Thermo Scientific Refrigerated and Heated Bath Circulators

Designed to meet your temperature control needs with advanced, configurable solutions

your success circulates
at every degree

Thermo SCIENTIFIC

Thermo Scientific temperature control products represent a giant leap forward in

performance, configurability
and **technology**

**Now you can configure
a flexible, cost-effective
temperature control solution
for any application.**

- Pharmaceutical
- BioTech
- Chemical/Petrochemical
- Food and Beverage
- QA/QC
- Research and Development
- Analytical Instruments

Environment-friendly Design

All units are RoHS/WEEE compliant

Green Tip
SAVE ENERGY
Save up 70% on energy
costs when using
the Energy Savings mode*

*Compared to standard operating mode

Safe Operation

Units are CE Compliant (UL pending) ensuring safe operation.

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.

The controller can be indexed 90° for optimal viewing.

- Tool-less setup

Table of Contents

4

Factors to consider before selecting your temperature control product

1. 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.

2. 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 Thermo Scientific™ refrigerated or heated bath circulators. All systems and immersion circulators come standard with the external circulation connections. Whether you have present or future use for external circulation you can always modify your refrigerated or heated bath circulator or immersion circulator to accomplish this in a few simple steps.

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

Decide between 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.

4. 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 plus 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 may lose heat quickly and may be able to accurately temperature control below the ambient plus 13°C threshold. Utilize a 'Cooling Coil' accessory or a refrigerated bath circulator to work in near ambient temperature conditions.

Q&A

Q: **Does my Thermo Scientific unit come with external circulation connections?**

A: **Yes.** The external circulation connections 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.

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. 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:

Immersion Circulator	100-115V 50-60Hz	100V 50-60Hz	115V 60Hz	200-230V 50-60Hz	230V 50Hz
SC100 SC150 SC150L	–	0.9kW @ 100V	1.2kW @ 115V	–	2kW @230V
AC150 AC200	–	0.9kW @ 100V	1.2kW @ 115V	2kW @ 230V	2kW @230V
PC200	1.2kW @ 115V	–	–	2kW @ 230V	–
PC201 PC300	–	–	–	3kW @ 230V	–

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.

- 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: **When using silicone oil 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. Based on our testing we anticipate that for every 100°C in temperature within the bath that the fluidwill expand 10%. However, our tests show 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.

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.

Thermo Scientific Immersion Circulator Comparison Table

1). Choose the immersion circulator that best fits your specific application requirements.
2). Match the immersion circulator to a refrigerated or heated bath.

Model	Thermo Scientific STANDARD Series			Thermo Scientific ADVANCED Series		Thermo Scientific 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 (kW) 230V/115V	2/1.2	2/1.2	2/1.2	2/1.2	2/1.2	2/1.2	3**	3**
Maximum flow rate (l/min)	17	17	17	20	20	24	24	24
Maximum pressure (mbar/psi)	300/4.35	300/4.35	300/4.35	475/6.89	475/6.89	560/8.12	560/8.12	560/8.12
Maximum suction (mbar/psi)				330/4.78	330/4.78	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 set point temperatures	5	5	5	5	5	5	5	5
Ramp programs					1	10	10	10
Real time clock	•	•	•	•	•	•	•	•
Multiple languages	3	3	3	5	5	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%.

Immersion Circulators

The Thermo Scientific STANDARD, ADVANCED, and PREMIUM Series heated immersion circulators offer outstanding, precise temperature control. Whether used alone or matched up with one of the refrigerated or heated baths, we offer a temperature control solution designed to meet your needs.

The STANDARD (SC) Series

Choose from three versions.

Designed for ease-of-use with powerful pumping and heating capacities for closed loop applications. This economical choice offers solid performance for applications ranging from ambient plus 13°C to 150°C.

The ADVANCED (AC) Series

Choose from two versions.

The ADVANCED series offers greater pumping performance, ramp programming, application alarms, and temperature ranges from ambient plus 13°C to 200°C.

The PREMIUM (PC) Series

Choose from three versions.

Ideal for applications that require sophisticated control, multiple ramp programming, and extreme temperature performance ranging from ambient plus 13°C to 300°C.

What's included:

8mm and 12mm hose adapters for external circulation, pump plug for external circulation and 6-ft. power cord.

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

Immersion Circulator	Order No.				
Voltage	100-115V/ 50-60Hz	100V/ 50-60Hz	115V/ 60Hz	200-230V/ 50-60Hz	230V/ 50Hz
SC 100		1520006	1520008		1520001
SC 100 w/clamp		1520016	1520018		1520011
SC 150		1530006	1530008		1530001
SC 150 w/clamp		1530016	1530018		1530011
SC 150L		1540006	1540008		1540001
SC 150L w/clamp		1540016	1540018		1540011
AC 150		1550006	1550008	1550001	
AC 150 w/bridge		1550026	1550028	1550021	
AC 200		1560006	1560008	1560001	
AC 200 w/bridge		1560026	1560028	1560021	
PC 200	1570002			1570005	
PC 200 w/bridge	1570022			1570025	
PC 201				1580005	
PC 201 w/bridge				1580025	
PC 300				1590005	
PC 300 w/bridge				1590025	

Useful accessories:

- Tap water cooling coil
- Solenoid valve for use with the tap water cooling coil (for AC200 controller and up)
- Pump/heater coil cage (SC100, SC150, SC150L controller only)
- Universal adjustable bridge
- External temperature probe (for AC150 controller and up)

Certification: CE

Compliance: RoHS and WEEE

▶STANDARD

SC100

- Maximum temperature: 100°C
- Five 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 visual alarm
- Auto-Restart feature after power failure

SC150

All of the SC100 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 SC150 immersion circulator features, PLUS–

- Increased immersion depth to accommodate larger or deeper baths

▶ADVANCED

AC150

All STANDARD immersion circulator features, PLUS–

- Maximum temperature: 150°C
- Pump speed adjustment to three levels for turbulence control
- Powerful force and 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
- Five languages (English, German, French, Spanish, Italian)

Green Tip
SAVE ENERGY
when using the Energy Savings mode*

AC200

All of the AC150 immersion circulator features, PLUS–

- Maximum temperature: 200°C
- One ramp program
- On/Off timer with real time clock for time-critical applications
- USB port
- Analog I/O option
- Multi-function port

▶PREMIUM

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)
- Ten ramp programs

PC201

All of the PC200 immersion circulator features, PLUS–

- 3.0 kW heater for faster time to temperature
- All stainless steel pump with ceramic rotors

PC300

All of the PC201 immersion circulator features, PLUS–

- Maximum temperature: 300°C

*Compared to standard operating mode

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

Outstanding cooling power, expansive temperature ranges, powerful force/suction pumps, and sophisticated digital control technology designed 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.
- The controller can be indexed 90° for easier viewing.

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

Controller ↑　　　Bath ▶	A10	A25
SC100	-10 to 100°C	-25 to 100°C
SC150	-10 to 100°C	-25 to 150°C
SC150L	—	-25 to 150°C
AC150	-10 to 100°C	-25 to 150°C
AC200	-10 to 100°C	-25 to 200°C
PC200	—	-25 to 200°C
Cooling capacity at 20°C 230V/115V	240W	500W
Maximum bath volume (liters)*	6	12
Work area (DxWxL) mm/in	150 x 136.7 x 123.5 / 5.9 x 5.4 x 4.9	200 x 173 x 183.7 / 7.9 x 6.8 x 7.2
Net weight (kg/lb)	27.5/60.6	36.1/79.5
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	A10			A25		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60Hz	230/50	100/50-60
SC100 plus Bath	1525108	1525101	1525106	1525258	1525251	1525256
SC150 plus Bath	1535108	1535101	1535106	1535258	1535251	1535256
SC150L plus Bath	–	–	–	1545258	1545251	1545256
AC150 plus Bath	1555108	1555101	1555106	1555258	1555251	1555256
AC200 plus Bath	1565108	1565101	1565106	1565258	1565251	1565256
PC200 plus Bath	–	–	–	1575258	1575251	1575256

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

8

Bath Circulators
-40°C to 200°C

What's Included: 8mm and 12mm hose adapters for external circulation, 6-ft. power cord and work area cover.

