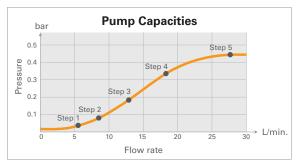
Rapid heating and cooling throughout the entire temperature range.





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

 $[\]ensuremath{\mathtt{\#}}$ Bath fluid: water at the normal temperature.

RW3-2025

Standard accessories

- Stainless steel flat cover
- Silicone rubber tubing (1ft length / 12mm inner dia.)

Optional accessories see page 28-29

• Test tube racks, Spring wire racks



Easy maintenance of condenser by removable gridded vent



Condenser air-filter for refrigerating efficiency



Comfortable front access drain





Green















Performance

- · Temperature range.
- RW3-35 models from -35 $^{\circ}$ C to 150 $^{\circ}$ C.
- RW3-25 models from -25 $^{\circ}$ C to 150 $^{\circ}$ C.
- · Microprocessor PID control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Suitable for both internal and external bath environments due to reduced turbulence by using five-speed adjustable pump and built-in cooling coil. (1 to 3 steps of the pump for internal circulation and 4 to 5 steps for external circulation)

Convenience

- Bright VFD display with quick adjustable dial knob. (0.1 °Cresolution)
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Convenient memory function of up to three frequently set temperature.

- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with front access drain valve.
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency.
- CFC-free refrigerant (R-507, R-404A) and a double service valve for leakage prevention.
- Quick-release front grill for easy cleaning of the condenser.
- RS-232 interface for external control and data collection. (RS-232 to USB serial converter is provided.)
- Side handles enables convenience handling and transport.

Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Complete safety protection system with warning alarms.
- Low fluid level and dry-running, over-temperature, over-current.
- · Keypad lock function prevents accidental changes during operation.

	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			
Working tempe	rature range (°C / °F)	-25 to 150 / -13 to 30	-25 to 150 / -13 to 302					
Temperature sta	ability 1) (±°C / °F)	0.05 / 0.09	0.05 / 0.09					
0 1:	at -20 [°] C (-4°F), W	30	50	260	390			
Cooling	at 0 ^{°C} (+32°F), W	230	250	410	570			
capacity 2) (bath fluid: ethanol)	at +20°C (+68°F), W	320	380	560	680			
(batti ilala, ctilalio)	Refrigerator	1/3 LBP, R-507	1/3 LBP, R-507	1/2 LBP, R-404A	3/4 LBP, R-404A			
Pump	Max. pressure	5.9 PSI (406.8 millibar)						
(bath fluid: water)	Max. flow rate	7.4 gallons / minute (28 liters / minute)						
	Bath opening / depth	150×99, 160	211×154, 180	290×214, 200	300×264, 230			
	(W×L, D) (mm / inch)	/ 5.9×3.9, 6.3	/ 8.3×6.1, 7.1	/ 11.4×8.4, 7.9	/ 11.8×10.4, 9			
Dimension	Exterior	309x480x733	367x532x780	387x602x825	447x662x895			
	(W×L×H) (mm / inch)	/ 12.2x18.9x28.9	/ 14.4x20.9x30.7	/ 15.2x23.7x32.5	/ 17.6x26.1x35.2			
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7			
Electrical requir	rements (230V, 60Hz)	11A	11A	12.5A	13.5A			
Cat. No.		AAH57041K	AAH57051K	AAH57061K	AAH57071K			
Electrical requirements (230V, 50Hz)		11A	11A	12.5A	13.5A			
Cat. No.		AAH57042K	AAH57052K	AAH57062K	AAH57072K			
Electrical requirements (120V, 60Hz)		12.6A	12.6A					
Cat. No.		AAH57043U	AAH57053U	-	-			

