Thermo Scientific Refrigerated and Heated Bath Circulators
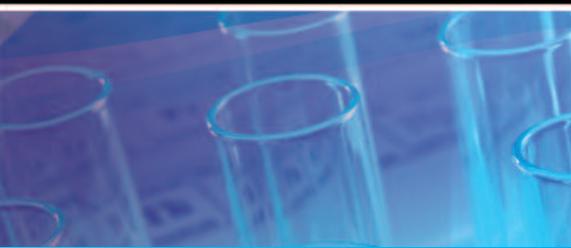
advanced, configurable solutions
to meet all your temperature control needs

Thermo
SCIENTIFIC

Thermo Scientific temperature control products represent a giant leap forward in performance, features, configurability and technology.

Now you can configure the most flexible, cost-effective temperature control solutions for any application.

- Pharmaceutical
- BioTech
- Chemical/Petrochemical
- Food & Beverage
- QA/QC
- Research & Development
- Analytical Instruments
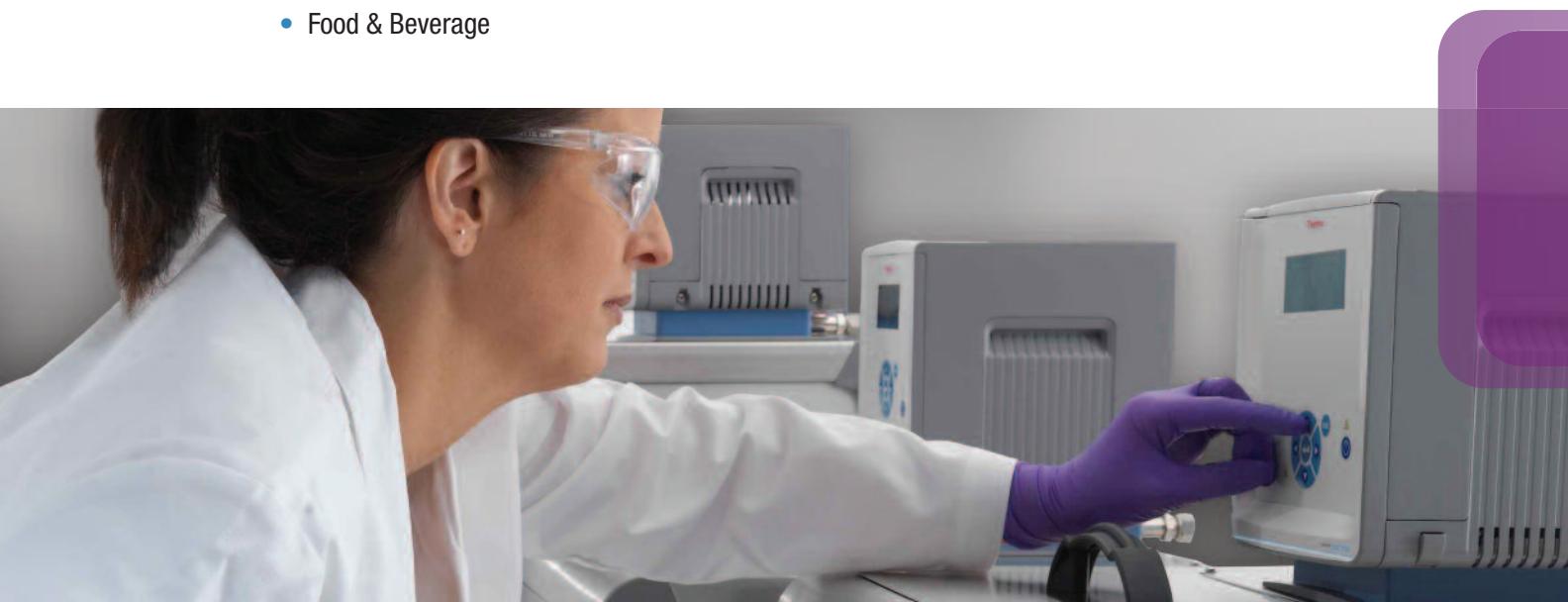
Environment-friendly Design

Utilize the energy savings mode to save up to 80% on energy costs and thousands of kilowatt hours during the life of the system.

- All units are RoHS/WEEE compliant (lead and mercury free)
- Recycled packaging

Safe Operation

Units are UL/CSA/CE compliant, ensuring safe operation in the unlikely event of a fault condition.

- Optional IQ/OQ compliance

Ease of Use

All immersion circulators feature an intuitive user interface with bright display to view critical readings. Each system comes with a quick-start guide for simple set up and operation.

When mounted on the bath, the controller can be indexed 90° for easy viewing.

- Tool-less setup

Superior Warranty and Service

All solutions come with a 36-month warranty and are backed by Thermo Scientific service and support worldwide.

Swap Program: in the event the controller fails, it can be exchanged for a new controller at no cost to you for the life of the warranty.

Table of Contents

4 Factors to consider before selecting your temperature control product

What is your application need?

Do you have an existing tank, vessel or bath and need to heat the fluids? Review the immersion circulators for the temperature control range and features that best suit your application requirements.

Do you need to circulate to an external application such as a rotary evaporator or bio reactor, or need to add heating or cooling to your application?

Consider the Heated Bath Circulators or Refrigerated Circulators. All systems and immersion circulators come standard with the external circulation plumbing. Whether you have present or future use for external circulation you can always modify your immersion circulator, refrigerated or heated bath circulator to accomplish this in a few simple steps.

Does your temperature control application require a work area to place beakers or test tube racks?

We have a large selection of Refrigerated Bath Circulators, Heated Stainless Steel Baths, as well as the economical PPO or Acrylic heated baths. These baths were designed to provide larger work areas to accommodate multiple beakers, test tube racks or incubation vessels.

How much cooling capacity will your application require?

Choose from multiple temperature ranges and temperature ramp rates required for your application. The heating and cooling capacity are specified in watts for each system. The corresponding heating and cooling curves will give you insight into how fast a system can heat or cool the volume of fluid to your required temperature set point.

Temperature specifications for heating baths state a minimum temperature of 'Ambient + 13°C'. This refers to the effect of 'heat soak' on the performance of these units that occurs when heat from the motor is conducted into the bath. Larger baths will lose heat more quickly and therefore will be able to accurately temperature control below the 'Amb + 13°C' threshold. Utilize a 'Cooling Coil' accessory or a refrigerated bath circulator to work in near ambient temperature conditions.

Frequently Asked Questions

Q: Does my unit come with external circulation plumbing and connections?

A: Yes. The plumbing required to circulate the fluid from the bath to your application is a standard feature on all STANDARD, ADVANCED and PREMIUM controllers. Each ARCTIC refrigerated/heated bath and SAHARA heated bath is capable of circulating to an external application. It is important to properly set up your system to circulate. Each controller comes with a threaded plug, 4 hose clamps and 2 sets of metric hose barb connections of 8mm and 12mm. For external circulation the outlet of the pump must be sealed with the stainless steel threaded plug. Sealing this outlet will force the fluid from the pump through the supply side tubing that will route to the external application.

Note: Two different size hose barbs are supplied that will accept tubing for external circulation. If you would rather install a threaded fitting instead of the metric hose barb we have fittings that will convert the M16 connection to a ¼" MNPT thread.

Q: How do I achieve more heating capacity for my application?

A: When choosing an immersion circulator, you have the ability to choose from different versions and voltages. The ADVANCED and PREMIUM Series utilize a special motor and electronics that will operate within a wide supply voltage. By understanding the flexibility of your electrical supply you can increase the amount of heating capacity for your application.

For applications in North America, the ADVANCED or PREMIUM Series can be utilized with 208V single phase electrical supply, and gain between 67% and 250% more in heating capacity.

The table below illustrates the different electrical capabilities and heating capacities

Controller	Global voltage: 100v to 115v / 50-60 Hz	Global voltage: 200v to 230v / 50-60 Hz
AC Series	1.2 KW	2.0 KW
PC 200	1.2 KW	2.0 KW
PC 300	Not Available in this voltage	3.0 KW

Q: What is the difference between a refrigerated circulating bath and a refrigerated circulator?

A: A refrigerated circulating bath and a refrigerated circulator are very much alike. The defining attribute is that the work area of the refrigerated circulating bath is much larger than that of the refrigerated circulator. Accordingly, these types of systems are much larger overall than the refrigerated circulators due to the larger size of the bath (or work area).