Useful Accessories:

- Fluid Displacement Block
- Auto-refill (AC200 controller and above)
- Trolley (A25, A28, and A40 models only)
- External Temperature Probe (AC150 controller and above)
- Fluids

With heated tank top designed to avoid ice build up

Controller ⬆ Bath ▶	A28	A28F	A40
SC100	-28 to 100°C	-28 to 100°C	—
SC150	-28 to 150°C	-28 to 150°C	-28 to 150°C
SC150L	-28 to 150°C	-28 to 150°C	-28 to 150°C
AC150	-28 to 150°C	-28 to 150°C	-28 to 150°C
AC200	-28 to 200°C	-28 to 200°C	-40 to 200°C
PC200	-28 to 200°C	-28 to 200°C	-40 to 200°C
Cooling capacity at 20°C 230V/115V	320W	320W	900W
Maximum bath volume (liters)*	10	10	12
Work area (DxWxL) mm/in	200 x 173 x 129 / 7.9 x 6.8 x 5.1	200 x 173 x 129 / 7.9 x 6.8 x 5.1	200 x 173 x 183.7 / 7.9 x 6.8 x 7.2
Net weight (kg/lb)	36/79.1	35.6/78.3	55.2/121.5
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	A28			A28F			A40		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1525288	1525281	1525286	1524288	1524281	1524286	–	–	–
SC150 plus Bath	1535288	1535281	1535286	1534288	1534281	1534286	1535408	1535401	1535406
SC150L plus Bath	1545288	1545281	1545286	1544288	1544281	1544286	1545408	1545401	1545406
AC150 plus Bath	1555288	1555281	1555286	1554288	1554281	1554286	1555408	1555401	1555406
AC200 plus Bath	1565288	1565281	1565286	1564288	1564281	1564286	1565408	1565401	1565406
PC200 plus Bath	1575288	1575281	1575286	1574288	1574281	1574286	1575408	1575401	1575406

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

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 consumption 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.

Typical applications:

- Calibration
- Bioreactors
- Rotary Evaporators
- Condensers
- Sample/Material Testing
- Sample/Material Preparation
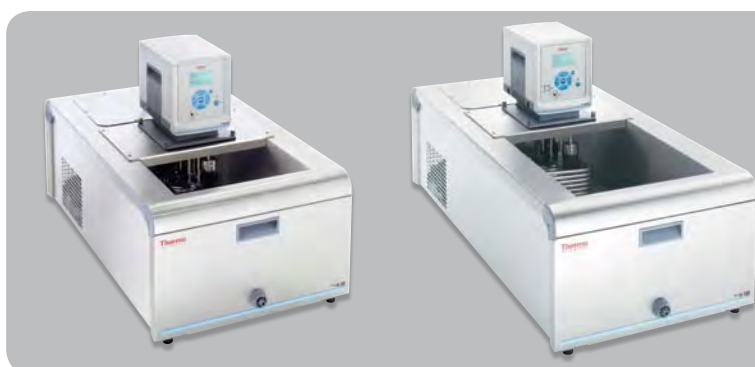
Controller ↑ Bath ▶	A5B**	A10B**
SC100	-5 to 100°C	-10 to 100°C
SC150	-5 to 100°C	-10 to 100°C
SC150L	—	—
AC150	-5 to 100°C	-10 to 100°C
AC200	-5 to 100°C	-10 to 100°C
PC 200	—	—
Cooling capacity at 20°C 230V/115V	200W	250W
Maximum bath volume (liters)*	21	30
Work area (D x W x L) mm/in	200 x 297.2 x 190 / 7.9 x 11.7 x 7.5	200 x 297.2 x 365 / 7.9 x 11.7 x 13.4
Net weight (kg/lb)	40/88.9	44.5/97.9
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	A5B			A10B		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1524058	1524051	1524056	1524108	1524101	1524106
SC150 plus Bath	1534058	1534051	1534056	1534108	1534101	1534106
SC150L plus Bath	–	–	–	–	–	–
AC150 plus Bath	1554058	1554051	1554056	1554108	1554101	1554106
AC200 plus Bath	1564058	1564051	1564056	1564108	1564101	1564106
PC200 plus Bath	–	–	–	–	–	–

*Fluid volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.
** Work area cover must be purchased separately.

Bath Circulators
-25°C to 200°C

What's Included: 8mm and 12mm hose adapters for external circulations and a 6-ft. power cord. The A24B and A25B models include the work area cover.

Useful Accessories:

- Auto-refill (AC200 controller and above)
- External Temperature Probe (AC150 controller and above)
- Work Area Cover (for A5B and A10B models that do not come with cover included)
- Lifting Platform
- Test Tube Racks
- Fluids

See page 22 for complete list of available accessories. Overall dimensions can be found on page 26-27.

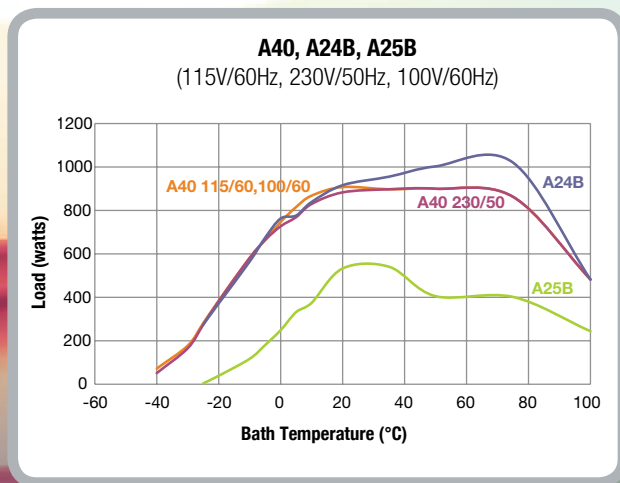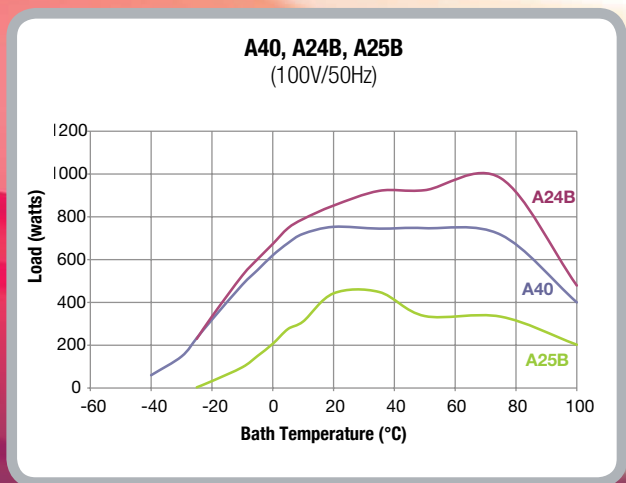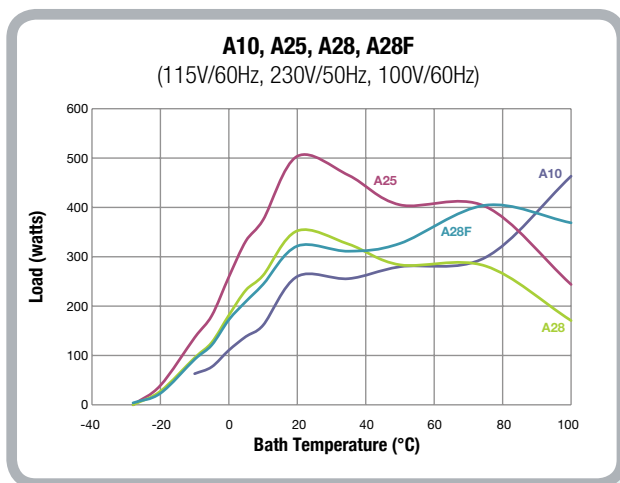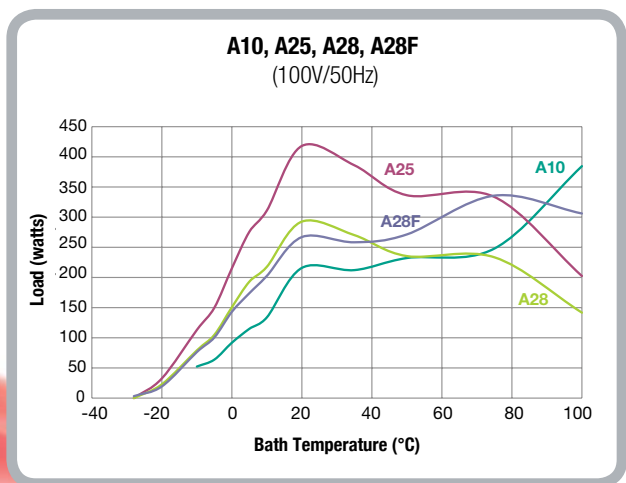| Controller ↑ Bath ▶	A24B	A25B
SC100	-24 to 100°C	-25 to 100°C
SC150	-24 to 150°C	-25 to 150°C
SC150L	-24 to 150°C	—
AC150	-24 to 150°C	-25 to 150°C
AC200	-24 to 200°C	-25 to 200°C
PC 200	-24 to 200°C	—
Cooling capacity at 20°C 230V/115V	900W	500W
Maximum bath volume (liters)*	27	21
Work area (DxWxL) mm/in	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
Net weight (kg/lb)	58.6/128.9	42.3/93.1
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	A24B			A25B		
Voltages (V/Hz)	**115/60**	**230/50**	**100/50-60**	**115/60**	**230/50**	**100/50-60**
SC100 plus Bath	1524248	1524241	1524246	1524258	1524251	1524256
SC150 plus Bath	1534248	1534241	1534246	1534258	1534251	1534256
SC150L plus Bath	1544248	1544241	1544246	–	–	–
AC150 plus Bath	1554248	1554241	1554246	1554258	1554251	1554256
AC200 plus Bath	1564248	1564241	1564246	1564258	1564251	1564256
PC200 plus Bath	1574248	1574241	1574246	–	–	–

