

thermo scientific



# Thermo Scientific Refrigerated and Heated Bath Circulators

**Your success circulates at every degree**

**ThermoFisher**  
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

## Safe Operation

Units are CE Compliant with select models UL listed, for 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.

## GREEN TIP SAVE ENERGY

Save up 70% on energy costs when using the Energy Savings mode\*

\*Compared to standard operating mode.

# 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 fluid? 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 Thermo Scientific™ refrigerated or heated bath circulators. All systems and immersion circulators come standard with external circulation connections. Whether you have present or future use for external circulation you can always reconfigure your refrigerated or heated bath circulator or immersion 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?

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.

### 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.

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# Frequently Asked Questions

# Q&A

## Does my Thermo Scientific unit come with external circulation connections?

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.

## How do I achieve more heating capacity for my application?

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% to 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	—

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

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 that the bath is much smaller and will not hold as many samples.

## When using silicone oil how does fluid expansion affect my application?

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 estimate that for every 100°C increase in temperature within the bath that the fluid will 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.

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

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
<b>Specifications</b>								
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
<b>Dimensions/Weight</b>								
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
<b>Safety &amp; Compliance</b>								
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
<b>Alarm Type</b>								
High temperature alarm	•	•	•	•	•	•	•	•
Low level alarm		•	•	•	•	•	•	•
Refrigeration alarm	•	•	•	•	•	•	•	•
Application threshold alarm				•	•	•	•	•
Application alarm (external)*				Optional	Optional	Optional	Optional	Optional
<b>Alarm Indicators</b>								
Acoustic/optical alarm	•	•	•	•	•	•	•	•
<b>Connectivity</b>								
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
<b>Information Displayed on Screen</b>								
High temperature warning				•	•	•	•	•
Low level warning		•	•	•	•	•	•	•
High level warning				•	•	•	•	•
Date & time	•	•	•	•	•	•	•	•
<b>Features</b>								
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

## Versatile Across Performance Levels

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 (SC only) 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: 

Compliance: RoHS and WEEE

See page 22 for complete list of available accessories.

# Immersion Circulators

## ►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.

# Thermo Scientific SAHARA Series

## Heated Bath Circulators

# +13°C to 300°C

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

Available in capacities from 7 to 53 liters with a variety of work area dimensions to meet your application needs.

- Up to eight 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.

**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).



### Typical applications:

- Viscometers
- Spectrophotometers
- Refractometers
- Metrology

Controller ↑ Bath ►	S7	S13
SC100	Ambient +13 to 100°C	Ambient +13 to 100°C
SC150	Ambient +13 to 150°C	Ambient +13 to 150°C
SC150L	Ambient +13 to 150°C	Ambient +13 to 150°C
AC150	Ambient +13 to 150°C	Ambient +13 to 150°C
AC200	Ambient +13 to 200°C	Ambient +13 to 200°C
PC200	Ambient +13 to 200°C	Ambient +13 to 200°C
PC201	Ambient +13 to 200°C	Ambient +13 to 200°C
PC300	Ambient +13 to 300°C	Ambient +13 to 300°C
Maximum bath volume (liters)*	8	12
Work area (DxWxL) mm (in)	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)
Net weight (kg/lb)	10.6/23.4	12.3/27
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE

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

### Ordering information:

Model	S7			S13		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1521078	1521071	1521076	1521138	1521131	1521136
SC150 plus Bath	1531078	1531071	1531076	1531138	1531131	1531136
SC150L plus Bath	1541078	1541071	1541076	1541138	1541131	1541136
AC150 plus Bath	1551078	1551071	1551076	1551138	1551131	1551136
AC200 plus Bath	1561078	1561071	1561076	1561138	1561131	1561136

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



# Thermo Scientific SAHARA Series Heated Bath Circulators

## 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

See page 19-21 for complete list of available accessories.

Overall dimensions can be found on page 23-24.