- The refrigerated circulating bath design is focused on applications that require a large area within the bath to place samples, beakers and / or test tube racks, etc. Although the primary focus is the use of the bath, this system can still circulate externally to a different application.

- The refrigerated circulator can also be used for samples, test tube or beakers within its small bath. The difference is that the bath is much smaller and will not hold as many samples.

Q: How does fluid expansion affect my application?

A: It is very important to take special precaution to ensure that your system is filled to the appropriate level to avoid overflowing the silicone oil out of the stainless steel bath onto the lab bench or other areas. It is absolutely critical to take every safety precaution and confirm all aspects of your system before setting the temperature parameters for extreme heating applications. We anticipate that for every 100°C in temperature within the bath that the fluid will expand 10%. However, depending on which immersion circulator you are utilizing the fluid expansion can range from 10% to 30%.

Note: The SAHARA stainless steel baths have been designed to be filled to the low level fluid safety cut out to enable the system to power up and start to temperature control. If filled properly to the low level, the expansion of the silicone oil will not overflow the tank at the immersion circulator's maximum temperature set point.

Q: How do I secure an immersion circulator to my tank or apparatus?

A: The model of immersion circulator will define the choices for your installation:

The STANDARD Series has a choice of the following:

- Stainless steel clamp that expands to 1" (25mm) and enables the installation of the immersion circulator to be installed on the lip of the tank or apparatus.

- Stainless steel bridge that allows the installation of a STANDARD Series immersion circulator to the legacy Haake stainless steel 'W' series baths

The ADVANCED and PREMIUM immersion circulators are only available with a bridge which utilizes the existing mounting holes to secure the immersion circulator to the bridge.

An adjustable bridge that expands between 300mm and 800mm is available and will fit all immersion circulators. This kind of adjustable bridge is useful when the vessel is irregularly shaped or does not have trim around the vessel to install a stainless steel clamp.

Heated Immersion Circulator Comparison

Use the table below to **choose the immersion circulator that best fits your specific application requirements.**
Then, match the immersion circulator to a refrigerated or heated bath.

Model	STANDARD series			ADVANCED series		PREMIUM series		
	SC100	SC150	SC150L	AC150	AC200	PC200	PC201	PC300
Specifications								
Maximum temperature (°C)	100	150	150	150	200	200	200	300
Temperature stability (°C)***	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Heater capacity (230V/115V)	2kW/1.2kW	2kW/1.2kW	2kW/1.2kW	2kW/1.2kW	3kW/1.5K	2kW/1.2KW	3kW	3kW**
Maximum flow rate (l/min)	17	17	17	20	24	24	24	24
Maximum pressure (mbar/psi)	300/4.35	300/4.35	300/4.35	475/6.89	560/8.12	560/8.12	560/8.12	560/8.12
Maximum suction (mbar/psi)				330/4.85	330/4.85	380/5.51	380/5.51	380/5.51
Flow rate / pump speed steps	2	2	2	3	3	Adjustable****	Adjustable****	Adjustable****
Fill level from top of tank (mm)	60..18	60..18	105..18	63..18	63..18	63..18	63..18	63..18
Tank depth requirement (mm)	150	150	200	150	150	200	200	200
Dimensions/Weight								
Overall dimensions (mm) H x W x D	336 x 138 x 199	336 x 138 x 199	384 x 138 x 199	372 x 165 x 199	372 x 165 x 199	421 x 189 x 233	421 x 189 x 233	421 x 189 x 233
Overall dimensions (in) H x W x D	13.2 x 5.4 x 7.8	13.2 x 5.4 x 7.8	15.1 x 5.4 x 7.8	14.6 x 6.4 x 7.8	14.6 x 6.4 x 7.8	16.6 x 7.4 x 9.2	16.6 x 7.4 x 9.2	16.6 x 7.4 x 9.2
Net weight (kg)	3.3	3.3	3.3	4.2	4.2	4.7	4.7	4.7
Safety & Compliance								
Safety class acc. DIN12876	1 / NFL	3 / FL	3 / FL	3 / FL	3 / FL	3 / FL	3 / FL	3 / FL
IQ/OQ	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Alarm Type								
High temperature alarm	•	•	•	•	•	•	•	•
Low level alarm		•	•	•	•	•	•	•
Refrigeration alarm	•	•	•	•	•	•	•	•
Application threshold alarm				•	•	•	•	•
Application alarm (external)*				Optional	Optional	Optional	Optional	Optional
Alarm indicators								
Acoustic/Optical alarm	•	•	•	•	•	•	•	•
Connectivity								
Remote sensor port				•	•	•	•	•
USB port		•	•	•	•	•	•	•
Multi function port					•	•	•	•
RS232/RS485/Ethernet/LAN		Optional	Optional	Optional	Optional	Optional	Optional	Optional
Analog I/O		Optional	Optional		Optional	Optional	Optional	Optional
Information displayed on screen								
High temperature warning				•	•	•	•	•
Low level warning		•	•	•	•	•	•	•
High level warning				•	•	•	•	•
Date & Time					•	•	•	•
Features								
Energy saving mode	•	•	•	•	•	•	•	•
RTA	•	•	•	•	•	•	•	•
°C/°F/°K selection	•	•	•	•	•	•	•	•
Auto restart	•	•	•	•	•	•	•	•
System temperature limits	•	•	•	•	•	•	•	•
Application temperature limits	•	•	•	•	•	•	•	•
Solenoid valve for tap water					Optional	Optional	Optional	Optional
On/Off timer	•	•	•	•	•	•	•	•
Preset setpoint temperatures	5	5	5	5	5	5	5	5
Ramp programs					1	10	10	10
Real time clock	•	•	•	•	•	•	•	•
Multiple languages	3	3	3	3	3	7	7	7

*In combination with a PT100 sensor probe connected to the external application.   **Available only in 230V
**Temperature stability data measured according to DIN 12876.   ****Adjustable from 40% to 100%.

The new STANDARD, ADVANCED, and PREMIUM series heated immersion circulators combine the best temperature control technologies offering three levels of performance with multiple features, options, and benefits. Whether used alone or matched up with one of the refrigerated or heated baths, we offer a temperature control solution that will meet your needs.

The STANDARD (SC) Series

Choose from three options.

Designed for ease-of-use and energy efficient with powerful pumping and heating capacities for closed loop applications. This is an economical choice, offering solid performance for applications ranging from -28°C to +150°C.

The ADVANCED (AC) Series

Choose from two options.

When your application requires greater pumping performance, ramp programming, application alarms, and temperature ranges from -50° to +200°C.

The PREMIUM (PC) Series

Choose from three options.

Ideal for applications that require sophisticated control, multiple ramp programming, and extreme temperature performance ranging from -50°C to +300°C.

What's included:

8mm and 12mm hose barbs with clamps or bridge, pump plug for external circulation, 6-ft. power cord, 3-year warranty.

SC100

- Maximum temperature: 100°C
- Self-Tuning PID controller for optimized temperature control
- 5 programmable set point temperatures
- RTA (Real Temperature Adjustment) for calibration
- Two levels of pump speed adjustment to increase flow or bath agitation
- Three languages (English, German, French)
- Change digital display resolution between 0.1 and 0.01 and between °C – °F – °K
- Acoustic and optical alarm
- Auto-Restart feature after power failure

SC150

All of the SC 100 immersion circulator features, PLUS–

- Maximum temperature: 150°C
- Early-warning alert for fluid refill
- Automatic controller shut-down at detection of excessive high temperature, low liquid level, or motor overload
- Communication options for:

  RS232

  RS485

  Ethernet/LAN

  Analog I/O

SC150L

All of the SC 150 immersion circulator features, PLUS–

- Maximum temperature: 150°C
- Increased immersion depth to accommodate larger or deeper baths

AC150

All STANDARD immersion circulator features, PLUS–

- Maximum temperature: 150°C
- Pump speed adjustment to three levels for turbulence control
- Powerful force & suction pump for external open and closed applications
- Internal or external temperature control mode (Remote Sensor, NAMUR type)
- Programmable application temperature alarm with user selected alarm, go-safe-state or shut off option
- Fluid selection with predefined temperature limits

Immersion Circulators

To purchase immersion circulators separately, please use the information below.