*Fluid volume varies depending on the fluid used, temperature range, and items inserted in the reservoir.
** Work area cover must be purchased separately.

Performance Curves for Refrigerated Baths and Circulators

Cooling Capacity

A5B, A10B
(100V/50Hz)

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

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

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

A40, A24B, A25B
(100V/50Hz)

A40, A24B, A25B
(115V/60Hz, 230V/50Hz, 100V/60Hz)
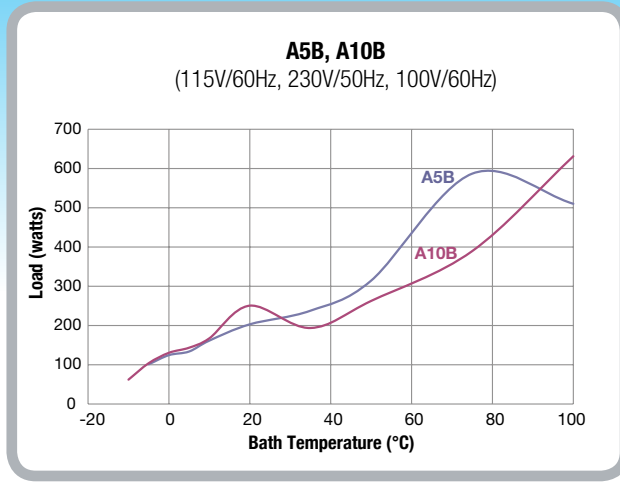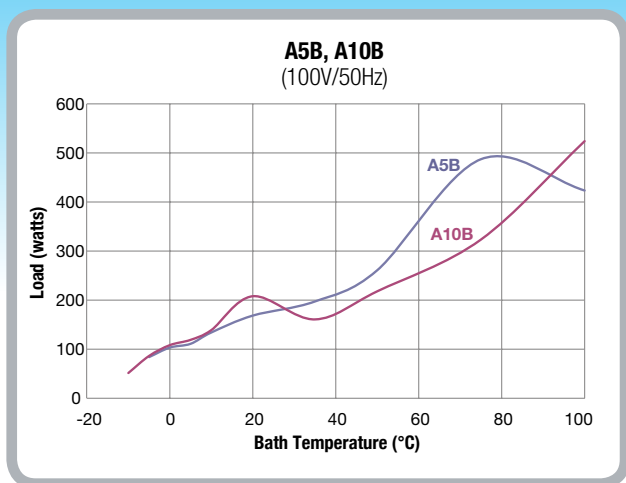
Performance Curves

Performance Curves for Refrigerated Baths and Circulators

Time to Temperature – Cooling
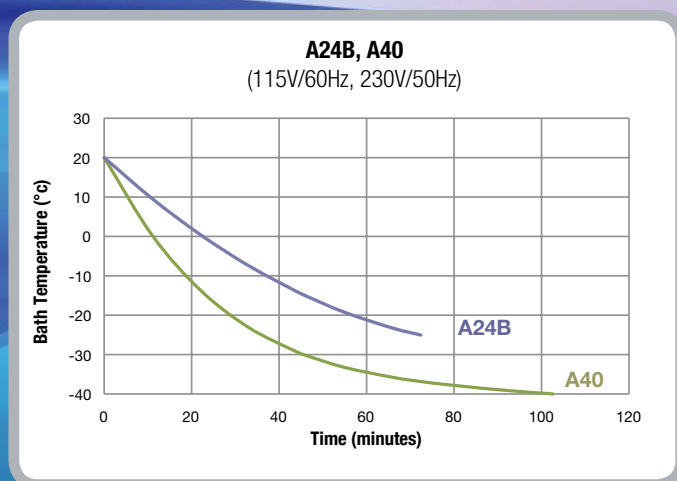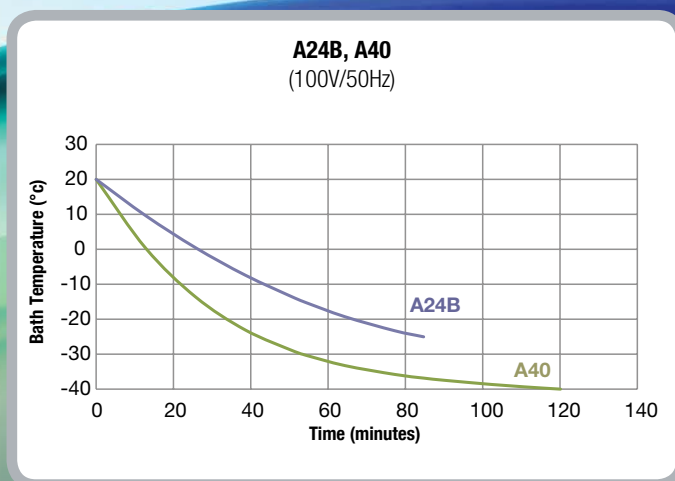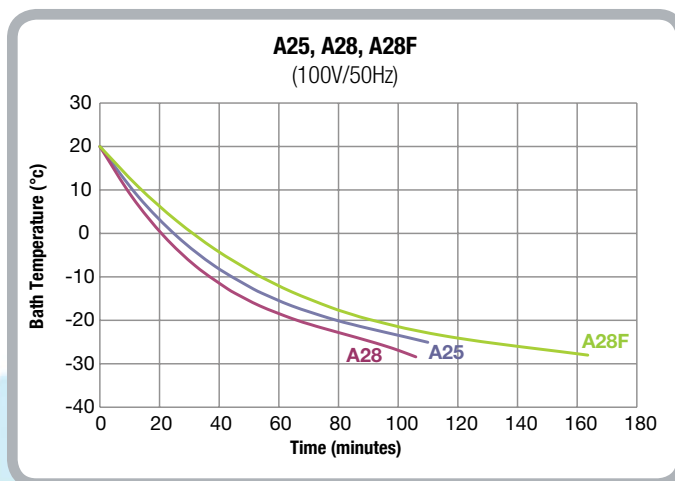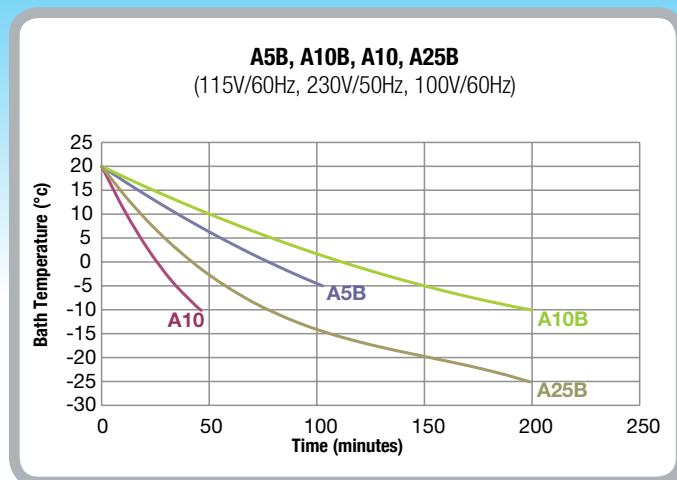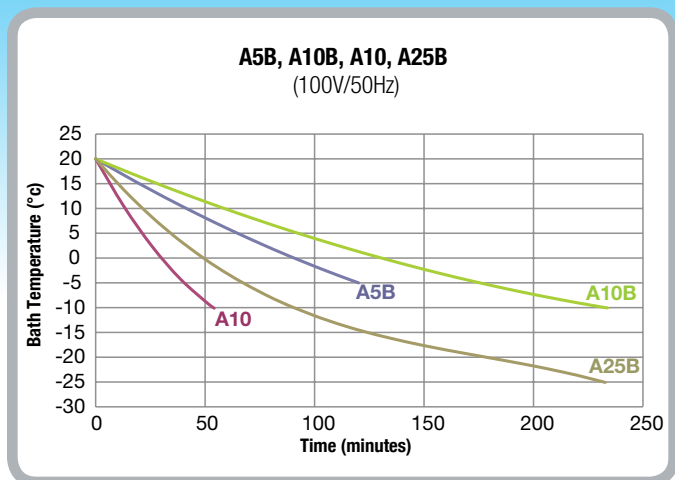
A5B, A10B, A10, A25B
(100V/50Hz)

