

Heating Bath Circulator

Suitable for precise temperature testing above ambient temperature

CW3-05P

with PPS (poly phenylene sulfide)
Bath Cover (standard)



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Bath Cover (standard)



Program Type Features

- 10 Programs & 10 steps program control
- Set time up to 99 hours and 59 minutes per step.
- Intuitive operation with color touch display.
- Digital Input / Output function makes it easy to connect external equipment.

Structural Functional Features

- Minimizes evaporation of internal solution at high temperatures and low-heat conductivity bath cover is provided as standard.
- Minimized usage space with compact design.
- Excellent durability even at high temperatures and repeated use.
- Internal circulation and internal/external circulation of solution.
- Easy to move and manage with the body handle.
- Stainless steel material inside and at the top of the bath is excellent in terms of corrosion resistance and clean maintenance.
- Drain valve for easy draining of bath solution.
- Includes rubber feet for stable product operation.
- 5-steps pump speed adjustment with simple operation.

Outstanding Safety

- Top-rated overheating protection system. (Registration KR 10-0397583)
- Over temperature limiting function.
- Prevention of mal-operation with controller lock function.
- Check and alert of temperature sensor abnormality.
- If an error occurs during operation, the details of the error are displayed on the screen and an alarm is sounded.
- Safe structure in which the heater, sensor, and pump inside the bath are separated by covering plates.

General Type Features

- Alert function when deviation from control temperature upper limit and lower limit occurs.
- Easy and convenient to use with simple operation.
- Clear VFD panel for clear information display.
- Convenient drain valve structure on the front panel.
- Built-in USB connection and dedicated software.

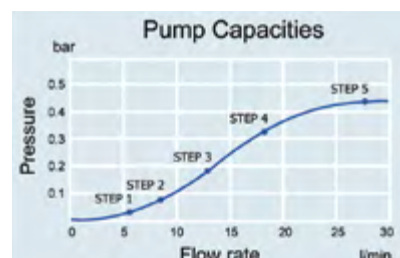
Use Convenience Features

- Temperature calibration of up to 3 points provides more reliable temperature control.
- Optimized control with auto-tuning.
- Save and use 3 frequently used temperatures. (CW3)
- Wait On/Off timer. (up to 999 hours 59 minutes)
- Microprocessor PID method for precise temperature control.
- Convenient remote control and data management through built-in dedicated software.
- Notification of low solution. (low level limiter)
- Automatic restart of operation when power is restored after power failure.
- Monitor via mobile app anytime, anywhere with LC Connected. (mobile monitoring system) (when purchased LC GreenBox)

Pump Capacity

Pump Step	1	2	3	4	5
Max. pressure (psi)	0.5	1.1	2.4	4.9	5.9
Max. flow rate (L/min)	5.6	8.0	12.8	18.8	28.0

※ Bath fluid : Water





Specification

Model		CW3-05P	CW3-10P	CW3-20P	CW3-30P
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (°C / °F)	Amb. +10 to 150 / Amb. +18 to 302	Amb. +10 to 150 / Amb. +18 to 302	Amb. +10 to 150 / Amb. +18 to 302	Amb. +10 to 150 / Amb. +18 to 302
	Temp. stability ¹⁾ (±°C / °F)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
	Heat up time to 70°C / 158 °F (min)	24	31	43	55
Dimension	Bath opening / depth (W x D x H, mm / inch)	150 x 99 x 160 / 5.9 x 3.9 x 6.3	211 x 154 x 180 / 8.3 x 6.1 x 7.1	290 x 214 x 200 / 11.4 x 8.4 x 7.9	300 x 264 x 230 / 11.8 x 10.4 x 9.1
	Exterior (W x D x H, mm / inch)	228 x 395 x 424 / 9.0 x 15.6 x 16.7	289 x 450 x 444 / 11.4 x 17.7 x 17.5	368 x 510 x 464 / 14.5 x 20.1 x 18.3	378 x 560 x 494 / 14.9 x 22 x 19.4
	Net weight (kg / lbs)	12.5 / 27.6	15.0 / 33.1	17.5 / 38.6	19.5 / 43
Electrical requirements (230V, 50/60Hz, A)		8.5	8.5	8.5	8.5
Cat. No.		AAH52741K	AAH52751K	AAH52761K	AAH52771K
Electrical requirements (120V, 60Hz, A)		8.6	8.6	8.6	8.6
Cat. No.		AAH52742U	AAH52752U	AAH52762U	AAH52772U

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Electrical requirements (230V, 50/60Hz, A)		8.5	8.5	8.5	8.5
Cat. No.		AAH52341K	AAH52351K	AAH52361K	AAH52371K
Electrical requirements (120V, 60Hz, A)		8.6	8.6	8.6	8.6
Cat. No.		AAH52342U	AAH52352U	AAH52362U	AAH52372U

※ The lowest temperature that can be controlled depends on changes in ambient temperature and sample temperature. Therefore, please contact the distributor of our products before purchasing for technical consultation.