Immersion Circulator	Heater Capacity	Order No.				
Voltage		100-115V/ 50-60Hz	100V/50-60Hz	115V/60Hz	200-230V/ 50-60Hz	230V/50Hz
SC 100	1.2Kw		152-0006	152-0008		152-0001
SC 100 w/clamp			152-0016	152-0018		152-0011
SC 150			153-0006	153-0008		153-0001
SC 150 w/clamp	1.2Kw		153-0016	153-0018		153-0011
SC 150L			154-0006	154-0008		154-0001
SC 150L w/clamp			154-0016	154-0018		154-0011
AC 150			155-0006	155-0008		155-0001
AC 150	1.2Kw		155-0026	155-0028		155-0021
AC 200			156-0006	156-0008		156-0001
AC 200 w/bridge	1.2Kw		156-0026	156-0028		156-0021
PC 200		157-0002			157-0005	
PC 200 w/bridge	1.2Kw	157-0022			157-0025	
PC 201					158-0005	
PC 201 w/bridge	2.0Kw				158-0025	
PC 300					159-0005	
PC 300 w/bridge	3.0Kw				159-0025	

Useful accessories:

- Tap water cooling coil
- Solenoid value for use with the tap water cooling coil (for AC200 and up)
- Pump/heater coil cage (SC100, SC150, SC150L only)
- Universal adjustable bridge
- External temperature probe (for AC200 and up)

See page 20 for complete list of available accessories.

Certification: CE c**RU**us

AC200

All of the AC 150 immersion circulator features, PLUS–

- Maximum temperature: 200°C
- One ramp program with edit during ramp feature
- Whole range calibration of 'n' points
- Timer with real time clock for time-critical applications
- Extra communication option for Profibus, CAN bus Analog I/O

PC200

All of the ADVANCED immersion circulator features, PLUS–

- Maximum temperature: 200°C
- Incremental pump speed adjustment
- Seven languages (English, German, French, Spanish, Italian, Chinese, and Japanese)
- Five ramp programs with edit during ramp feature

PC201

All of the PC 200 immersion circulator features, PLUS–

- Maximum temperature: 200°C
- 3.0 Kw heater for faster time to temperature
- All stainless steel pump with ceramic rotors

PC300

All of the PC 201 immersion circulator features, PLUS–

- Maximum temperature: 300°C
- 3.0 Kw heater for faster time to temperature
- All stainless steel pump with ceramic rotors

Multiple options allow the perfect fit for your external circulation applications.

Superior cooling power, expansive temperature ranges, powerful force/suction pumps, and sophisticated digital control technology to ensure accuracy and reproducibility of your liquid temperature control procedures. Six controller options allow you the flexibility to choose the right model for your application.

- Drain port at the front for operator convenience.
- Advanced design allows two sides of the unit to be blocked, allowing placement in a corner while maintaining full refrigeration performance.
- For less demanding applications, power consumptions can be lowered by utilizing the energy savings mode.
- Swap Program: in the event the controller fails, it can be exchanged for a new controller at no cost to you for the life of the warranty.
- The controller can be indexed 90° for easier viewing.

Typical applications:
- Calibration
- Bioreactors
- Rotary Evaporators
- Condensers
- Sample/Material Testing
- Sample/Material Preparation

Whats Included: Communication cables, bridge with gasket and thumbscrews, 8mm and 12mm hose barbs with clamps, external circulation plumbing, 6-ft. power cord, work area cover, 3-year warranty

Controller ▼ Bath ▶	A10
SC100	-10 to 100°C
SC150	-10 to 100°C
SC150L	—
AC150	-10 to 100°C
AC200	-10 to 100°C
PC200	—
PC201	—
Cooling capacity at 20°C 230V/115V	240W
Maximum bath volume (liters)*	6
Work area (DxWxL) mm/in	150 x 136.7 x 123.5 / 5.9 x 5.4 x 4.9
Net weight (kg/lb)	27.5/60.6
Compliance	CE/ROHS/WEEE

Ordering information:			
Model	**A10**		
Voltages	**115V/60Hz**	**230V/50Hz**	**100V/50-60Hz**
SC100 plus Bath	152-5108	152-5101	152-5106
SC150 plus Bath	153-5108	153-5101	153-5106
SC150L plus Bath	–	–	–
AC150 plus Bath	155-5108	155-5101	155-5106
AC200 plus Bath	156-5108	156-5101	156-5106
PC200 plus Bath			

*Bath volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.

Useful Accessories:

- Displacement Bodies
- Auto-refill (AC200 and above)
- Trolley (A25, A28, and A40 only)
- External Temperature Probe (AC200 and above)
- Fluids

See page 20 for complete list of available accessories.

Designed with heated tank top to avoid ice build up.

A25	A28	A28F	A40
-25 to 100°C	-28 to 100°C	-28 to 100°C	—
-25 to 150°C	-28 to 150°C	-28 to 150°C	-28 to 150°C
-25 to 150°C	-28 to 150°C	-28 to 150°C	-28 to 150°C
-25 to 150°C	-28 to 150°C	-28 to 150°C	-28 to 150°C
-25 to 200°C	-28 to 200°C	-28 to 200°C	-40 to 200°C
-25 to 200°C	-28 to 200°C	-28 to 200°C	-40 to 200°C
—	—	—	—
500W	320W	320W	800W
12	10	10	12
204 x 173 x 183.7 / 8 x 6.8 x 7.2	204 x 173 x 129 / 8 x 6.8 x 5.1	204 x 173 x 129 / 8 x 6.8 x 5.1	204 x 173 x 183.7 / 8 x 6.8 x 7.2
36.1/79.5	36/79.1	35.6/78.3	55.2/121.5
CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

A25			A28			A28F			A40		
115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
152-5258	152-5251	152-5256	152-5288	152-5281	152-5286	152-4288	152-4281	152-4286	–	–	–
153-5258	153-5251	153-5256	153-5288	153-5281	153-5286	153-4288	153-4281	153-4286	153-5408	153-5401	153-5406
154-5258	154-5251	154-5256	154-5288	154-5281	154-5286	154-4288	154-4281	154-4286	154-5408	154-5401	154-5406
155-5258	155-5251	155-5256	156-5288	156-5281	156-5286	155-4288	155-4281	155-4286	155-5408	155-5401	155-5406
156-5258	156-5251	156-5256	155-5288	155-5281	155-5286	156-4288	156-4281	156-4286	156-5408	156-5401	156-5406
157-5258	157-5251	157-5256	157-5288	157-5281	157-5286	157-4288	157-4281	157-4286	157-5408	157-5401	157-5406

Large work area enables high throughput and work flow efficiency.

Stainless steel reservoir, offered in multiple capacities with a variety of reservoir openings and depth dimensions for maximum application flexibility.

- Advanced design allows two sides of the unit to be blocked, allowing placement in a corner while maintaining full refrigeration performance.

- For less demanding applications, power consumptions can be lowered by utilizing the energy savings mode.

- Up to six different controller heads can be selected to best fit your application needs.

- The controller can be indexed 90° for easier viewing.

- Drain port at the front for operator convenience.

What's Included: Communication cables, bridge with gasket and thumbscrews, 8mm and 12mm hose barbs with clamps, external circulation plumbing, 6-ft. power cord, A24B and A25B include the work area cover, 3-year warranty

Typical applications:

- Calibration
- Bioreactors
- Rotary Evaporators
- Condensers
- Sample/Material Testing
- Sample/Material Preparation

Controller ▼	Bath ▶
SC100	
SC150	
SC150L	
AC150	
AC200	
PC 200	
Cooling capacity at 20°C 230V/115V	
Maximum bath volume (liters)*	
Work area (D x W x L) mm/in	
Net weight (kg/lb)	
Compliance	

Ordering information:	
Model	
Voltages	
SC100 plus Bath	
SC150 plus Bath	
SC150L plus Bath	
AC150 plus Bath	
AC200 plus Bath	
PC200 plus Bath	

*Bath volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.