**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).



Controller ↑ Bath ►	S21	S45	S49
SC100	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
SC150L	—	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
AC200	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
PC201	—	Ambient +13 to 200°C	Ambient +13 to 200°C
PC300	—	—	—
Maximum bath volume (liters)*	19	41	53
Work area (DxWxL) mm (in)	150 x 296.5 x 311.9 (5.9 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	20.3/44.7	24.3/53.4
Compliance	CE/ROHS/WEEE	CE/ROHS/WEEE	CE/ROHS/WEEE

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

## Ordering information:

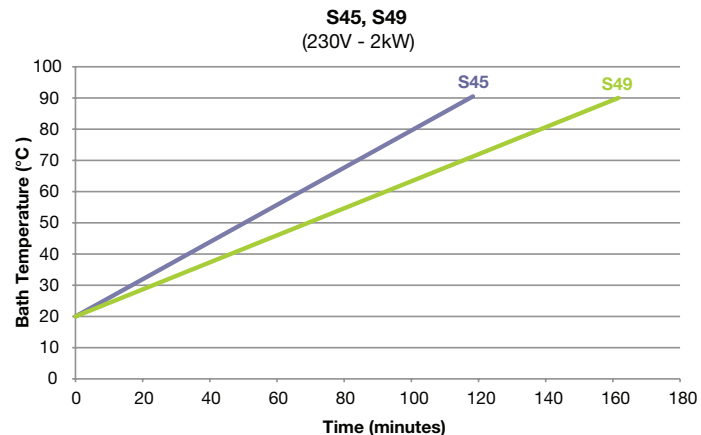
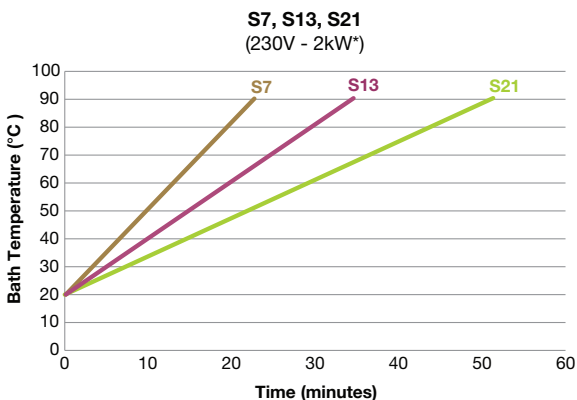
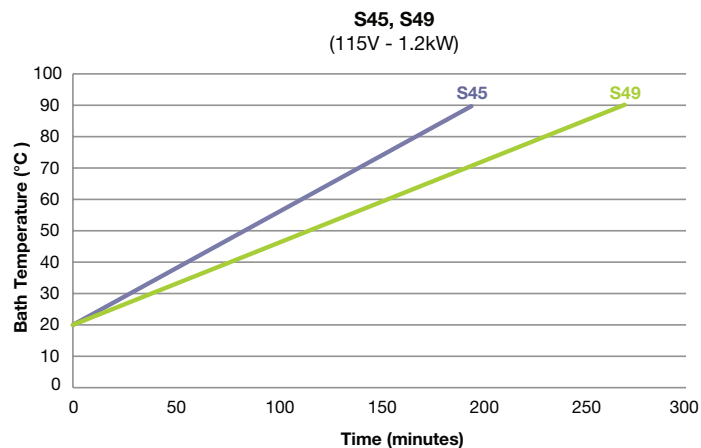
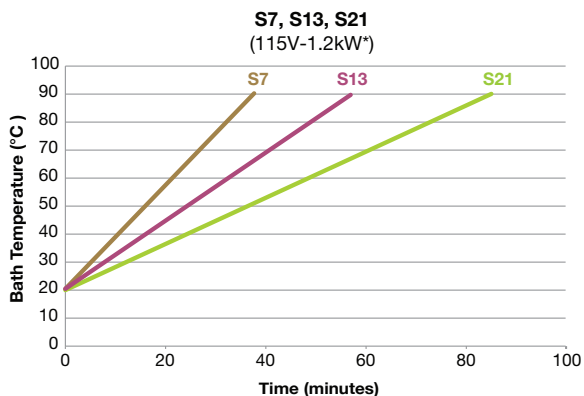
Model	S21			S45			S49		
Voltages (V/Hz)	115/60	230/50	100/50-60	115/60	230/50	100/50-60	115/60	230/50	100/50-60
SC100 plus Bath	1521218	1521211	1521216	1521458	1521451	1521456	1521498	1521491	1521496
SC150 plus Bath	1531218	1531211	1531216	1531458	1531451	1531456	1531498	1531491	1531496
SC150L plus Bath	—	—	—	1541458	1541451	1541456	1541498	1541491	1541496
AC150 plus Bath	1551218	1551211	1551216	1551458	1551451	1551456	1551498	1551491	1551496
AC200 plus Bath	1561218	1561211	1561216	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
PC200 plus Bath	—	—	1571452	1571455	1571492	1571495
PC201 plus Bath	—	—	—	1581455	—	1581495
PC300 plus Bath	—	—	—	—	—	—

