SPHERA GROUP

Bath Circulator

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General Application

Internal/external temperature control: Spectrophotometer, refractometer, polarimeter, viscometer, fermenter, electrophoresis equipment, column chromatography, rotary evaporator etc.

	Description		Temp. Range (℃/°F)	Max. Temp. Stability (℃/°F)	Volume (L / cu ft)	Model	Page
Refrigerated & Heating	Program	• 10 Programs & 10 Steps • Intuitive operation with color touch display	-25 ~ 150 /-13 ~ 302 (RW3-25P) -35 ~ 150 /-31 ~ 302 (RW3-35P)	±0.05 / 0.09 at -10 °C	5, 10, 20, 30 / 0.2, 0.4, 0.7, 1.1	RW3-P	22
	General	• Clear VFD & simple operation • Applies smart refrigeration system	-25 ~ 150 /-13 ~ 302 (RW3-25) -35 ~ 150 /-31 ~ 302 (RW3-35)	±0.05 / 0.09 at -10°C	5, 10, 20, 30 / 0.2, 0.4, 0.7, 1.1	RW3	24
Heating	Program	• 10 Programs & 10 Steps • Intuitive operation with Color Touch display	Amb. +10 ~ 150 / Amb. +18 ~ 302	±0.05 / 0.09 at 50°C	5, 10, 20, 30 / 0.2, 0.4, 0.7, 1.1	CW3-P	26
	General	• Clear VFD & simple operation • Detection and notification of temperature deviation	Amb. +10 ~ 150 / Amb. +18 ~ 302	±0.05 / 0.09 at 50°C	5, 10, 20, 30 /0.2, 0.4, 0.7, 1.1	CW3	26

※ The contents of the above and the contents of this catalog may differ depending on the specific model and conditions of use. For the information about the features and specifications that applying to each models, please check the information on the corresponding page of each models.

CE — Satisfaction with the requirements of European regulations and guidelines.

LC Connected — Real-time equipment monitoring and control system using mobile app.

Safety Patented — Registered safety patent based on JEIO TECH's proprietary technology.

Green CFC-Free — Eco-friendly product that has passed environmental impact assessment tests.

Digital IN/OUT — Digital Input / Output for external device interlock control.

Touch Display — Intuitive operation with Color Touch display.

Deviation Warning — Warning alarm in case of deviation of temperature control.

Timer — Possible to set end time or start time of device operation.

Program — Control of temperature / humidity / rpm / time, etc. through dedicated program.

Computer Interface — PC communication via RS-232 / RS-485 / USB port.

3 Points Temperature Calibration — More precise temperature control through 3-point temperature calibration.

Over Temp. — Over temperature protection function.

Low Level — Alarm if the water is low level.

Auto Run — It memorizes the state of power failure and operates automatically when power is restored.

2 year Warranty — 2 year warranty Free A/S.

Innovative Control System & Design
Application of specialized exclusive control system

> Selection of 2 control systems

Program Controller Type

- Program operation controller, 10 programs. (10 steps maximum)
- Intuitive operation with color touch display.

General Controller Type

- Controller for constant temperature value control. and temperature deviation notification. (deviation limit/alarm delay setting)
- Precise and stable control of set temperature.

> Sharper screen display

Program type is applied to color touch display, general type is applied to clear VFD.

> Provision of remote equipment monitoring service (option)

Real-time monitoring of equipment operation status using smartphone. (when purchased LC GreenBox)

> More stable temperature control (RW3/CW3)

- Depending on the type of fluid used in the bath, three different auto-tuning values (ΔT1-3) are saved.
- Auto-tuning is activated after 3 operating temperatures are inputted for each auto-tuning.