Useful Accessories:

- Auto-refill (AC200 and above)
- External Temperature Probe (AC200 and above)
- Work Area Cover
- Lifting Platform
- Test Tube Racks
- Fluids

A5B	A10B	A24B	A25B
-5 to 100°C	-10 to 100°C	-24 to 100°C	-25 to 100°C
-5 to 100°C	-10 to 100°C	-24 to 150°C	-25 to 150°C
—	—	-24 to 150°C	—
-5 to 100°C	-10 to 100°C	-24 to 150°C	-25 to 150°C
-5 to 100°C	-10 to 100°C	-24 to 200°C	-25 to 200°C
—	—	-25 to 200°C	—
200W	250W	700W	500W
20	30	27	21
200 x 297.2 x 190 / 7.9 x 11.7 x 7.5	200 x 297.2 x 365 / 7.9 x 11.7 x 13.4	200 x 297.2 x 313.4 / 8 x 11.7 x 12.3	233 x 223.8 x 243.8 / 9.2 x 8.8 x 9.6
40/88.9	44.5/97.9	58.6/128.9	42.3/93.1
CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

A5B			A10B			A24B			A25B		
115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
152-4058	152-4051	152-4056	152-4108	152-4101	152-4106	152-4248	152-4241	152-4246	152-4258	152-4251	152-4256
153-4058	153-4051	153-4056	153-4108	153-4101	153-4106	153-4248	153-4241	153-4246	153-4258	153-4251	153-4256
–	–	–	–	–	–	154-4248	154-4241	154-4246	–	–	–
155-4058	155-4051	155-4056	155-4108	155-4101	155-4106	155-4248	155-4241	155-4246	155-4258	155-4251	155-4256
156-4058	156-4051	156-4056	156-4108	156-4101	156-4106	156-4248	156-4241	156-4246	156-4258	156-4251	156-4256
–	–	–	–	–	–	157-4248	157-4241	157-4246	–	–	–

Performance Curves for Refrigerated Baths and Circulators

Cooling Capacity

A5B, A10 (100V/60Hz)

Watts: 600, 500, 400, 300, 200, 100
Temperature °C: -20, 0, 20, 40, 60, 80

A5B
A10B
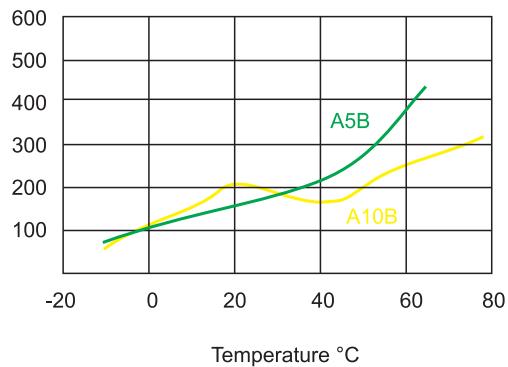
A5B, A10B (115V/60Hz, 230V/50Hz, 100V/60Hz)

Watts: 600, 500, 400, 300, 200, 100
Temperature °C: -20, 0, 20, 40, 60, 80

A5B
A10B
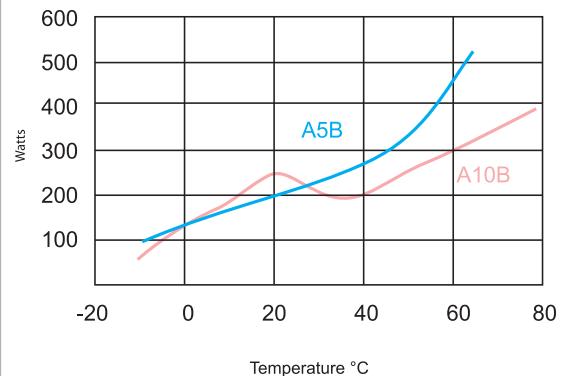
A10, A25, A28, A28F (100V/50Hz)

Watts: 600, 500, 400, 300, 200, 100
Temperature °C: -40, -20, 0, 20, 40, 60, 80, 100

A25
A28
A28F
A10
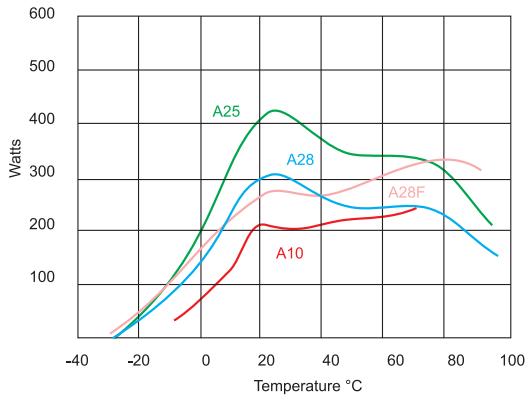
A10, A25, A28, A28F (115V/60Hz, 230V/50Hz, 100V/60Hz)

Watts: 600, 500, 400, 300, 200, 100
Temperature °C: -40, -20, 0, 20, 40, 60, 80, 100

A25
A28
A28F
A10
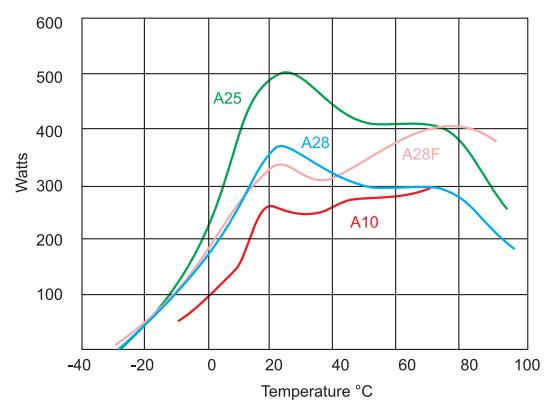
A40, A25 Cooling (100V/50Hz)

Watts: 1000, 800, 600, 400, 200
Temperature °C: -40, -20, 0, 20, 40, 60, 80, 100

A40
A25B

A25B, A40 (115V/60Hz, 230V/50Hz, 100V/60Hz)

Watts: 1000, 800, 600, 400, 200
Temperature °C: -40, -20, 0, 20, 40, 60, 80, 100

A40 115V,100/60
A40 230/50
A25B

10
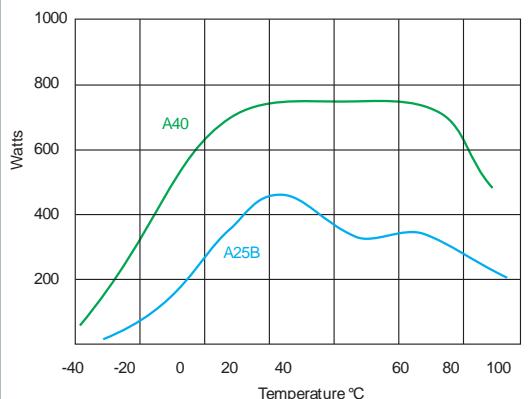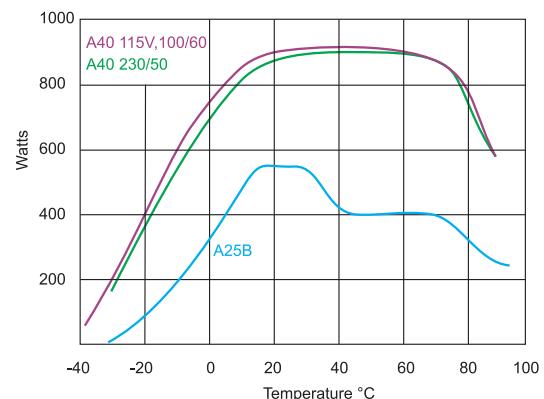
Time to Temperature