A5B, A10B, A10, A25B
(115V/60Hz, 230V/50Hz, 100V/60Hz)

A25, A28, A28F
(100V/50Hz)

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

A24B, A40
(100V/50Hz)

A24B, A40
(115V/60Hz, 230V/50Hz)

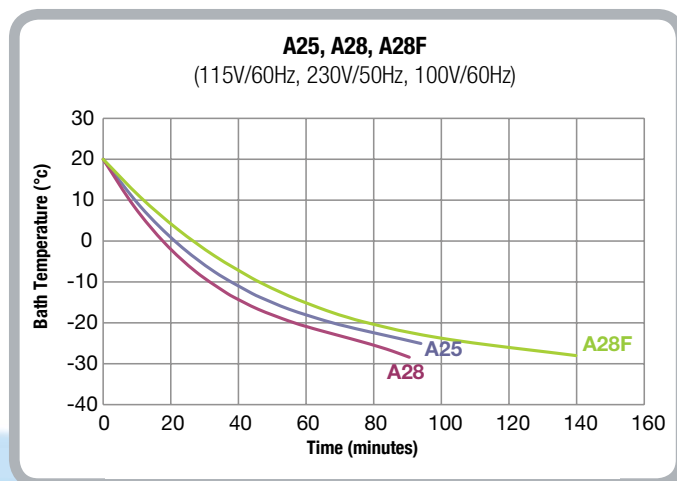Specifications obtained at sea level using water (above 5°C to 90°C) or a fluid with a specificheat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a 20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude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

Thermo Scientific GLACIER Series Ultra-low Temperature Refrigerated Bath Circulators

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

This circulator delivers high heating and cooling capacities for rapid heat-up and cool-down times. Fitted with locking castors, drain port, and handles – a perfect fit for any environment.

- With heated tank designed to avoid ice build up.
- Effective cooling capacity at ultra low temperatures designed to allow you to reach your specific application temperature requirement.
- Sealed work area cover.
- Insulated supply and return ports designed to eliminate ice build up and process temperature variation.

Cooling Capacity

G50
(208-230V/50-60Hz, 200V/50-60Hz)

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. Specifications are for reference only and are subject to change.
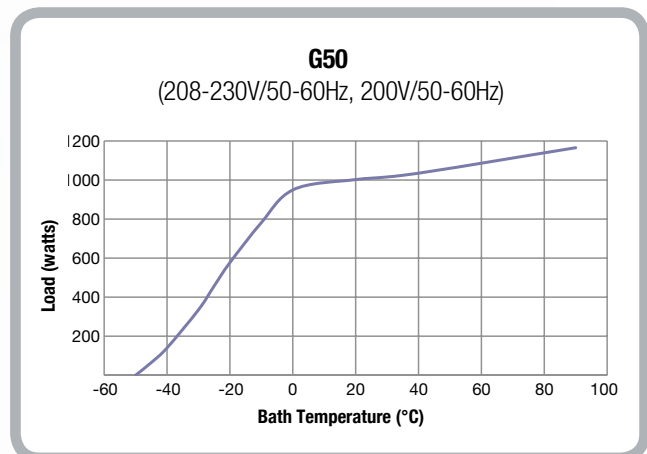
Time to Temperature Cooling

G50
(208-230V/60Hz, 230V/50Hz, 200V/50-60Hz)
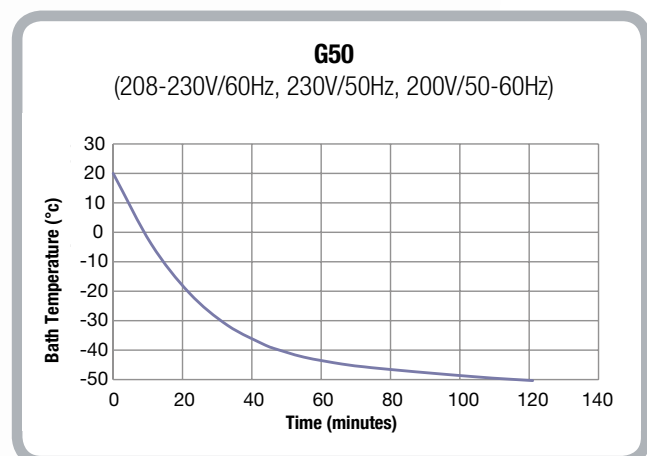
ULT Circulators
-50°C to 200°C

What's Included: 8mm and 12mm hose adapters for external circulation, external circulation plumbing, 6-ft. power cord and sealed work area cover.

Typical applications:

- Jacketed Reaction Vessels
- Material Testing
- Analytical Instrumentation\
- Calibration
- Condensers
- Crystallization

Controller ↑ Bath ▶	G50
AC200	-50 to 200°C
PC200	-50 to 200°C
Cooling capacity at 20°C 230V/115V	1000W
Maximum bath volume (liters)*	12
Work area (DxWxL) (mm/in)	200 x 208.5 x 104.2 / 7.9 x 8.2 x 4.1
Net weight (kg/lb)	62/137
Compliance	CE/ROHS/WEEE

Ordering Information

Model	G50	
Voltages	**230V/50Hz**	**200-230V/60Hz; 200V/50Hz**
AC200 plus Bath	1566501	1566509
PC200 plus Bath	1576501	1576509

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

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

Available in capacities from 5 to 53 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

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.

See page 22 for complete list of available accessories.
Overall dimensions can be found on page 26-27.

Typical applications:

- Viscometers
- Spectrophotometers
- Refractometers
- Metrology

Controller ▲ Bath ▶	S3	S7	S13	S15
SC100	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C
SC150	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
SC150L	—	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
AC150	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
AC200	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC200	—	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC201	—	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC300	—	Ambient +13 to 300°C	Ambient +13 to 300°C	Ambient +13 to 300°C
Maximum bath volume (liters)*	6	8	12	17
Work area (DxWxL) mm (in)	150 x 154.2 x 111.9 (5.9 x 6.1 x 4.4)	200 x 154.2 x 111.9 (7.9 x 6.1 x 4.4)	200 x 239.9 x 119.9 (7.9 x 9.4 x 4.4)	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 (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1521038	1521031	1521036	1521078	1521071	1521076	1521138	1521131	1521136	1521158	1521151	1521156
SC150 plus Bath	1531038	1531031	1531036	1531078	1531071	1531076	1531138	1531131	1531136	1531158	1531151	1531156
SC150L plus Bath	–	–	–	1541078	1541071	1541076	1541138	1541131	1541136	1541158	1541151	1541156
AC150 plus Bath	1551038	1551031	1551036	1551078	1551071	1551076	1551138	1551131	1551136	1551158	1551151	1551156
AC200 plus Bath	1561038	1561031	1561036	1561078	1561071	1561076	1561138	1561131	1561136	1561158	1561151	1561156

Voltages (V/Hz)	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60
PC200 plus Bath	–	–	1571072	1571075	1571132	1571135	1571152	1571155
PC201 plus Bath	–	–	–	1581075	–	1581135	–	1581155
PC300 plus Bath	–	–	–	1591075	–	1591135	–	–

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

Stainless Steel
+13°C to 300°C

What's Included: 8mm and 12mm hose adapters for external circulation, 6-ft power cord and work area cover (not included with models S45 and S49).