> Optimized temperature control

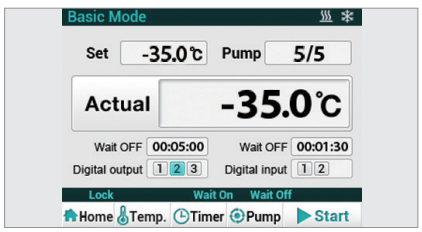
Auto-tuning function enables optimal control even when mainly used temperature or ambient conditions are frequently changed.

> 3-point temperature calibration function (RW3/CW3)

Temperature calibration of up to 3 points provides more reliable temperature control.

> Computer Interface (USB, RS-232)

Convenient remote control and data management on PC via built-in dedicated software.



Color Touch Display Controller.

Clear VFD Controller.

Provision of remote equipment monitoring service.

Provision of convenient and useful functions for actual use
Applies Lab Companion's patented safety system

> Convenient timer function provided
Wait On/Wait Off is run after the set time elapses.
(Max. 999 hours and 59 minutes)

> Smart cooling control system
According to the temperature, the flow of refrigerant is controlled.
The cooling speed from high temperature to room temperature is faster than previous product.

> Convenient solution discharge
Drain valve is included as standard, making it both easy and convenient to discharge the solution in the bath.

> Stable performance of circulation pump
Stable circulation pump with max. 0.4 bar pressure makes it easy to adjust pump speed in 5 steps.

> Top-grade protection system (Lab Companion's patent)
The safety device is configured to operate preferentially even if the malfunction is occurred in the device control unit.

> Shutdown function in case of over temperature
Safe structure with shutdown function using over temperature limiter in case of overheating.

> Solution level detection
Detects the level of solution in the bath and stops the device and notifying when the level is low.

> Prepared for unexpected power failure
Auto-run function capable of selecting reoperation when power is restored after sudden power failure.

※ Some of the above contents are limited to specific models.

Sophisticated refrigerant volume control system.

Removable freezing condenser grill structure.

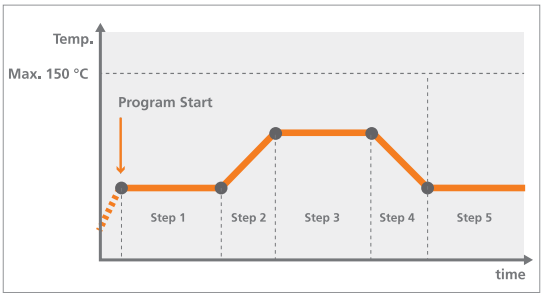
Convenient solution discharge (CW3) with drain valve located on the front.

Refrigerated & Heating Bath Circulator
Program type

Convenient program control function

Program Type

- Possible to set and save 10 programs.
- Up to 10 steps can be set in the one program.
- Set time up to 99 hours and 59 minutes per step.
- Includes useful scheduler management functions such as program operation range and repeat interval setting.
- Program repetition possible up to 99 times.
- Provides temperature ramp control in program operation.
- Digital Input / Output function makes it easy to connect external equipment.
- Intuitive operation with color touch display.



RW3-0525P
with PPS (poly phenylene sulfide)
Bath Cover (standard)

Structural Functional Features

- Internal circulation and internal/external circulation of solution.
- Built-in bath cover with handle.
- Internal bath with seamless integral structure. (except RW3-3025P, 3035P models)
- 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.
- Easy-to-clean refrigerator condenser filter.
- Equipped with easy-to-move/install caster.
- 8 models provided according to temperature range, capacity, etc.
- 5-steps pump speed adjustment with simple operation.

Use Convenience Features

- Temperature calibration of up to 3 points provides more reliable temperature control.
- Optimized control with auto-tuning.
- Wait On/Off timer. (up to 99 hours 59 minutes)
- Microprocessor PID method for precise temperature control.
- USB/RS-232 connection and software provide convenient computer operation and data management.
- 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)

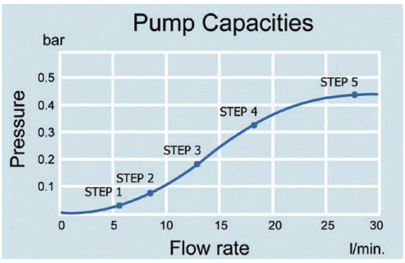
Outstanding Safety

- Top-rated overheating protection system. (Registration KR 10-0397583)
- Over temperature limiting function. (Over Temperature Limiter)
- 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.