A10, A5B, A10B, A25B (100V/50Hz)
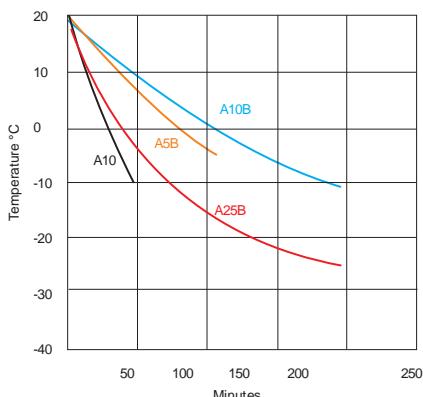
A10, A5B, A10B, A25B (115V 60Hz, 230V 50Hz, 100V 50Hz)
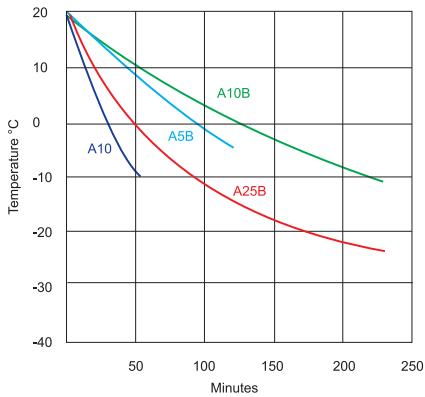
A25, A28, A10B, A28F, A40 (100V/50Hz)
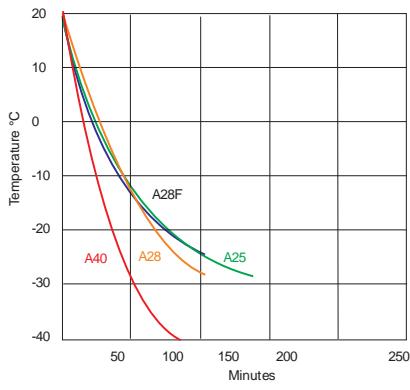
A25, A28, A28F, A40 (115V 60Hz, 230V 50Hz, 100V 50Hz)
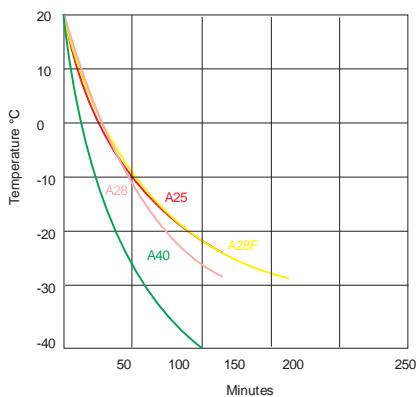
Specifications obtained at sea level using water (above +5°C to +90°C) or a fluid with a specificheat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect performance. Pump specifications are nominal values of ±10%. Specifications are for reference only and are subject to change.

Performance Curves

A cost effective ultra-low temperature refrigerated circulator with extreme temperature performance.

These circulators deliver high heating and cooling capacities for rapid heat-up and cool-down times. Fitted with locking castors, drainport, and handles – a perfect fit for any environment.

- Designed with heated tank top to avoid ice build up.
- Effective cooling capacity at ultra low temperatures allows you to reach your specific application temperature requirements.
- Sealed work area cover ensures contaminate-free fluid to your application.
- Insulated supply and return ports eliminate ice build up and process temperature variation.

Cooling Capacity
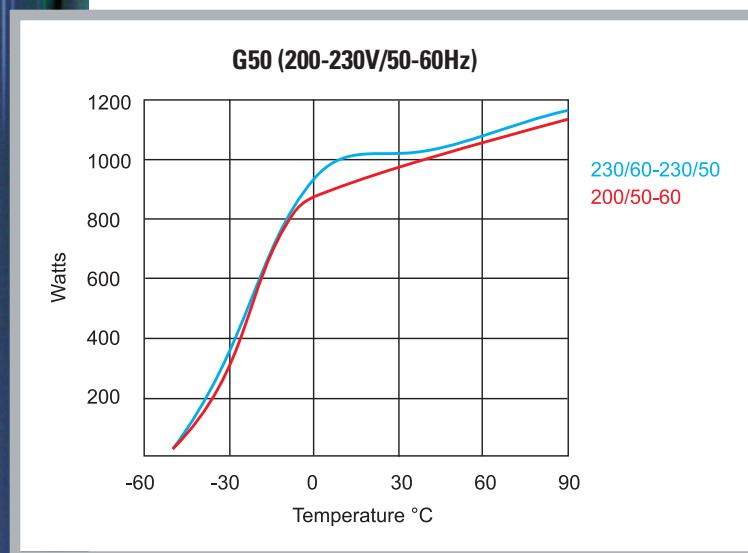
G50 (200-230V/50-60Hz)

230/60-230/50
200/50-60

Specifications obtained at sea level using water (above +5°C to +90°C) or a fluid with a specific heat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect Performance. Pump specifications are nominal values of ±10%. Specifications are for reference only and are subject to change.

ULT Circulators

Typical applications:

- Jacketed reaction vessels
- Material testing
- Analytical instrumentation
- Calibration
- Condensers
- Crystallization

What's Included: Communication cables, bridge with gasket and thumbscrews, 8mm and 12mm hose barbs with clamps, external circulation plumbing, 6-ft. power cord, sealed work area cover, 3-year warranty

Controller ▼ Bath ▶	G50
AC200	-50 to 200°C
PC200	-50 to 200°C
Maximum bath volume (liters)*	12
Cooling capacity at 20°C	1000W
Work area (DxWxL) (mm/in)	200 x 208.5 x 104.2 / 7.9 x 8.8 x 4.75
Net Weight (kg/lb)	53 / 117
Compliance	CE/ROHS/WEEE

Ordering Information		
Model	G50	
Voltages	230V/50Hz	200-230V/60Hz, 200V/50Hz
AC200 plus Bath	156-6501	–
PC200 plus Bath	156-6501	157-6509

*Bath volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.

Thermo Scientific SAHARA Series Heated Bath Circulators

When your application requires high temperature rely on these durable, seamless stainless steel baths.

Available in capacities from 5 to 51 liters with a variety of work area dimensions to meet your application needs.

- Up to 8 different controllers can be selected that best fit your application needs
- The controller can be indexed 90° for easier viewing.
- Ideally suited for use with silicone oil.

▶ **Typical applications:**

- Viscometers
- Spectrophotometers
- Refractometers
- Metrology

Stainless Steel

Controller ▼ Bath ▶	S3	S7	S13	S15
SC100	Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C
SC150	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
SC150L	—	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
AC150	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
AC200	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
PC200	—	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
PC201	—	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
PC300	—	Amb +13 to 300°C	Amb +13 to 300°C	Amb +13 to 300°C
Maximum bath volume (liters)*	5	7	11	17
Work area (D x W x L) mm (in)	150 x 154.2 x 111.9 (5.9 x 6.1 x 4.4)	185 x 154.2 x 111.9 (7.3 x 6.1 x 4.4)	200 x 111.9 x 239.3 (7.9 x 4.4 x 9.4)	200 x 299.5 x 140.9 (7.9 x 11.8 x 5.5)
Net weight (kg/lb)	9.8/21.5	10.6/23.4	12.3/27	13.7/30.1
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information												
Model	S3			S7			S13			S15		
Voltages	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
SC100 plus Bath	152-1038	152-1031	152-1036	152-1078	152-1071	152-1076	152-1138	152-1131	152-1136	152-1158	152-1151	152-1156
SC150 plus Bath	153-1038	153-1031	153-1036	153-1078	153-1071	153-1076	153-1138	153-1131	153-1136	154-1158	154-1151	154-1156
SC150L plus Bath	–	–	–	154-1078	154-1071	154-1076	154-1138	154-1131	154-1136	153-1158	153-1151	153-1156
AC150 plus Bath	155-1038	155-1031	155-1036	155-1078	155-1071	155-1076	156-1138	156-1131	156-1136	154-1158	154-1151	154-1156
AC200 plus Bath	156-1038	156-1031	156-1036	156-1078	156-1071	156-1076	155-1138	155-1131	155-1136	156-1158	156-1151	156-1156
Voltages	100-115V/50-60Hz	200-230V/50-60Hz		100-115V/50-60Hz	200-230V/50-60Hz		100-115V/50-60Hz	200-230V/50-60Hz		100-115V/50-60Hz	200-230V/50-60Hz	
PC200 plus Bath	–	–	157-1072	157-1075	157-1132	157-1135	157-1152	157-1155				
PC201 plus Bath	–	–	–	158-1075	–	158-1135	–	158-1155				
PC300 plus Bath	–	–	–	159-1075	–	159-1135	–	–				

*Bath volume varies depending on the fluid used, temperature range, and items inserted into the reservoir.

Whether you need internal or external circulation, choose from a wide selection of heating bath circulators for efficient heating. Rugged and corrosion-resistant for high temperature applications up to 300°C.