Useful Accessories:

- Tap Water Cooling Coil
- Solenoid Valve for Tap Water Cooling Coil (AC200 controller and above)
- Auto-refill (AC200 controller and above)
- External Temperature Probe (AC150 controller and above)
- Work Area Cover (for S45 and S49 models that do not come with cover included)
- Lifting Platform
- Test Tube Racks
- Fluids

Controller ↑ Bath ▶	S21	S30	S45	S49
SC100	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C
SC150	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
SC150L	—	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
AC150	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C	Ambient +13 to 150°C
AC200	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC200	—	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC201	—	Ambient +13 to 200°C	Ambient +13 to 200°C	Ambient +13 to 200°C
PC300	—	—	—	—
Maximum bath volume (liters)*	19	26	41	53
Work area (D x W x L) mm (in)	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)
Net weight (kg/lb)	14.2/31.2	16.5/36.2	20.3/44.7	24.3/53.4
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

Ordering information:

Model	S21			S30			S45			S49		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1521218	1521211	1521216	1521308	1521301	1521306	1521458	1521451	1521456	1521498	1521491	1521496
SC150 plus Bath	1531218	1531211	1531216	1531308	1531301	1531306	1531458	1531451	1531456	1531498	1531491	1531496
SC150L plus Bath	–	–	–	1541308	1541301	1541306	1541458	1541451	1541456	1541498	1541491	1541496
AC150 plus Bath	1551218	1551211	1551216	1551308	1551301	1551306	1551458	1551451	1551456	1551498	1551491	1551496
AC200 plus Bath	1561218	1561211	1561216	1561308	1561301	1561306	1561458	1561451	1561456	1561498	1561491	1561496

Voltages (V/Hz)	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60	100-115/50-60	200-230/50-60
PC200 plus Bath	–	–	1571302	1571305	1571452	1571455	1571492	1571495
PC201 plus Bath	–	–	–	1581305	–	1581455	–	1581495
PC300 plus Bath	–	–	–	–	–	–	–	–

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

Performance Curves for Stainless Steel Heated Bath Circulators

Time to Temperature – Heating

S3, S7, S13
(115V/ - 1.2kW*)

S3, S7, S13
(230V - 2kW*)

S3, S7, S13
(230V - 3kW*)
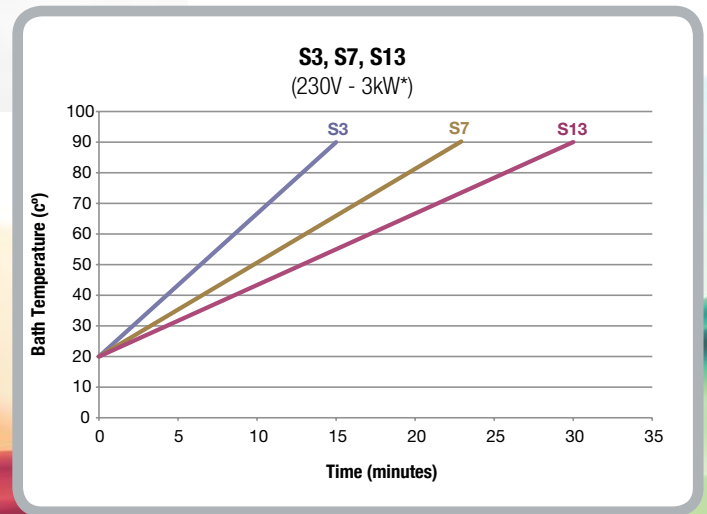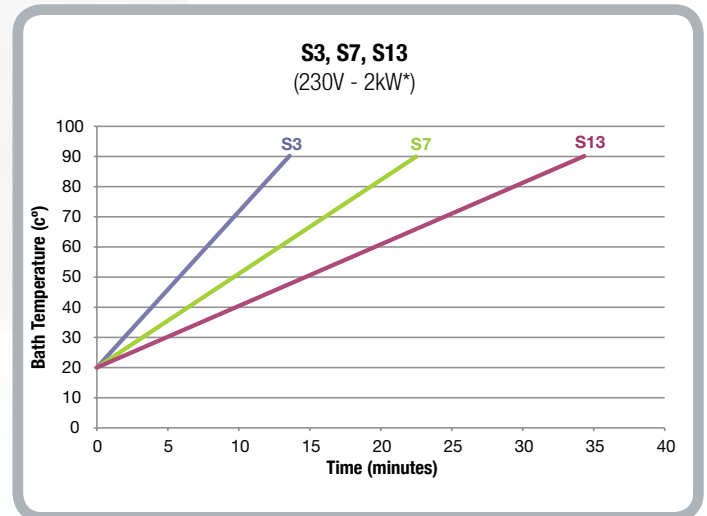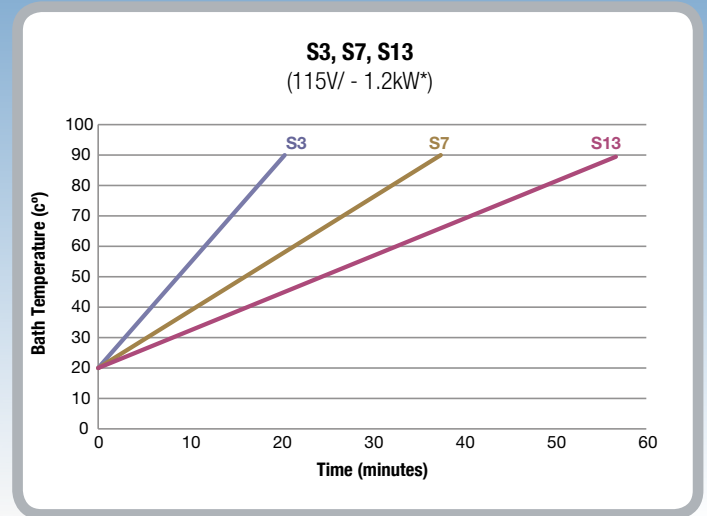
Heating Curves

* 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. Specifications are for reference only and are subject to change. Heat-up rates for the 100V baths will take approximately 25% longer than the 115V.
See pages 16/17 for available controller

Performance Curves for Stainless Steel Heated Bath Circulators

Time to Temperature – Heating

S15, S21, S30
(115V - 1.2kW*)

S45, S49
(115V - 1.2kW*)

S15, S21, S30
(230V - 2kW*)

S45, S49
(230V - 2kW*)

S30, S45, S49
(230V - 3kW*)
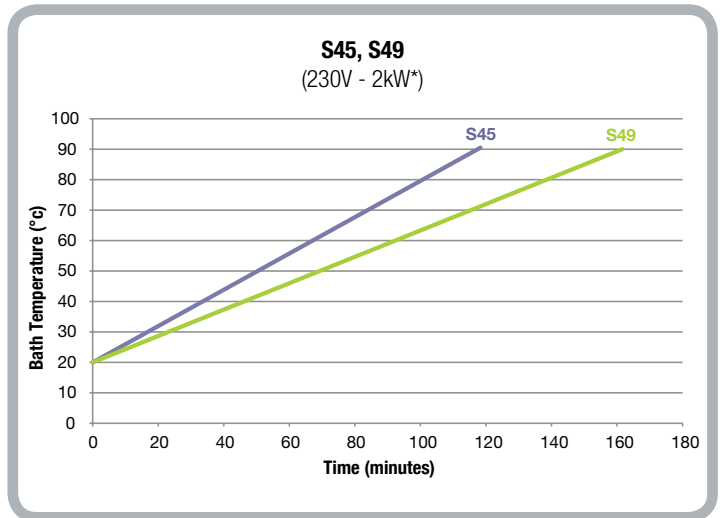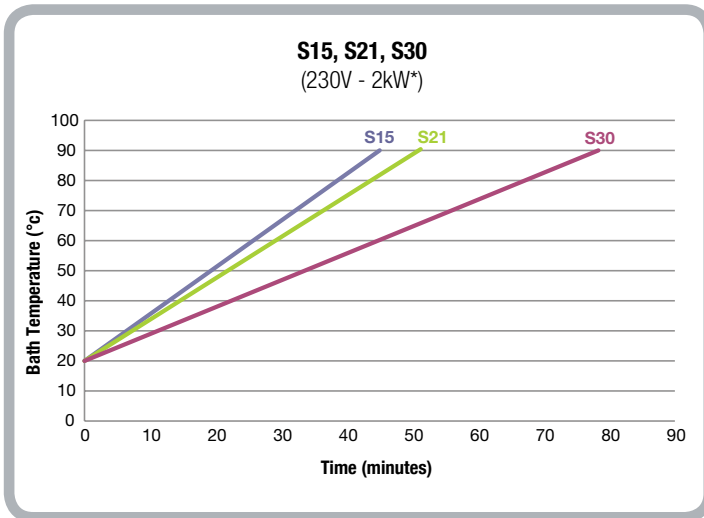