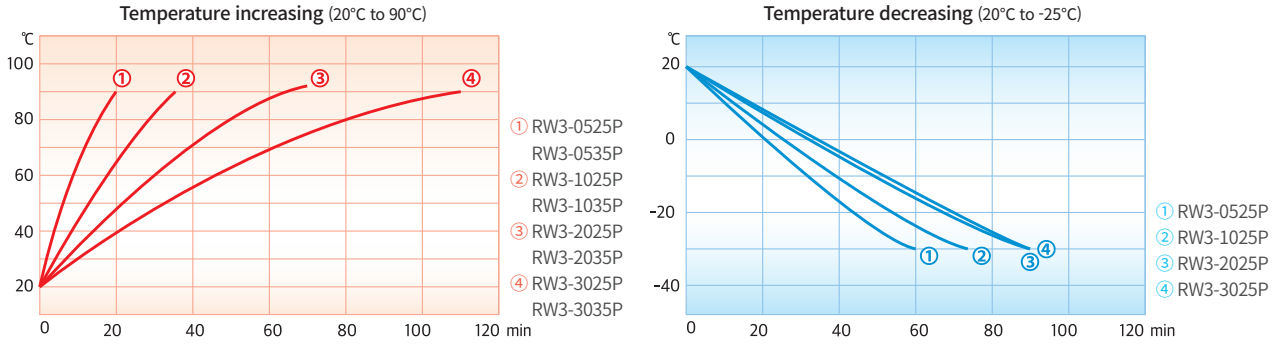
Pump Capacity

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



Heat-up Time, Cool-down Time



※ Bath fluid : Water & Antifreeze (1 : 1)
※ 230V 60Hz

Specification

Model		RW3-0525P	RW3-1025P	RW3-2025P	RW3-3025P
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (°C / °F)	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302
	Temp. stability[1] (±°C / °F)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
Cooling capacity	at +20°C (+68°F), W	320	380	550	740
	at 0°C (+32°F), W	230	270	420	630
	at -20°C (-4°F), W	80	150	300	470
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)	308 x 480 x 733 / 12.1 x 18.9 x 28.9	366 x 532 x 780 / 14.4 x 20.9 x 30.7	386 x 602 x 825 / 15.2 x 23.7 x 32.5	446 x 662 x 895 / 17.6 x 26.1 x 35.2
	Net weight (kg / lbs)	37 / 81.6	44 / 97	60 / 132.2	67 / 147.7
Electrical requirements (230V, 60Hz, A)		11	11	12.5	13.5
Cat. No.		**AAH57641K**	**AAH57651K**	**AAH57661K**	**AAH57671K**
Electrical requirements (230V, 50Hz, A)		11	11	12.5	13.5
Cat. No.		**AAH57642K**	**AAH57652K**	**AAH57662K**	**AAH57672K**
Electrical requirements (120V, 60Hz, A)		12.6	12.6		
Cat. No.		**AAH57643U**	**AAH57653U**	-	-

Model		RW3-0535P	RW3-1035P	RW3-2035P	RW3-3035P
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (°C / °F)	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302
	Temp. stability[1] (±°C / °F)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
Cooling capacity	at +20°C (+68°F), W	280	450	800	880
	at 0°C (+32°F), W	150	330	660	700
	at -20°C (-4°F), W	80	150	400	440
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)	308 x 480 x 733 / 12.1 x 18.9 x 28.9	366 x 532 x 780 / 14.4 x 20.9 x 30.7	386 x 602 x 825 / 15.2 x 23.7 x 32.5	446 x 662 x 895 / 17.6 x 26.1 x 35.2
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7
Electrical requirements (230V, 60Hz, A)		12.5	12.5	13.5	14.5
Cat. No.		**AAH57741K**	**AAH57751K**	**AAH57761K**	**AAH57771K**
Electrical requirements (230V, 50Hz, A)		12.5	12.5	13.5	14.5
Cat. No.		**AAH57742K**	**AAH57752K**	**AAH57762K**	**AAH57772K**