What's Included: Communication cables, bridge with gasket and thumbscrews, 8mm and 12mm hose barbs with clamps, external circulation plumbing 6-ft power cord, work area cover (not included with S45 and S49), 3-year warranty

Useful accessories:
- Tap Water Cooling Coil
- Solenoid Valve for Tap Water Cooling Coil (AC200 and above)
- Auto-refill (AC200 and above)
- External Temperature Probe (AC200 and above)
- Work Area Cover (S45 and S49 only)
- Lifting Platform
- Test Tube Racks
- Fluids

S21	S30	S45	S49
Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C
Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
—	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C	Amb +13 to 150°C
Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
—	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
—	Amb +13 to 200°C	Amb +13 to 200°C	Amb +13 to 200°C
—		—	—
17	24	41	51
150 x 296.5 x 311.9 (5.9 x 11.7 x 12.3)	200 x 296.5 x 311.9 (7.9 x 11.7 x 12.3)	300 x 298.1 x 311.9 (11.8 x 11.7 x 12.3)	200 x 498 x 429.9 (7.9 x 19.6 x 16.9)
14.2/31.2	16.5/36.2	20.3/44.7	24.3/53.4
CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

S21			S30			S45			S49		
115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
152-1218	152-1211	152-1216	152-1308	152-1301	152-1306	152-1458	152-1451	152-1456	152-1498	152-1491	152-1496
153-1218	153-1211	153-1216	153-1308	153-1301	153-1306	153-1458	153-1451	153-1456	153-1498	153-1491	153-1496
			154-1308	154-1301	154-1306	154-1458	154-1451	154-1456	154-1498	154-1491	154-1496
155-1218	155-1211	155-1216	155-1308	155-1301	155-1306	155-1458	155-1451	155-1456	155-1498	155-1491	155-1496
156-1218	156-1211	156-1216	156-1308	156-1301	156-1306	156-1458	156-1451	156-1456	156-1498	156-1491	156-1496

100-115V/50-60Hz	200-230V/50-60Hz	100-115V/50-60Hz	200-230V/50-60Hz	100-115V/50-60Hz	200-230V/50-60Hz	100-115V/50-60Hz	200-230V/50-60Hz
–	–	157-1302	157-1305	157-1452	157-1455	157-1492	157-1495
–	–	–	158-1305	–	158-1455	–	158-1495
–	–	–	–	–	–	–	–

Heating Curves

Time to Temperature

S3, S7, S13 (115V/60Hz)
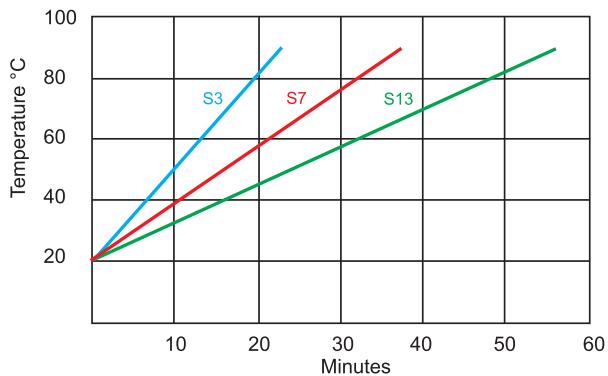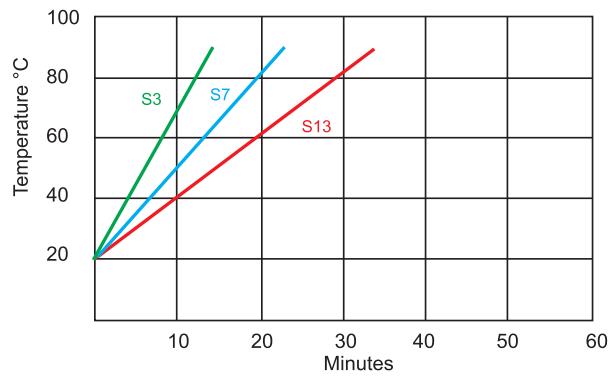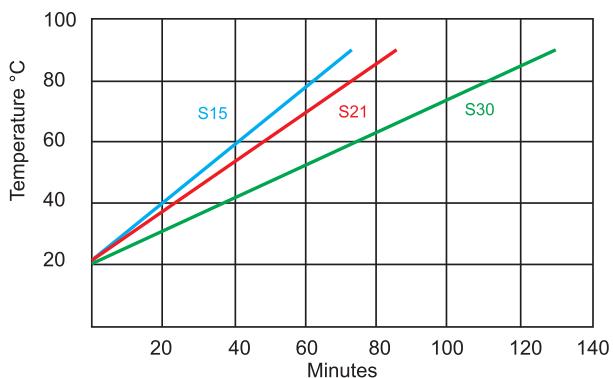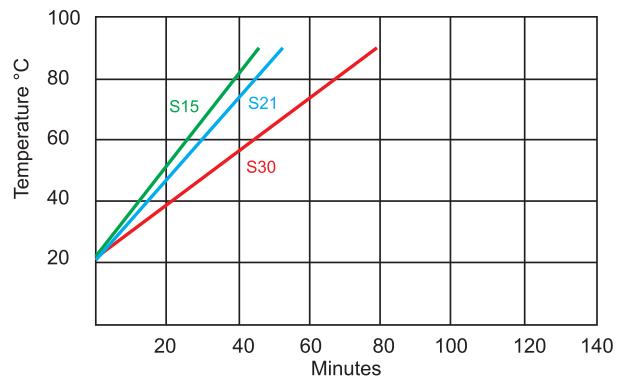
Temperature °C vs Minutes

Curves: S3, S7, S13

S3, S7, S13 (230V/60Hz)

Temperature °C vs Minutes

Curves: S3, S7, S13

S15, S21, S30 (115V/60Hz)

Temperature °C vs Minutes

Curves: S15, S21, S30

S15, S21, S30 (230V/60Hz)

Temperature °C vs Minutes

Curves: S15, S21, S30

S45, S49 (115V/60Hz)

Temperature °C vs Minutes

Curves: S45, S49

S45, S49 (230V/60Hz)

Temperature °C vs Minutes

Curves: S45, S49

Specifications obtained at sea level using water (above +5°C to +90°C) or a fluid with a specific heat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect performance. Pump specifications are nominal values of ±10%. Specifications are for reference only and are subject to change. Heat-up rates for the 100V baths witll take approvximately 25% longer than the 115V

Acrylic

Transparent Acrylic Baths

These baths are ideal when visibility of your application is required. Temperatures are maintained from ambient plus 13°C to a maximum of 80°C.

Useful accessories:

- Lifting Platform
- Tap Water Cooling Coil
- Test Tube Racks
- Fluids

Controller ▼ Bath ▶	S6T	S12T	S19T
SC100	Amb +13 to 80°C	Amb +13 to 80°C	Amb +13 to 80°C
SC150	Amb +13 to 80°C	Amb +13 to 80°C	Amb +13 to 80°C
AC150	—	Amb +13 to 80°C	Amb +13 to 80°C
AC200	—	Amb +13 to 80°C	Amb +13 to 80°C
Bath volume (liters)*	6	12	19
Work area (DxWxL) mm/in	130 x 138 x 148.9 / 5.1 x 5.4 x 5.7	130 x 302 x 148.9 / 5.1 x 11.9 x 5.7	130 x 302 x 148.9 / 5.1 x 11.9 x 5.9
Net weight (kg/lb)	6.3 / 13.9	7.3 / 16.1	8.7 / 19.1
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	S6T			S12T			S19T		
Voltages	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
SC100 plus Bath	152-2068	152-2061	152-2066	152-2128	152-2121	152-2126	152-2198	152-2191	152-2196
SC150 plus Bath	153-2068	153-2061	153-2066	153-2128	153-2121	153-2126	153-2198	153-2191	153-2196
AC150 plus Bath	–	–	–	155-2128	155-2121	155-2126	155-2198	155-2191	155-2196
AC200 plus Bath	–	–	–	156-2128	156-2121	156-2126	156-2198	156-2191	156-2196

*Bath volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.

PPO

Polyphenylene Oxide (PPO)

An economical alternative to stainless steel, these modified polyphenylene oxide baths are thermally resistant up to 100°C and deliver exceptional temperature performance with operational savings. Temperatures are maintained from ambient plus 13°C to 100°C.