※ Technical data (according to DIN 12876)

※ In case using silicon oil, you need to exchange other material tube (inlet and out late part), such as copper tube, a teflon tube instead of a silicon tube in fitting.

1) Bath fluid : Water at 50°C / 122°F

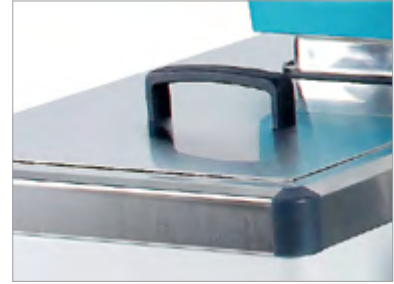
Accessories Page 28 Spring Wire Rack, Test Tube Rack, Silicone Tube, Tubing Insulation, Clamp, Cover, LC GreenBox

Accessories

Stainless Steel Cover

Sturdy, corrosion-resistant, stainless steel material.

Cat. No.	Model
AAA51531	RW3-0525(P), RW3-0535(P), CW3-05(P)
AAA51532	RW3-1025(P), RW3-1035(P), CW3-10(P)
AAA51533	RW3-2025(P), RW3-2035(P), CW3-20(P)
AAA51534	RW3-3025(P), RW3-3035(P), CW3-30(P)



Spring Wire Rack

It has a lattice-shaped double spring structure, which makes it easy to fix various kinds of experiment containers and the height can also be easily adjusted.

Cat. No.	Model
AAA51522	RW3-2025(P), 2035(P)
AAA51523	RW3-3025(P), 3035(P)
AAA51522	CW3-20(P)
AAA51523	CW3-30(P)



Test Tube Rack

Test tubes can be easily fixed in the bath and various models are available according to test tube size. Structure allows for easy adjustment of the degree of tilt and lock.

Cat. No.	Description (mm / inch)	Max. Quantity of Racks
AAA44581	ø8 / 0.3 x 86 tubes	CW3-20(P): 2ea CW3-30(P): 2ea RW3-2025(P): 2ea RW3-2035(P): 2ea RW3-3025(P): 2ea RW3-3035(P): 2ea
AAA44582	ø10 / 0.4 x 86 tubes	
AAA44583	ø12 / 0.5 x 58 tubes	
AAA44585	ø16 / 0.6 x 32 tubes	
AAA44586	ø25 / 1.0 x 19 tubes	
AAA41531	ø8 / 0.3 x 50 tubes	
AAA41532	ø10 / 0.4 x 50 tubes	
AAA41533	ø12 / 0.5 x 33 tubes	
AAA41535	ø16 / 0.6 x 16 tubes	
AAA41539	ø25 / 1.0 x 10 tubes	



Silicone Tube

The operating temperature range is -50 ~ 250°C / -58 ~ 482°F.

Inner diameter of 10 mm,
Outside diameter of 16 mm.

Cat. No.	Length (m / inch)
00FAA0001110	10 / 393.7



Tubing Insulation

EPDM material insulation prevents heat loss when using external circulation.

Cat. No.	Description
00FEA0001453	I.D. 25 mm (13T)



Tube Clamp

Attachment that stably holds the tube connection.

Cat. No.	Description
00HXE0001099	3/4"
00HXE0001100	5/8"



LC GreenBox

Real-time monitoring and control of device operation via mobile app. Up to 4 devices can be connected at once.

Cat. No.	Dimension (W x D x H, mm / inch)
AAHQ1011K	156 x 94 x 34 / 6.1 x 3.7 x 1.3



Bath Circulator

vs.

Chiller



	Bath Circulator (ex. RW3-3035)	Chiller (Recirculating Cooler) (ex. HX-25H)
Application	Preserves precise temperature of external devices where heat removal capacity is not required largely.	Maintains temperature by stably removing large heat generated from external devices.
Cooling Capacity	Heat removal capacity is small. 880W at 20°C / 68°F.	Heat removal capacity is large. 2,800W at 20°C / 68°F.
Temperature Range	Temperature range is wide. -35 to 150°C / -31 to 302°F.	Temperature range is narrow. 3 to 40°C / 37 to 104°F.
Pump Pressure	Circulation pressure is weak. Max. 0.4 bar.	Circulation pressure is strong. Max. 6 bar.

Lab Companion's Chiller Information

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Chiller for Rotary Evaporator

- Chiller optimized for rotary evaporator.
- Easy to install and use with compact design.
- Pump In/Out port is located at the upper part, so it is convenient to connect with evaporator.
- Convenient bath fluid injection on the top.
- LCD screen for easy checking of operation status.
- Includes low-level solution alert notification.

Model	RC-05
Temp. Range (°C / °F)	-10 ~ 30 / 14 ~ 86
Temp. Stability (±°C / °F)	1.0 / 1.8 at 15 °C
Cooling Capacity	580W at 20°C / 68°F
230V, 50/60Hz, A	4
Cat. No.	ACH651012K



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Rotary Evaporator