※ 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 : Ethanol at -10°C / 14°F

Accessories Page 28

Spring Wire Rack, Test Tube Rack, Silicone Tube, Tubing Insulation, Clamp, Cover, Silicone Oil, Ethylene Glycol, LC GreenBox

Refrigerated & Heating Bath Circulator
General type

Stable internal/external temperature control

General Type

- 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.
- Applies smart refrigeration system using Lab Companion's technology.
- Optimized control reduces overall power consumption.
- Easily removable condenser grill structure.
- Equipped with advanced filter with flat plate structure in refrigeration condenser.
- Compact structure design.

RW3-2025

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

Structural Functional Features

- Internal circulation and internal/external circulation of solution.
- Refrigerator stopped automatically when it rises too high of temperature, saving power, extending freezer life, and reducing noise generation.
- High-efficiency refrigeration through application of electronic expansion valve.
- Built-in bath cover with handle.
- Internal bath with seamless integral structure. (except RW3-3025, 3035 models)
- Stainless steel material inside and at the top of the bath is excellent in terms of corrosion resistance and clean maintenance.
- Left and right handles for convenient handling.
- Drain valve for easy draining of bath solution.
- Easy-to-clean refrigerator condenser filter.
- Equipped with easy-to-move/install caster.
- 8 models provided according to temperature range, capacity, etc.
- 5-steps pump speed adjustment with simple operation.

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.
- Wait On/Off timer. (up to 999 hours 59 minutes)
- Microprocessor PID method for precise temperature control.
- USB/RS-232 connection and software provide convenient computer operation and data management.
- 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)

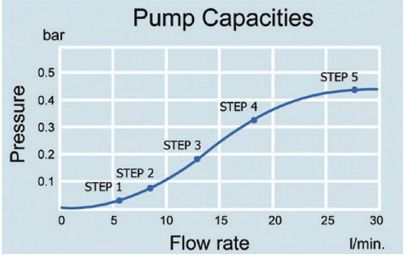
Outstanding Safety

- 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.

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



Single-Action refrigeration condenser grill structure allows for detaching and attaching without additional tools.

The drain valve located on the side is simple and convenient to use as it is ball valve type.

Specification

Model		RW3-0525	RW3-1025	RW3-2025	RW3-3025
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (°C / °F)	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302	-25 to 150 / -13 to 302
	Temp. stability[1] (±°C / °F)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
Cooling capacity	at 20°C (+68°F), W	400	560	850	980
	at 0°C (+32°F), W	270	360	610	700
	at -20°C (-4°F), W	140	180	310	465
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)	308 x 480 x 733 / 12.1 x 18.9 x 28.9	366 x 532 x 780 / 14.4 x 20.9 x 30.7	386 x 602 x 825 / 15.2 x 23.7 x 32.5	446 x 662 x 895 / 17.6 x 26.1 x 35.2
	Net weight (kg / lbs)	37 / 81.6	44 / 97	60 / 132.3	67 / 147.7
Electrical requirements (230V, 60Hz, A)		11	11	12.5	13.5
Cat. No.		**AAH57041K**	**AAH57051K**	**AAH57061K**	**AAH57071K**
Electrical requirements (230V, 50Hz, A)		11	11	12.5	13.5
Cat. No.		**AAH57042K**	**AAH57052K**	**AAH57062K**	**AAH57072K**
Electrical requirements (120V, 60Hz, A)		12.6	12.6		
Cat. No.		**AAH57043U**	**AAH57053U**	-	-