Specifications obtained at sea level using water (above 5°C to 90°C) or a fluid with a specific heat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a 20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude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

Acrylic
Ambient +13°C to 80°C

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
- Solenoid Valve for Tap Water Cooling Coil (AC200 controller and above)
- Auto-refill (AC200 controller and above)
- External Temperature Probe (AC150 controller and above)

Controller ⬆ Bath ▶	S6T	S12T	S19T
SC100	Ambient +13 to 80°C	Ambient +13 to 80°C	Ambient +13 to 80°C
SC150	Ambient +13 to 80°C	Ambient +13 to 80°C	Ambient +13 to 80°C
AC150	—	Ambient +13 to 80°C	Ambient +13 to 80°C
AC200	—	Ambient +13 to 80°C	Ambient +13 to 80°C
Bath volume (liters)*	6	12	19
Work area (D x W x L) mm/in	150 x 138 x 223 / 5.9 x 5.4 x 8.8	150 x 302 x 148.9 / 5.9 x 11.9 x 5.9	150 x 302 x 326.9 /5.9 x 11.9 x 12.9
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	**115/60**	**230/50**	**100/50-60**	**115/60**	**230/50**	**100/50-60**	**115/60**	**230/50**	**100/50-60**
SC100 plus Bath	1522068	1522061	1522066	1522128	1522121	1522126	1522198	1522191	1522196
SC150 plus Bath	1532068	1532061	1532066	1532128	1532121	1532126	1532198	1532191	1532196
AC150 plus Bath	–	–	–	1552128	1552121	1552126	1552198	1552191	1552196
AC200 plus Bath	–	–	–	1562128	1562121	1562126	1562198	1562191	1562196

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

PPO
Ambient +13°C to 100°C

Polyphenylene Oxide (PPO)

An economical alternative to stainless steel, these 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 controller and above)
- Auto-refill (AC200 controller and above)
- External Temperature Probe (AC150 controller and above)
- Work Area Cover
- Lifting Platform
- Test Tube Racks

Controller ⬆ Bath ▶	S5P	S14P	S21P
SC100	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C
SC150	Ambient +13 to 100°C	Ambient +13 to 100°C	Ambient +13 to 100°C
AC150	—	Ambient +13 to 100°C	Ambient +13 to 100°C
AC200	—	Ambient +13 to 100°C	Ambient +13 to 100°C
Bath volume (liters)*	5	14	21
Work area (D x W x L) mm/in	160 x 132 x 132 / 6.3 x 5.2 x 5.2	160 x 300 x 163 / 6.3 x 11.8 x 6.4	160 x 300 x 353 / 6.3 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:

| Model	S5P			S14P			S21P		
Voltages	**115/60**	**230/50**	**100/50-60**	**115/60**	**230/50**	**100/50-60**	**115/60**	**230/50**	**100/50-60**
SC100 plus Bath	1523058	1523051	1523056	1523148	1523141	1523146	1523218	1523211	1523216
SC150 plus Bath	1533058	1533051	1533056	1533148	1533141	1533146	1533218	1533211	1533216
AC150 plus Bath	–	–	–	1553148	1553141	1553146	1553218	1553211	1553216
AC200 plus Bath	–	–	–	1563148	1563141	1563146	1563218	1563211	1563216

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

Stainless steel rack
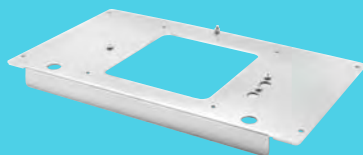
Bath bridge

Part #	Racks and inserts: Racks for Arctic and Sahara
1600002	**Stainless steel rack for bath types A5B, A10B, A24B, S49, S19T, S14P, S21P. Choose a rack insert below:**
1600003	• **Rack insert** - includes top and bottom panels that will hold up to 100 test tubes that are 10mm Ø
1600004	• **Rack insert** - includes top and bottom panels that will hold up to 60 test tubes that are 16mm Ø
1600005	• **Rack insert** - includes top and bottom panel that will hold up to 25 test tubes that are 25mm Ø
1600006	• **Rack insert** - includes top and bottom panel with no holes
1600079	**Stainless steel rack for bath types A25B, A40, S21, S30. Choose a rack insert below:**
1600072	• **Rack insert** - includes top and bottom panels that will hold up to 55 test tubes that are 10mm Ø
1600081	• **Rack insert**- includes top and bottom panel that will hold up to 32 test tubes that are 16mm Ø
1600082	• **Rack insert** - includes top and bottom panel that will hold up to 13 test tubes that are 25mm Ø
1600083	• **Rack insert** - includes top and bottom panel with no holes
1600026	**Stainless steel rack for bath types S13, S12T, S15. Choose a rack insert below:**
1600084	• **Rack insert** - includes top and bottom panels that will hold up to 39 test tubes that are 10mm Ø
1600085	• **Rack insert** - includes top and bottom panel that will hold up to 20 test tubes that are 16mm Ø
1600086	• **Rack insert** - includes top and bottom panel that will hold up to 8 test tubes that are 25mm Ø
1600087	• **Rack insert** - includes top and bottom panel with no holes
Part #	**Racks for Glacier**
1600154	Rack for Glacier G50 ultra low refrigerated bath. Holds 16 straws up to 3mm dia. and 65mm or 133mm in length
Part #	**Bridges**
1600077	Bath bridge - for immersion cooler. Fits S15, S21, S30, S45 heated baths
1600078	Bath bridge - to hold SC immersion circulator in W13, W15, W26, W45, W46 baths
1600150	Bath bridge - to hold AC immersion circulator in W13, W15, W26, W45, W46 baths
1600123	Bath bridge - for tap water cooling coil and auto-refill. Fits S15, S21, S30, and S45 heated baths
1600131	Bath bridge - for cooling coil and auto-refill. Fits S3, S7
1600131	Bath bridge - for cooling coil and auto-refill. Fits S3, S7 (for SC controller only)
1600135	Bath bridge - for cooling coil and auto-refill. Fits S5P
1600137	Bath bridge - for cooling coil and auto-refill. Fits S12T, S19T
1600139	Bath bridge - for cooling coil and auto-refill. Fits S6T
1600140	Bath bridge - for cooling coil and auto-refill. Fits S49
1600125	Bath bridge - for auto-refill. Fits A25, A28, A28F, A40
1600141	Bath bridge - for auto-refill. Fits A5B, A10B, A24B
1600124	Bath bridge - for auto-refill. Fits A25B
1600126	Bath bridge - for auto-refill. Fits A10
1600133	Bath bridge - for auto-refill. Fits S3, S7
1600018	Adjustable bath bridge - 400 to 800 mm, for SC, AC & PC immersion circulators

Coming Soon!
Boost Heater and Boost Pump Performance Accessories

Adding a **lifting platform** to your bath allows you to adjust the submerged depth of your vessels or other objects.

Part #	Lifting Platforms
1600011	**Lifting platform, stainless steel for S21, S21P, S30, S45**
1600007	• **Bath Bridge** - for lifting platform in S21, S30, S45 baths
1600098	• **Bath Bridge** - for lifting platform in S21P
1600136	• **Bath Bridge** - for tap water cooling coil, auto-refill and lifting platform in S21P bath
1600012	**Lifting platform, stainless steel for S15, S14P**
1600007	• **Bath bridge** - for lifting platform in S15
1600098	• **Bath bridge** - for lifting platform in S14P
1600136	• **Bath bridge** - for tap water cooling coil, auto-refill and lifting platform in S14P bath
1600121	**Lifting platform, stainless steel for A5B**
1600036	• **Bath bridge** - for lifting platform in A5B bath
1600128	• **Bath bridge** - for lifting platform and auto-refill in A5B bath
1600142	**Lifting platform, stainless steel for A10B**
1600036	• **Bath bridge** - for lifting platform in A10B bath
1600128	• **Bath bridge** - for lifting platform and auto-refill in A10B bath
1600013	**Lifting platform stainless steel for S49**
1600009	• **Bath bridge** - for lifting platform in S49 bath
1600130	• **Bath bridge** - for tap water cooling coil, auto-refill and lifting platform in S49 bath

Part #	Performance Accessories
1600106	Fluid displacement block for A28 bath
1600105	Fluid displacement block for A25, A40 bath
1600045	Fluid displacement block for A10 bath

Improve time to temperature by lowering the amount of fluid that needs to be heated or cooled. Fluid displacement blocks are used for external circulation only.