for temperature range from -35 $^{\circ}$ C to 150 $^{\circ}$ C

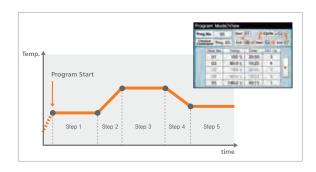
	Model	RW3-0535	RW3-1035	RW3-2035	RW3-3035			
Bath volume (L / cu ft)		5 / 0.2	10 / 0.4	20 / 0.7	30 / 1.1			
Working tempe	rature range (°C / °F)	-35 to 150 / -31 to 30	-35 to 150 / -31 to 302					
Temperature sta	ability ¹) (±℃ / °F)	0.05 / 0.09	0.05 / 0.09					
0 !!	at -20 [°] C (-4°F) , W	80	150	400	440			
Cooling	at 0 [°] C (+32°F) , W	150	330	660	700			
capacity 2) (bath fluid: ethanol)	at +20 [℃] (+68°F), W	280	450	800	880			
	Refrigerator	1/2 LBP, R-404A	1/2 LBP, R-404A	3/4 LBP, R-404A	1 LBP, R-404A			
Pump	Max. pressure	5.9 PSI (406.8 millibar)						
(bath fluid: water)	Max. flow rate	7.4 gallons / minute (2	7.4 gallons / minute (28 liters / minute)					
	Bath opening / depth	150×99, 160	211×154, 180	290×214, 200	300×264, 230			
	(WxL, D) (mm / inch)	/ 5.9×3.9, 6.3	/ 8.3×6.1, 7.1	/ 11.4×8.4, 7.9	/ 11.8×10.4, 9			
Dimension	Exterior	309x480x733	367x532x780	387x602x825	447x662x895			
	(W×L×H) (mm / inch)	/ 12.2x18.9x28.9	/ 14.4x20.9x30.7	/ 15.2x23.7x32.5	/ 17.6x26.1x35.2			
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7			
Electrical requirements (230V, 60Hz) 12.5A		12.5A	12.5A	13.5A	14.5A			
Cat. No.		AAH57141K	AAH57151K	AAH57161K	AAH57171K			
Electrical requirements (230V, 50Hz)		12.5A	12.5A	13.5A	14.5A			
Cat. No.		AAH57142K	AAH57152K	AAH57162K	AAH57172K			

¹⁾ Technical data according to DIN 12876. (bath fluid: ethanol at -10 °C)

²⁾ The cooling capacity is measured under 230V / 60Hz electrical condition.

Newly developed bath circulator with the Intelligent programmable controller brings the best intuitive control performance to your laboratory.





Intelligent program control

- 10 programs available for temperature ramp up and dwell control.
- 10 steps per a program and 99 hours 59 minutes per a step.
- · Stored programs are easily linkable.
- Programs can be repeated up to 99 cycles.
- Pre-heating and heating time are settable before program starts.

RW3-0525P

Standard accessories

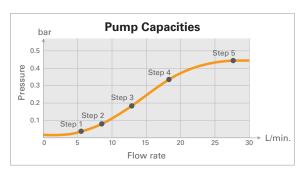
- · Stainless steel flat cover
- Silicone rubber tubing (1ft length / 12mm inner dia.)

Optional accessories see page 28-29

- · Suction function for pumps
- Test tube racks, Spring wire racks



Touch LCD Controller



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 at the normal temperature

























Performance

- · Temperature range.
- RW3-35P models from -35 $^{\circ}$ C to 150 $^{\circ}$ C.
- RW3-25P models from -25 $^{\circ}$ C to 150 $^{\circ}$ C.
- · Microprocessor PID control.
- Three point temperature calibration / Automatic tuning / Automatic run.
- Suitable for both internal and external bath environments due to reduced turbulence by using five-speed adjustable pump and built-in cooling coil. (1 to 3 steps of the pump for internal circulation and 4 to 5 steps for external circulation)

Convenience

- Intuitive touch screen LCD controller with easy icons and logical menus.
- Dual wait on/off timer modes. (1 min. to 99 hr. 59 min.)
- Digital input and output control function for interlocking external devices.
- RS-232 interface for external control and data collection. (RS-232 to USB serial converter is provided.)

- Corrosion-resistant, leak-proof, round-cornered, and easy-to-clean stainless steel bath with front access drain valve.
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency.
- Usage of CFC-free refrigerant (R-507, R-404A) and a double service valve for leakage prevention.
- Quick-release front grill for easy cleaning of the condenser.
- ${\ \cdot\ }$ Built-in casters and side handles for easy transport and installation.