Model		RW3-0535	RW3-1035	RW3-2035	RW3-3035
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (°C / °F)	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302	-35 to 150 / -31 to 302
	Temp. stability[1] (±°C / °F)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
Cooling capacity	at 20°C (+68°F), W	400	560	850	980
	at 0°C (+32°F), W	270	360	610	700
	at -20°C (-4°F), W	140	180	310	465
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)	308 x 480 x 733 / 12.1 x 18.9 x 28.9	366 x 532 x 780 / 14.4 x 20.9 x 30.7	386 x 602 x 825 / 15.2 x 23.7 x 32.5	446 x 662 x 895 / 17.6 x 26.1 x 35.2
	Net weight (kg / lbs)	38 / 83.8	45 / 99.2	60 / 132.3	68 / 149.9
Electrical requirements (230V, 60Hz, A)		12.5	12.5	13.5	14.5
Cat. No.		**AAH57141K**	**AAH57151K**	**AAH57161K**	**AAH57171K**
Electrical requirements (230V, 50Hz, A)		12.5	12.5	13.5	14.5
Cat. No.		**AAH57142K**	**AAH57152K**	**AAH57162K**	**AAH57172K**

※ 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 : Ethanol at -10°C / 14°F

Accessories Page 28

Spring Wire Rack, Test Tube Rack, Silicone Tube, Tubing Insulation, Clamp, Cover, Silicone Oil, Ethylene Glycol, LC GreenBox

Heating Bath Circulator

Suitable for precise temperature testing above ambient temperature

CW3-05P

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

CW3-05

with PPS (poly phenylene sulfide)
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 us.
- 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.

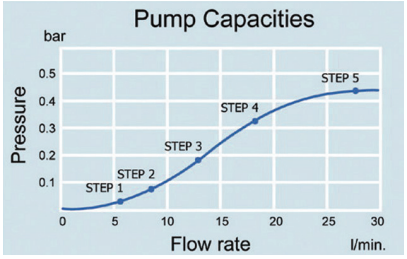
Use Convenience Features

- Temperature calibration of up to 3 points provides more reliable temperature control.
- Optimized control with auto-tuning.
- Save and use 3 frequently used temperatures.
- 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 (℃ / ℉)	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] (±℃ / ℉)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
	Heat up time to 70℃ / 158 ℉ (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**

Model		CW3-05	CW3-10	CW3-20	CW3-30
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1
Temperature	Working temp. range (℃ / ℉)	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] (±℃ / ℉)	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09	0.05 / 0.09
	Heat up time to 70℃ / 158 ℉ (min)	15	23	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	17.5 / 38.6	19.5 / 43
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℃ / 122℉

Accessories Page 28

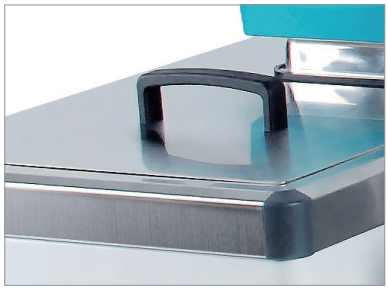
Spring Wire Rack, Test Tube Rack, Silicone Tube, Tubing Insulation, Clamp, Cover, Silicone Oil, Ethylene Glycol, LC GreenBox

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	CW3-10(P): 1ea RW3-1025(P): 1ea RW3-1035(P): 1ea
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)
AAAQ1011	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 low. 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 Page 30

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)	-20 ~ 30 / -4 ~ 86
Temp. Stability (°C / °F)	±1.0 / ±1.8
Cooling Capacity	580W at 20°C / 68°F
230V, 60Hz, A	4
Cat. No.	**ACH651011K**
230V, 50Hz, A	4
Cat. No.	**ACH651012K**

Rotary Evaporator

Chiller Page 40