Useful accessories:

- Tap Water Cooling Coil
- Solenoid Valve for Tap Water Cooling Coil (AC200 and above)
- Auto-refill (AC200 and above)
- External Temperature Probe (AC200 and above)
- Work Area Cover
- Lifting Platform
- Test Tube Racks
- Fluids

Controller ▼ Bath ▶	S5P	S14P	S21P
SC100	Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C
SC150	Amb +13 to 100°C	Amb +13 to 100°C	Amb +13 to 100°C
AC150	—	Amb +13 to 100°C	Amb +13 to 100°C
AC200	—	Amb +13 to 100°C	Amb +13 to 100°C
Bath volume (liters)*	5	14	21
Work area (D x W x L) mm/in	130 x 132 x 133.4 / 5.1 x 5.2 x 5.6	130 x 300 x 163 / 5.1 x 11.8 x 6.4	130 x 300 x 353 / 5.1 x 11.8 x 13.9
Net weight (kg/lb)	5.1 / 11.2	6.3 / 13.9	6.6 / 14.5
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

	S5P			S14P			S21P		
Voltages	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz	115V/60Hz	230V/50Hz	100V/50-60Hz
SC100 plus Bath	152-3058	152-3051	152-3056	152-3148	152-3141	152-3146	152-3218	152-3211	152-3216
SC150 plus Bath	153-3058	153-3051	153-3056	153-3148	153-3141	153-3146	153-3218	153-3211	153-3216
AC150 plus Bath	–	–	–	155-3148	155-3141	155-3146	155-3218	155-3211	155-3216
AC200 plus Bath	–	–	–	156-3148	156-3141	156-3146	156-3218	156-3211	156-3216

*Bath volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.

Accessories

Part #	Racks and inserts
160-0002	Universal stainless steel rack for bath types A5B, A10B, A24B, S49, S19T, S14P, S21P. Two inserts with different sizes of holes can be varied in height within the rack.
160-0003	2x Rack inserts for 86 test tubes, of 10mm Ø
160-0004	2x Rack insert 46 test tubes, of 16mm Ø
160-0005	2x Rack insert for 23 test tubes, of 25mm Ø
160-0006	2x Rack inserts 283x145mm rack without holes
160-0079	Universal stainless steel rack for bath types A25B, A40, S21, S30. 160x145mm. Includes two inserts with different sizes of holes
160-0080	2x Rack inserts for 86 test tubes, of 10mm Ø
160-0081	2x Rack insert for 46 test tubes, of 16mm Ø
160-0082	2x Rack insert rack for 23 test tubes, of 25mm Ø
160-0083	2x Rack inserts without holes
160-0026	Universal stainless steel rack for bath types S13, S12T, S15. 160x100mm, two inserts with different size holes can be varied in height within the rack.
160-0084	2x Rack inserts for 86 test tubes, of 10mm Ø
160-0085	2x Rack insert for 46 test tubes, of 16mm Ø
160-0086	2x Rack insert for 23 test tubes, of 25mm Ø
160-0087	2x Rack inserts without holes
160-0066	Rack insert for 30 test tubes, 4.2mm Ø
160-0067	Rack insert for 30 test tubes 2mm Ø

Part #	Bridges
160-0007	Extension bridge for S15, S21, S30, S45 liftplate
160-0077	Extension bridge for S15, S21, S30, S45
160-0078	Stainless steel bridge to hold SC or AC controller on the W13, W15, W26, W45, W46 baths
160-0009	Extension bridge for S49 liftplate
160-0036	Extension bridge for A5B, A10B liftplate
160-0018	Adustable bridge in widths between 300 and 800 mm, for SC, AC & PC immersion circulators

Part #	Lifting Platforms
160-0011	Lifting platform, stainless steel for S21, S30, S45
160-0012	Lifting platform, stainless steel for S15
160-0013	Lifting platform stainless steel for S49
160-0121	Lifting Platform, stainess steel for A5B
160-0142	Lifting Platform, stainess steel for A10B

Part #	Tap Water Cooling Coils
160-0014	Tap water cooling coil for SC100, SC150, AC150, or AC200 with S13, S15, S21, S30, S45, S49, S14P, S21P, S12T, S19T
160-0015	Tap water cooling coil for the SC100 or SC150 immersion circulator with a clamp
160-0016	Tap water cooling coil for the SC150L controller with S13, S15, S30, S45, S49
160-0017	Tap water cooling coil for the SC150L immersion circulator with a clamp
160-0090	Tap water cooling coil for SC100 or SC 150 controller with S5P
160-0091	Tap water cooling coil for SC100 or SC150 controller with S6T
160-0092	Tap water cooling coil for SC100 or SC150 controller with S3 or S7
160-0093	Tap water cooling coil for SC150L controller with S7
160-0094	Tap water cooling coil for AC150 or AC200 controller with S3 or S7

Part #	Connectivity
160-0027	Communication extension board for RS232
160-0075	Communication extension board for RS485
160-0076	Communication extension board for Ethernet/LAN
160-0033	Interface Cable USB 1.8m long
160-0034	Interface Cable RS232 and RS485 5 feet long
160-0035	Interface Cable LAN 2m long

Part #	Miscellaneous Accessories
160-0070	Trolley w/castors for A40
160-0071	Trolley w/castors for A28 or A25
160-0088	Cage for SC100 or SC150 immersion circulator
160-0089	Cage for SC150L immersion circulator
160-0045	Displacement body for A10
160-0105	Displacement body for A25 or A40
160-0106	Displacement body for A28

Part #	Covers / Lids
160-0020	Stainless steel bath lid for S5P
160-0021	Stainless steel bath lid for S14P
160-0022	Stainless steel bath lid for S21P bath
160-0037	Stainless steel bath lid, for S15
160-0038	Stainless steel bath lid, for S21, S30, S45
160-0040	Stainless steel bath lid, for S49
160-0041	Stainless steel bath lid, for A5B
160-0042	Stainless steel bath lid, for A10B
160-0100	Work area cover leveling device for A10
160-0101	Work area cover leveling device for A28 or A28F
160-0102	Work area cover leveling device for S3 or S7
160-0103	Work area cover leveling device for S13

Part #	Tubing Accessories
160-0028	Adapter M16x1 female/1/4"NPTF male
160-0029	Adapter M16x1 male/1/4"NPTF male

Part #	Temperature Sensors
333-0818	Sensor BT Pt100 Sensor, teflon coated, flexible, 300mm long, Ø 3mm, cable length 3m

Part #	Heat Transfer Fluids
128-009	Ethylene Glycol, 5 Gallons (approx. 19 Liters)

Part #	Heat Transfer Fluids
422000000004	NEScom 4.0 software package
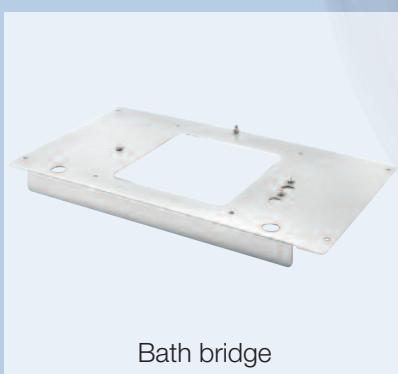
Stainless steel rack

Bath bridge

Tap water cooling coil

Bath lid

Dimensions

Thermo Scientific SAHARA Acrylic Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S 6T	352.7 x 150.7 x 407	13.9 x 5.9 x 16
SC150-S 6T	352.7 x 150.7 x 407	13.9 x 5.9 x 16
SC100-S 12T	354.7 x 314.7 x 348	14 x 12.4 x 13.7
SC150-S 12T	354.7 x 314.7 x 348	14 x 12.4 x 13.7
AC150-S 12T	392.7 x 314.7 x 348	15.5 x 12.4 x 13.7
AC200-S 12T	392.7 x 314.7 x 348	15.5 x 12.4 x 13.7
SC100-S 19T	354.7 x 314.7 x 526	14 x 12.4 x 20.7
SC150-S 19T	354.7 x 314.7 x 526	14 x 12.4 x 20.7
AC150-S 19T	392.7 x 314.7 x 526	15.5 x 12.4 x 20.7
AC200-S 19T	392.7 x 314.7 x 526	15.5 x 12.4 x 20.7

Thermo Scientific SAHARA PPO Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S 5P	359.5 x 190 x 388	14.2 x 7.5 x 15.3
SC150-S 5P	359.5 x 190 x 388	14.2 x 7.5 x 15.3
SC100-S 14P	360.5 x 358 x 452	14.2 x 14.1 x 17.8
SC150-S 14P	360.5 x 358 x 452	14.2 x 14.1 x 17.8
AC150-S 14P	398.5 x 358 x 452	15.7 x 14.1 x 17.8
AC200-S 14P	398.5 x 358 x 452	15.7 x 14.1 x 17.8
SC100-S 21P	360.5 x 358 x 642	14.2 x 14.1 x 25.3
SC150-S 21P	360.5 x 358 x 642	14.2 x 14.1 x 25.3
AC150-S 21P	398.5 x 358 x 642	15.7 x 14.1 x 25.3
AC200-S 21P	398.5 x 358 x 642	15.7 x 14.1 x 25.3