Part #	Tap Water Cooling Coils
1600015	Tap water cooling coil for SC 100 or SC150 immersion circulator with a clamp
1600017	Tap water cooling coil for SC150L immersion circulator with a clamp
1600014	Tap water cooling coil for all controllers with S13, S15, S21, S30, S45, S49, S14P, S21P, S12T, S19T
1600016	Tap water cooling coil for SC150L controller with S13, S15, S30, S45, S49
1600090	Tap water cooling coil for SC100 or SC150 controller with S5P
1600091	Tap water cooling coil for SC100 or SC150 controller with S6T
1600092	Tap water cooling coil for SC100 or SC150 controller with S3, S7
1600093	Tap water cooling coil for SC150L controller with S7
1600094	Tap water cooling coil for AC150 or AC200 controller with S3, S7
1601000	Solenoid valve (100-230V/50-60Hz) for tap water cooling coil (AC200 and up)

Operate heated baths closer to ambient temperature by removing pump heat.

Tap water cooling coil

Part #	Connectivity
1600027	RS232 serial communication adapter
1600075	RS485 serial communication adapter
1600076	Communication extension board for Ethernet/LAN
1600033	Interface cable USB 1.8m long
1600034	Interface cable RS232 and RS485 1.5m long
1600035	Interface cable LAN 5m long
1600149	Analog I/O adapter

Various adapter boxes and communication cables are available to allow for serial and analog communication.

Accessories

Part #	Work Area Covers
1600020	Stainless steel work area cover for S5P
1600021	Stainless steel work area cover for S14P
1600022	Stainless steel work area cover for S21P
1600037	Stainless steel work area cover for S15
1600038	Stainless steel work area cover for S21, S30, S45
1600040	Stainless steel work area cover for S49
1600041	Stainless steel work area cover for A5B
1600042	Stainless steel work area cover for A10B
1600100	Work area cover with leveling device for A10
1600101	Work area cover with leveling device for A28, A28F
1600102	Work area cover with leveling device for S3, S7
1600103	Work area cover with leveling device for S13

Part #	Tubing and Accessories
1600028	Adapter M16x1 female/1/4"NPTF male
1600029	Adapter M16x1 male/1/4"NPTF male
1600146	Plumbing Package – includes (4) clamps and (2) 5' Viton tubing (uninsulated), temperature range of -30°C to +200°C, 12mm ø
1600147	Plumbing Package – includes (4) clamps and (2) 5' Viton tubing (insulated), temperature range of -30°C to +200°C, 12mm ø

Part #	Remote Temperature Sensors
3330818	Pt100 prode, teflon coated, flexible, 300mm long, 3mm Ø, cable length 3m
3330429	Pt100 probe, 18/8 stainless steel tubing, 150mm long, 3mm Ø, 3m cable length, up to 600°C

Part #	Heat Transfer Fluids
9990201	Sil 100 Silicone oil bath liquid, temperature range -75 to 75°C, 5L
9990202	Sil 100 Silicone oil bath liquid, temperature range -75 to 75°C, 10L
610000000000	Silicone oil, temperature range +30°C to +150°C, 5 GAL
610000000005	Algaecide/corrosion inhibitor, Nalco Kit
610000000007	THERMO200 Treated water solution w/Nalco, Temp Range +5°C to +95°C, 5 GAL
9990203	Sil 180 Silicone oil bath liquid, temperature range -40 to 200°C, 5L
9990204	Sil 180 Silicone oil bath liquid, temperature range -40 to 200°C, 10L
9990205	Sil 300 Silicone oil bath liquid, temperature range +80 to 300°C, 5L
9990206	Sil 300 Silicone oil bath liquid, temperature range +80 to 300°C, 10L
9990213	Synth 260 bath liquid, temperature range +40 to 250°C, 5L
9990214	Synth 260 bath liquid, temperature range +40 to 250°C, 10L
160000000001	Ethylglycol, 5 gallons (approx. 19 liters) for low temperature applications to -30°C

Part #	Software
422000000004	NEScom control/monitoring PC software

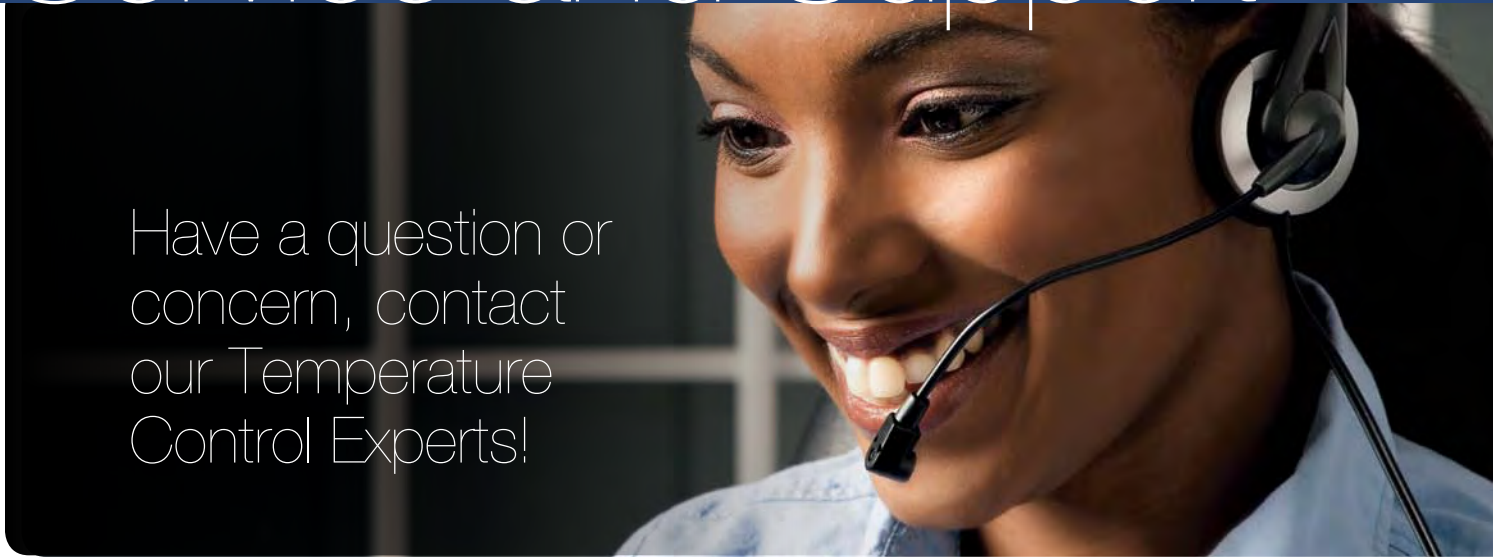| Part #	Miscellaneous Accessories
1600070	Trolley w/castors for A40
1600071	Trolley w/castors for A28, A25
1600088	Cage for SC100/SC150 immersion circulator
1600089	Cage for SC150L immersion circulator
1603000	Auto-refill (100-230V/50-60Hz) (AC200 and up)

Directly control temperature of an external batch or application by placing the temperature sensor directly into the external application.

Allows you to start/stop, monitor temperature, run temperature ramps and data log from your computer.

Service and Support

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

Support and Maintenance

Technical Questions

Our technical service team is ready to help answer any of your questions.

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 one of the 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 and 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 ensure proper installation of your unit..
With our services you will receive:

- Installation scheduled at your convenience
- Assurance that all installation 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 depot repair services. Certified and experienced technicians conduct rapid failure detection and analysis. Prior to return, performance tests are conducted to ensure 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 limited warranty*, giving you peace of mind.

Preventive Maintenance/Calibration

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

* Subject to the terms of Thermo Fisher's standard limited warranty available at www.thermoscientific.com.