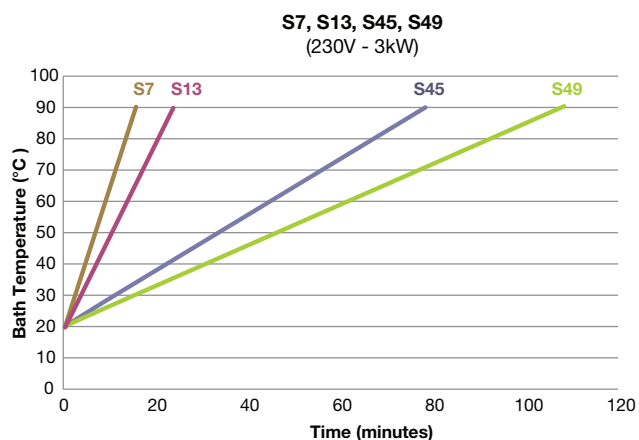
# Performance Curves

## for Stainless Steel Heated Bath Circulators

### Time to Temperature – Heating



# Heating Curves



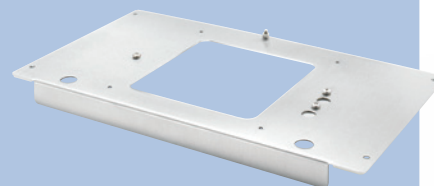
\*Specifications obtained at sea level using water (above 5°C to 90°C) or a fluid with a specific heat of 2.3 kJ/kg-K or 0.55 Btu/lb-F (less than 5°C) as the recirculating fluid at a 20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude 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.

# Accessories

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



Stainless steel rack



Bath bridge

# Accessories

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

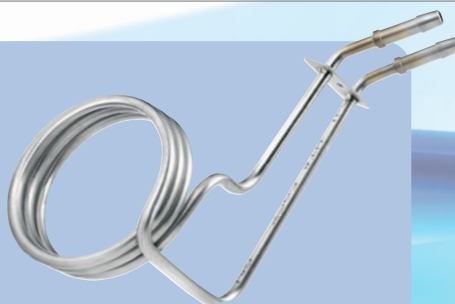
Improve time to temperature by lowering the amount of fluid that needs to be heated or cooled. **Fluid displacement blocks** are used for external circulation only.

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

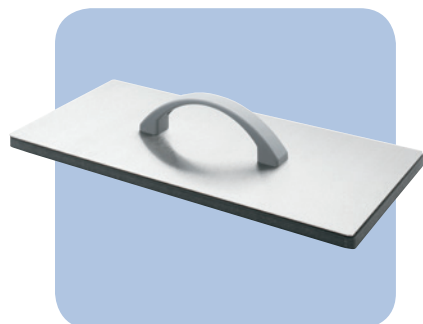
Various **adapter boxes and communication cables** are available to allow for serial and analog communication.