Thermo Scientific SAHARA Stainless Steel Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S 3	406.2 x 234.8 x 428.4	16 x 9.2 x 16.7
SC150-S 3	406.2 x 234.8 x 428.4	16 x 9.2 x 16.7
AC150-S 3	444.2 x 234.8 x 428.4	17.5 x 9.2 x 16.7
AC200-S 3	444.2 x 234.8 x 428.4	17.5 x 9.2 x 16.7
SC100-S 7	456.2 x 234.8 x 428.4	18 x 9.2 x 16.7
SC150-S 7	456.2 x 234.8 x 428.4	18 x 9.2 x 16.7
AC150-S 7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
AC200-S 7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC200-S 7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC201-S 7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC300-S 7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
SC100-S 13	456.2 x 320.8 x 428.4	18 x 12.6 x 16.7
SC150-S 13	456.2 x 320.8 x 428.4	18 x 12.6 x 16.7
AC150-S 13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
AC200-S 13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC200-S 13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC201-S 13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC300-S 13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
SC100-S 15	456.2 x 380.8 x 457.4	18 x 15 x 18
SC150-S 15	456.2 x 380.8 x 457.4	18 x 15 x 18
SC150L- S 15	456.2 x 380.8 x 457.4	18 x 15 x 18
AC150-S 15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
AC200-S 15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
PC200-S 15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
PC201-S 15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
SC150-S 21	408.5 x 380.8 x 628.4	16.1 x 15 x 24.7
SC150- S 21	408.5 x 380.8 x 628.4	16.1 x 15 x 24.7
AC150-S 21	446.5 x 380.8 x 628.4	17.6 x 15 x 24.7
AC200-S 21	446.5 x 380.8 x 628.4	17.6 x 15 x 24.7

Thermo Scientific SAHARA Stainless Steel Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S 30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
SC150-S 30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
SC150L-S 30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
AC150-S 30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
AC200-S 30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
PC200-S 30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
PC201-S 30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
SC100-S 45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
SC150-S 45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
SC150L-S 45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
AC150-S 45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
AC200-S 45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
PC200-S 45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
PC201-S 45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
SC100-S 49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
SC150-S 49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
SC150L-S 49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
AC150-S 49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
AC200-S 49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
PC200-S 49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
PC201-S 49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4

Thermo Scientific ARCTIC Refrigerated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-A 5B	470.7 x 428.5 x 738	18.5 x 16.9 x 29.1
SC150-A 5B	470.7 x 428.5 x 738	18.5 x 16.9 x 29.1
AC150-A 5B	508.7 x 428.5 x 738	20 x 16.9 x 29.1
AC200-A 5B	508.7 x 428.5 x 738	20 x 16.9 x 29.1
SC100-A 10B	470.7 x 428.5 x 913	18.5 x 16.9 x 35.9
SC150-A 10B	470.7 x 428.5 x 913	18.5 x 16.9 x 35.9
AC150-A 10B	508.7 x 428.5 x 913	20 x 16.9 x 35.9
AC200-A 10B	508.7 x 428.5 x 913	20 x 16.9 x 35.9
SC100-A 24B	573.7 x 765 x 610	22.6 x 30.1 x 24
SC150-A 24B	573.7 x 765 x 610	22.6 x 30.1 x 24
SC150L-A 24B	573.7 x 765 x 610	22.6 x 30.1 x 24
AC150-A 24B	611.7 x 765 x 610	24.1 x 30.1 x 24
AC200-A 24B	611.7 x 765 x 610	24.1 x 30.1 x 24
PC200-A 24B	611.7 x 765 x 610	24.1 x 30.1 x 24
SC100-A 25B	739.7 x 324 x 541	29.1 x 12.8 x 21.3
SC150-A 25B	739.7 x 324 x 541	29.1 x 12.8 x 21.3
AC150-A 25B	777.7 x 324 x 541	30.6 x 12.8 x 21.3
AC200-A 25B	777.7 x 324 x 541	30.6 x 12.8 x 21.3

Thermo Scientific GLACIER Ultra Low Temperature Refrigerated Circulators

Model	Millimeters (H x W x L)	Inches (H x W x L)
AC150-G 50	851.1 x 418.8 x 554	33.5 x 16.5 x 21.8
AC200-G 50	851.1 x 418.8 x 554	33.5 x 16.5 x 21.8
PC200-G 50	851.1 x 418.8 x 554	33.5 x 16.5 x 21.8

Thermo Scientific ARCTIC Refrigerated Circulators

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-A 10	631.7 x 220 x 414	24.9 x 8.7 x 16.3
SC150- A 10	631.7 x 220 x 414	24.9 x 8.7 x 16.3
AC150- A 10	669.7 x 220 x 414	26.4 x 8.7 x 16.3
AC200- A 10	669.7 x 220 x 414	26.4 x 8.7 x 16.3
SC100-A 25	710.7 x 273 x 483	28 x 10.7 x 19
SC150-A 25	710.7 x 273 x 483	28 x 10.7 x 19
SC150L-A 25	710.7 x 273 x 483	28 x 10.7 x 19
AC150-A 25	748.7 x 273 x 483	29.5 x 10.7 x 19
AC200-A 25	748.7 x 273 x 483	29.5 x 10.7 x 19
PC200-A 25	748.7 x 273 x 483	29.5 x 10.7 x 19
SC100-A 28	710.7 x 273 x 483	28 x 10.7 x 19
SC150- A 28	710.7 x 273 x 483	28 x 10.7 x 19
SC150L-A 28	710.7 x 273 x 483	28 x 10.7 x 19
AC150-A 28	748.7 x 273 x 483	29.5 x 10.7 x 19
AC200-A 28	748.7 x 273 x 483	29.5 x 10.7 x 19
PC200- A 28	748.7 x 273 x 483	29.5 x 10.7 x 19
SC100-A 28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
SC150-A 28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
SC150L-A 28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
AC150-A 28F	557.7 x 514 x 426	22 x 20.2 x 16.8
AC200-A 28F	557.7 x 514 x 426	22 x 20.2 x 16.8
PC200-A 28F	557.7 x 514 x 426	22 x 20.2 x 16.8
SC150-A 40	748.7 x 385 x 519	29.5 x 15.2 x 20.4
SC150L-A 40	748.7 x 385 x 519	29.5 x 15.2 x 20.4
AC150-A 40	786.7 x 385 x 519	31 x 15.2 x 20.4
AC200-A 40	786.7 x 385 x 519	31 x 15.2 x 20.4
PC200-A 40	786.7 x 385 x 519	31 x 15.2 x 20.4

Service and Support

Support and Maintenance

Have a question or concern, contact our Temperature Control Experts!

Technical Questions

Our technical service team is ready to answer any of your questions on your existing systems.

Customer Service

Let our professional and experienced customer service representatives guide you when choosing your temperature control needs. They will evaluate your needs, develop a system recommendation, and coordinate your order and shipment.

New Lab Construction

We offer the most comprehensive line of temperature control products in the world. We can configure the temperature control system that is a perfect fit for your new lab's needs.

Service & Support

Maintaining your temperature control system is crucial to the overall productivity of your laboratory, the long-term performance of the system and the total cost of ownership. We offer a variety of services to suit your individual needs. Professional service delivers improved productivity, convenience, peace-of-mind, and budget control.

Installation

Factory-trained technicians can install your system to ensure it operates with precision. With our services you will receive:

- Installation scheduled at your convenience

- Assurance that all technical specifications are met

- Practical hands-on instructions

Onsite and Depot Repair

Should an unexpected repair event occur, you will be covered with our on-site and dept repair services. Certified and experienced technicians conduct rapid failure detection and analysis. Prior to return, performance tests are conducted to insure factory specifications are met.

Extended Warranty and Repair Services

Control your cost of ownership by securing an extended warranty or repair service plan. Continue to receive the same benefits as the original warranty, giving you piece of mind.

Controller Swap Program: in the event of that the controller fails, it can be exchanged for a new controller - at no cost to you - for the life of the warranty.

Preventative Maintenance/Calibration

Extend the functional integrity of your system via a scheduled preventative maintenance and calibration service. Regularly scheduled preventative maintenance can help prevent premature failure of critical components like pumps, compressors and fan motors.

Please ask your local sales representative for additional information about service offerings in your area.

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