Safety

- Isolated design of agitator, heater, and sensor by a baffle plate to minimize the turbulence in the bath fluid and also to protect users and samples against direct contact.
- Temperature warning Indicator simply shows inner reservoir's temperature by three different colors.
- · Complete safety protection system with warning alarms.
- Low fluid level and dry-running, over-temperature, over-current.
- Keypad lock function prevents accidental changes during operation.
- · Splash-proof keypad.

	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		
Working temperature range ($^{\circ}$ / $^{\circ}$)							
Temperature st	ability 1) (±°C / °F)	0.05 / 0.09					
Cooling	at -20 [°] C (-4°F), W	30	50	260	390		
capacity 2)	at 0 °C (+32°F), W	230	250	410	570		
(bath fluid:	at +20 °C (+68°F), W	320	380	560	680		
ethanol)	Refrigerator	1/3 LBP, R-507	1/3 LBP, R-507	1/2 LBP, R-404A	3/4 LBP, R-404A		
Pump	Max. pressure	5.9 PSI (406.8 millibar)					
(bath fluid: water)	Max. flow rate	7.4 gallons / minute (28 liters / minute)					
	Bath opening / depth	150x99x160	211x154x180	290x214x200	300x264x230		
	(W×L, D) (mm / inch)	/ 5.9x3.9x6.3	/ 8.3x6.1x7.1	/ 11.4x 8.4x7.9	/ 11.8x10.4x9.1		
Dimension	Exterior	302×438×690	360x490x780	380x560x825	440x620x895		
	(W×L×H) (mm / inch)	/ 11.9×17.2×27.2	/ 14.2x19.3x30.7	/ 14.9x22x32.5	/ 17.3x24.4x35.2		
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7		
Electrical requi	rements (230V, 60Hz)	11A	11A	12.5A	13.5A		
Cat. No.		AAH57641K	AAH57651K	AAH57661K	AAH57671K		
Electrical requirements (230V, 50Hz)		11A	11A	12.5A	13.5A		
Cat. No.		AAH57642K	AAH57652K	AAH57662K	AAH57672K		
Electrical requirements (120V, 60Hz)		12.6A	12.6A				
Cat. No.		AAH57643K	AAH57653U	-	-		

for temperature range from -35 $^{\circ}$ C to 150 $^{\circ}$ C

	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			
Working tempe	rature range (°C / °F)	-35 to 150 / -31 to 30	-35 to 150 / -31 to 302					
Temperature sta	ability 1) (±°C / °F)	0.05 / 0.09	0.05 / 0.09					
	at -20 ^{°C} (-4°F), W	80	150	400	440			
Cooling	at 0 °C (+32°F), W	150	330	660	700			
capacity 2) (bath fluid: ethanol)	at +20 [°] C (68°F), W	280	450	800	880			
(batil liulu, etilalioi)	Refrigerator	1/2 LBP, R-404A	1/2 LBP, R-404A	3/4 LBP, R-404A	1 LBP, R-404A			
Pump	Max. pressure	5.9 PSI (406.8 millibar)						
(bath fluid: water)	Max. flow rate	7.4 gallons / minute (28 liters / minute)						
Dimension	Bath opening / depth (W×L, D) (mm / inch)	150x99x160 / 5.9x3.9x6.3	211x154x180 / 8.3x6.1x7.1	290x214x200 / 11.4x 8.4x7.9	300x264x230 / 11.8x10.4x9.1			
	Exterior (W×L×H) (mm / inch)	302x438x690 / 11.9x17.2x27.2	360x490x780 / 14.2x19.3x30.7	380x560x825 / 14.9x22x32.5	440x620x895 / 17.3x24.4x35.2			
	Net weight (kg / lbs)	38 / 83.8	44 / 97	60 / 132.2	67 / 147.7			
Electrical requirements (230V, 60Hz)		12.5A	12.5A	13.5A	14.5A			
Cat. No.		AAH57741K	AAH57751K	AAH57761K	AAH57771K			
Electrical requirements (230V, 50Hz)		12.5A	12.5A	13.5A	14.5A			
Cat. No.		AAH57742K	AAH57752K	AAH57762K	AAH57772K			

²⁾ The cooling capacity is measured under 230V / 60Hz electrical condition.