W, Air cooled closed reciprocator / R404A			
Strring method	Magnetic drive pump				
Circulation capacity	Max. flow (pump capacity): 3.7 / 4.7L/min (11 / 12L/min)				
(50/60 Hz)	Max. lift (pump capacity): 1 / 1.5m (1.5 / 2.1m)				
Heater	700W	900W			
Safety device	Over-current leakage breaker, Refrigerator overload relay, Refrigerator pressure detection, Float switch to prevent empty boiling, Delay timer function to protect the refrigerator, Automatic overheat prevention function, Overheat prevention device, Power failure compensation function, Key lock function				
Other functions	Drain cock, Condenser filter, RS485 communication function, Temperature output terminal, Refrigerator pressure switch indicator, Calibration offset function				
Bath dimensions*2	W300×D150×H177.5mm (effective : W238×D100×H85mm)	W300×D240×H177.5mm (effective : W238×D190×H85mm)			
Bath capacity (effective)	8L (6.75L)	13L (11.5L)			
External dimensions*2	W500×D530×H500mm	W500×D603×H500mm			
Power source (50/60Hz)	AC220V 5A Single phase with step-down transformer	AC220V 6A Single phase with step-down transformer			
Weight	Approx. 50kg	Approx. 55kg			
Accessories	Bottom shelf plate (1 pc.), 0.5m Drain hose (1 pc.), 0.5m Overflow hose (1 pc.) Lid (1 pc.)				

*1 Performance data is based on room temperature of 20°C with no load and rated power supply voltage of 50Hz. The performance will vary depending on the ambient temperature and operating conditions. *2 Protruding parts are not included in the bath dimensions and external dimensions.

The length of the power cord is about 2m outside the unit.

(Note) The freezer is turned off when the temperature setting is 40.1°C or higher, so it cannot be cooled.

Optional items

Description	Specifications	Product code
External communication adapter	RS485-RS232C conversion	281387
Shelf for BBL101	With 4 shelf supports	221586
Shelf for BBL301	With 4 shelf supports	221587

Control Panel



Side View



A water stop valve is installed on the discharge side, so external circulation can be changed with one touch. nozzle diameter : 10.5mm. Drain cock • Overflow drain port

Sample Application



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

Dimensions (mm)