Accessory	Catalog Number
<b>Lifting Platform</b>	
Lifting platform, stainless steel for S21, S21P, S45	1600011
Bath Bridge - for lifting platform in S21, S45 baths	1600007
Bath Bridge - for lifting platform in S21P	1600098
Bath Bridge - for tap water cooling coil, auto-refill and lifting platform in S21P bath	1600136
Lifting platform, stainless steel for S14P	1600012
Bath bridge - for lifting platform in S14P	1600098
Bath bridge - for tap water cooling coil, auto-refill and lifting platform in S14P bath	1600136
Lifting platform, stainless steel for A10B	1600142
Bath bridge - for lifting platform in A10B bath	1600036
Bath bridge - for lifting platform and auto-refill in A10B bath	1600128
Lifting platform stainless steel for S49	1600013
Bath bridge - for lifting platform in S49 bath	1600009
Bath bridge - for tap water cooling coil, auto-refill and lifting platform in S49 bath	1600130
<b>Performance Accessories</b>	
Fluid displacement block for A25, A40 bath	1600105
Fluid displacement block for A10 bath	1600045
<b>Tap Water Cooling Coils</b>	
Tap water cooling coil for SC100 or SC150 immersion circulator with a clamp	1600015
Tap water cooling coil for SC150L immersion circulator with a clamp	1600017
Tap water cooling coil for all controllers with S13, S21, S45, S49, S14P, S21P, S12T, S19T	1600014
Tap water cooling coil for SC150L controller with S13, S45, S49	1600016
Tap water cooling coil for SC100 or SC150 controller with S5P	1600090
Tap water cooling coil for SC100 or SC150 controller with S6T	1600091
Tap water cooling coil for SC100 or SC150 controller with S7	1600092
Tap water cooling coil for SC150L controller with S7	1600093
Tap water cooling coil for AC150 or AC200 controller with S7	1600094
Solenoid valve (100-230V/50-60Hz) for tap water cooling coil (AC200 and up)	1601000
<b>Connectivity</b>	
RS232 serial communication adapter	1600027
RS485 serial communication adapter	1600075
Communication extension board for Ethernet/LAN	1600076
Interface cable USB 1.8m long	1600033
Interface cable RS232 and RS485 1.5m long	1600034
Interface cable LAN 5m long	1600035
Analog I/O adapter	1600149

Tap water cooling coil



# Accessories



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

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

Accessory	Catalog Number
<b>Work Area Covers</b>	
Stainless steel work area cover for S5P	1600020
Stainless steel work area cover for S14P	1600021
Stainless steel work area cover for S21P	1600022
Stainless steel work area cover for S21, S45	1600038
Stainless steel work area cover for S49	1600040
Stainless steel work area cover for A10B	1600042
Work area cover with leveling device for A10	1600100
Work area cover with leveling device for S7	1600102
Work area cover with leveling device for S13	1600103
<b>Tubing and Accessories</b>	
Adapter M16x1 female/1/4"NPTF male	1600028
Adapter M16x1 male/1/4"NPTF male	1600029
Plumbing Package – includes (4) clamps and (2) 5' Viton tubing (uninsulated), temperature range of -30°C to +200°C, 12mm Ø	1600146
Plumbing Package – includes (4) clamps and (2) 5' Viton tubing (insulated), temperature range of -30°C to +200°C, 12mm Ø	1600147
<b>Remote Temperature Sensors</b>	
Pt100 probe, teflon coated, flexible, 300mm long, 3mm Ø, cable length 3m	3330818
Pt100 probe, 18/8 stainless steel tubing, 150mm long, 3mm Ø, 3m cable length, up to 600°C	3330429
<b>Heat Transfer Fluids</b>	
Sil 100 Silicone oil bath liquid, temperature range -75 to 75°C, 5L	9990201
Sil 100 Silicone oil bath liquid, temperature range -75 to 75°C, 10L	9990202
Silicone oil, temperature range +30°C to +150°C, 5 GAL	610000000000
Algaecide/corrosion inhibitor, Nalco Kit	610000000005
THERMO200 Treated water solution w/Nalco, Temp Range +5°C to +95°C, 5 GAL	610000000007
Sil 180 Silicone oil bath liquid, temperature range -40 to 200°C, 5L	9990203
Sil 180 Silicone oil bath liquid, temperature range -40 to 200°C, 10L	9990204
Sil 300 Silicone oil bath liquid, temperature range +80 to 300°C, 5L	9990205
Sil 300 Silicone oil bath liquid, temperature range +80 to 300°C, 10L	9990206
Synth 260 bath liquid, temperature range +40 to 250°C, 5L	9990213
Synth 260 bath liquid, temperature range +40 to 250°C, 10L	9990214
Ethyl glycol, 5 gallons (approx. 19 liters) for low temperature applications to -30°C	610000000001
<b>Software</b>	
NEScom control/monitoring PC software	422000000004
<b>Miscellaneous Accessories</b>	
Trolley w/castors for A40	1600070
Trolley w/castors for A25	1600071
Cage for SC100/SC150 immersion circulator	1600088
Cage for SC150L immersion circulator	1600089
Auto-refill (100-230V/50-60Hz) (AC200 and up)	1603000



# 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-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
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-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



# Wolf Laboratories Limited

[www.wolflabs.co.uk](http://www.wolflabs.co.uk)

Tel: 01759 301142

Fax: 01759 301143

[sales@wolflabs.co.uk](mailto:sales@wolflabs.co.uk)



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