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

Dimensions

Thermo Scientific SAHARA
Acrylic Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S6T	352.7 x 188.8 x 407	13.9 x 5.9 x 16
SC150-S6T	352.7 x 188.8 x 407	13.9 x 5.9 x 16
SC100-S12T	354.7 x 356.1 x 348	14 x 14 x 13.7
SC150-S12T	354.7 x 356.1 x 348	14 x 14 x 13.7
AC150-S12T	392.7 x 356.1 x 348	15.5 x 14 x 13.7
AC200-S12T	392.7 x 356.1 x 348	15.5 x 14 x 13.7
SC100-S19T	354.7 x 356.1 x 526	14 x 14 x 20.7
SC150-S19T	354.7 x 356.1 x 526	14 x 14 x 20.7
AC150-S19T	392.7 x 356.1 x 526	15.5 x 14 x 20.7
AC200-S19T	392.7 x 356.1 x 526	15.5 x 14 x 20.7

Thermo Scientific SAHARA
Stainless Steel Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S3	406.2 x 234.8 x 428.4	16 x 9.2 x 16.7
SC150-S3	406.2 x 234.8 x 428.4	16 x 9.2 x 16.7
AC150-S3	444.2 x 234.8 x 428.4	17.5 x 9.2 x 16.7
AC200-S3	444.2 x 234.8 x 428.4	17.5 x 9.2 x 16.7
SC100-S7	456.2 x 234.8 x 428.4	18 x 9.2 x 16.7
SC150-S7	456.2 x 234.8 x 428.4	18 x 9.2 x 16.7
AC150-S7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
AC200-S7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC200-S7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC201-S7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
PC300-S7	494.2 x 234.8 x 428.4	19.5 x 9.2 x 16.7
SC100-S13	456.2 x 320.8 x 428.4	18 x 12.6 x 16.7
SC150-S13	456.2 x 320.8 x 428.4	18 x 12.6 x 16.7
AC150-S13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
AC200-S13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC200-S13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC201-S13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
PC300-S13	494.2 x 320.8 x 428.4	19.5 x 12.6 x 16.7
SC100-S15	456.2 x 380.8 x 457.4	18 x 15 x 18
SC150-S15	456.2 x 380.8 x 457.4	18 x 15 x 18
SC150L-S15	456.2 x 380.8 x 457.4	18 x 15 x 18
AC150-S15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
AC200-S15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
PC200-S15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
PC201-S15	494.2 x 380.8 x 457.4	19.5 x 15 x 18
SC150-S21	408.5 x 380.8 x 628.4	16.1 x 15 x 24.7
SC150-S21	408.5 x 380.8 x 628.4	16.1 x 15 x 24.7
AC150-S21	446.5 x 380.8 x 628.4	17.6 x 15 x 24.7
AC200-S21	446.5 x 380.8 x 628.4	17.6 x 15 x 24.7

Thermo Scientific SAHARA
PPO Heated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-S5P	359.5 x 190 x 388	14.2 x 7.5 x 15.3
SC150-S5P	359.5 x 190 x 388	14.2 x 7.5 x 15.3
SC100-S14P	360.5 x 358 x 452	14.2 x 14.1 x 17.8
SC150-S14P	360.5 x 358 x 452	14.2 x 14.1 x 17.8
AC150-S14P	398.5 x 358 x 452	15.7 x 14.1 x 17.8
AC200-S14P	398.5 x 358 x 452	15.7 x 14.1 x 17.8
SC100-S21P	360.5 x 358 x 642	14.2 x 14.1 x 25.3
SC150-S21P	360.5 x 358 x 642	14.2 x 14.1 x 25.3
AC150-S21P	398.5 x 358 x 642	15.7 x 14.1 x 25.3
AC200-S21P	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-S30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
SC150-S30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
SC150L-S30	456.2 x 380.8 x 628.4	18 x 15 x 24.7
AC150-S30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
AC200-S30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
PC200-S30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
PC201-S30	494.2 x 380.8 x 628.4	19.5 x 15 x 24.7
SC100-S45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
SC150-S45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
SC150L-S45	556.2 x 380.8 x 628.4	21.9 x 15 x 24.7
AC150-S45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
AC200-S45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
PC200-S45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
PC201-S45	594.2 x 380.8 x 628.4	23.4 x 15 x 24.7
SC100-S49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
SC150-S49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
SC150L-S49	456.2 x 578.8 x 746.4	18 x 22.8 x 29.4
AC150-S49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
AC200-S49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
PC200-S49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4
PC201-S49	494.2 x 578.8 x 746.4	19.5 x 22.8 x 29.4

Thermo Scientific GLACIER
Ultra-Low Temperature Refrigerated Baths

Model	Millimeters (H x W x L)	Inches (H x W x L)
AC200-G50	851.1 x 418.8 x 554	33.5 x 16.5 x 21.8
PC200-G50	851.1 x 418.8 x 554	33.5 x 16.5 x 21.8

Dimensions

**Thermo Scientific ARCTIC
Refrigerated Baths**

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-A5B	470.7 x 428.5 x 738	18.5 x 16.9 x 29.1
SC150-A5B	470.7 x 428.5 x 738	18.5 x 16.9 x 29.1
AC150-A5B	508.7 x 428.5 x 738	20 x 16.9 x 29.1
AC200-A5B	508.7 x 428.5 x 738	20 x 16.9 x 29.1
SC100-A10B	470.7 x 428.5 x 913	18.5 x 16.9 x 35.9
SC150-A10B	470.7 x 428.5 x 913	18.5 x 16.9 x 35.9
AC150-A10B	508.7 x 428.5 x 913	20 x 16.9 x 35.9
AC200-A10B	508.7 x 428.5 x 913	20 x 16.9 x 35.9
SC100-A24B	573.7 x 765 x 610	22.6 x 30.1 x 24
SC150-A24B	573.7 x 765 x 610	22.6 x 30.1 x 24
SC150L-A24B	573.7 x 765 x 610	22.6 x 30.1 x 24
AC150-A24B	611.7 x 765 x 610	24.1 x 30.1 x 24
AC200-A24B	611.7 x 765 x 610	24.1 x 30.1 x 24
PC200-A24B	611.7 x 765 x 610	24.1 x 30.1 x 24
SC100-A25B	739.7 x 324 x 541	29.1 x 12.8 x 21.3
SC150-A25B	739.7 x 324 x 541	29.1 x 12.8 x 21.3
AC150-A25B	777.7 x 324 x 541	30.6 x 12.8 x 21.3
AC200-A25B	777.7 x 324 x 541	30.6 x 12.8 x 21.3

**Thermo Scientific ARCTIC
Refrigerated Baths**

Model	Millimeters (H x W x L)	Inches (H x W x L)
SC100-A10	631.7 x 220 x 414	24.9 x 8.7 x 16.3
SC150-A10	631.7 x 220 x 414	24.9 x 8.7 x 16.3
AC150-A10	669.7 x 220 x 414	26.4 x 8.7 x 16.3
AC200-A10	669.7 x 220 x 414	26.4 x 8.7 x 16.3
SC100-A25	710.7 x 273 x 483	28 x 10.7 x 19
SC150-A25	710.7 x 273 x 483	28 x 10.7 x 19
SC150L-A25	710.7 x 273 x 483	28 x 10.7 x 19
AC150-A25	748.7 x 273 x 483	29.5 x 10.7 x 19
AC200-A25	748.7 x 273 x 483	29.5 x 10.7 x 19
PC200-A25	748.7 x 273 x 483	29.5 x 10.7 x 19
SC100-A28	710.7 x 273 x 483	28 x 10.7 x 19
SC150-A28	710.7 x 273 x 483	28 x 10.7 x 19
SC150L-A28	710.7 x 273 x 483	28 x 10.7 x 19
AC150-A28	748.7 x 273 x 483	29.5 x 10.7 x 19
AC200-A28	748.7 x 273 x 483	29.5 x 10.7 x 19
PC200-A28	748.7 x 273 x 483	29.5 x 10.7 x 19
SC100-A28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
SC150-A28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
SC150L-A28F	519.7 x 514 x 426	20.5 x 20.2 x 16.8
AC150-A28F	557.7 x 514 x 426	22 x 20.2 x 16.8
AC200-A28F	557.7 x 514 x 426	22 x 20.2 x 16.8
PC200-A28F	557.7 x 514 x 426	22 x 20.2 x 16.8
SC150-A40	748.7 x 385 x 519	29.5 x 15.2 x 20.4
SC150L-A40	748.7 x 385 x 519	29.5 x 15.2 x 20.4
AC150-A40	786.7 x 385 x 519	31 x 15.2 x 20.4
AC200-A40	786.7 x 385 x 519	31 x 15.2 x 20.4
PC200-A40	786.7 x 385 x 519	31 x 15.2 x 20.4

Length

Width