

ESCY

25
years of
excellence



Temperature Engineered

A Thermolab Group Company
www.escyequipments.com

1. Heating Circulators

Basic (BC) & Prime (PS | PB) Series

ESCY Heating circulators are suitable for both internal & external temperature control applications. Depending on the required temperature, rate of heating, and desired features, one can select from various models. Smaller objects can be inserted directly into the bath at the same time.

- High quality stainless steel bath tanks with bath lids and drain tap.
- Microprocessor based PID Controller with Dual LED Display.
- Models for internal and external circulation applications.
- Integrated pump connection with nozzles.
- Compact and space saving.
- Easy operation.



Standard Specification for all models:

- Temperature stability $\pm 0.03^{\circ}\text{C}$

Model	Temperature Range ($^{\circ}\text{C}$)	Bath Volume (L)	Heater Capacity (kW)	Pump Pressure (mbar)	Pump Flow Rate Max (lpm)	No. of Set Points	Low Liquid Level Alarm	Over Temp Cut Off	Variable Speed Control	RS485 Comm	External Temperature Control	Ramp & Soak
H05BC0510A	RT+5 to 100	5	1	300	10	1	X	X	X	X	X	X
H09BC0510A	RT+5 to 100	9	2	300	10	1	X	X	X	X	X	X
H13BC0510A	RT+5 to 100	13	2	300	10	1	X	X	X	X	X	X
H20BC0510A	RT+5 to 100	20	2	300	10	1	X	X	X	X	X	X
H05PS0510A	RT+5 to 100	5	1	300	10	4	●	●	X	○	○	○
H09PS0510A	RT+5 to 100	9	2	300	10	4	●	●	X	○	○	○
H13PS0510A	RT+5 to 100	13	2	300	10	4	●	●	X	○	○	○
H20PS0510A	RT+5 to 100	20	2	300	10	4	●	●	X	○	○	○
H05PB0520A	RT+5 to 200	5	3	700	16	4	●	●	●	○	○	○
H09PB0520A	RT+5 to 200	9	3	700	16	4	●	●	●	○	○	○
H13PB0520A	RT+5 to 200	13	3	700	16	4	●	●	●	○	○	○
H20PB0520A	RT+5 to 200	20	3	700	16	4	●	●	●	○	○	○
H28PB0520A	RT+5 to 200	28	3	700	16	4	●	●	●	○	○	○

● = Standard

○ = Optional

X = Not Available

1.1 ESCY MAX SERIES HEATING CIRCULATORS



The ESCY Max series heating circulators (MX models) are equipped with all the features of the PB models. Additionally, they feature multiple data logging options, TFT Colour display (Touchscreen) & Software.

1.1 Heating Circulators

Max Series (MX)

- TFT coloured display with Touchscreen, multiple set points & advance safety features viz Low liquid level audio visual alarm, over temp cut off.
- Optional features are Multiple Ramp and Soak, External Temperature control & RS485 communication port.
- High quality stainless steel bath tanks with bath lids and drain tap.
- Models for internal and external circulation applications.
- Compact, space saving & easy operation.
- Selectable Display resolution of 0.1, 0.01.
- Integrated pump connection with nozzles.
- Powerful pump with variable speed.



RS485
Communication
Port



USB
Connection
Port



RS232
Interface
Connection



Alarm
Alert



Cell Phone
Alert



Data
Logging



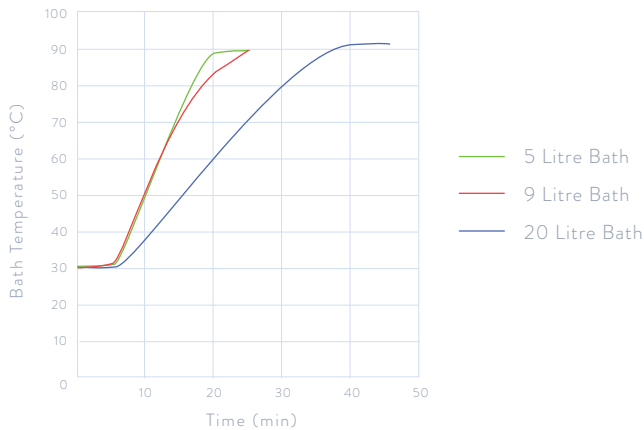
Email
Alert



TFT
Display

Heating Curve

Bath Liquid: Ethanol



Standard Specification for all models:

- Temperature stability: $\pm 0.01^{\circ}\text{C}$
- Pump pressure (mbar): 700
- Pump Flow rate Max (lpm): 16.
- No. of Set Points: 4.
- Low liquid level alarm.
- Over Temp Cut off.
- Variable speed control.



Model	Temperature Range (°C)	Bath Volume (L)	Heater Capacity (kW)
H05MX0520A	RT+5 to 200	5	2
H09MX0520A	RT+5 to 200	9	2
H13MX0520A	RT+5 to 200	13	3
H20MX0520A	RT+5 to 200	20	3
H28MX0520A	RT+5 to 200	28	3.5

2. Refrigerated Circulators

Basic Series (BC)

ESCY Refrigerated circulators are suitable for both internal & external temperature control applications. Depending on the required temperature, rate of heating or cooling, and desired features, one can select from various models. Smaller objects can be inserted directly into the bath at the same time.

- High quality stainless steel bath tanks with bath lids and drain tap.
- Microprocessor based PID Controller with Dual LED Display.
- Models for internal and external circulation applications.
- Integrated pump connection with nozzles.
- Compact and space saving.
- Robust Cooling.
- Easy operation.

Standard Specification for all models:

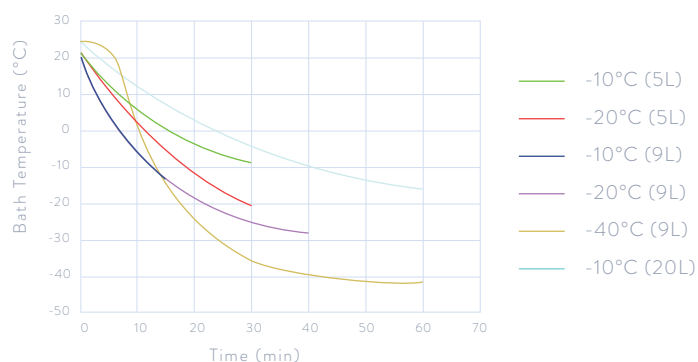
- Temperature stability: $\pm 0.03^{\circ}\text{C}$
- Pump pressure (mbar): 300
- Pump Flow rate Max (lpm): 12
- No. of Set Points: 1



Model	Temperature Range (°C)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)
R05BC1010A	-10 to +100	5	1	0.3
R05BC2010A	-20 to +100	5	1	0.3
R05BC2510A	-25 to +100	5	1	0.6
R09BC1010A	-10 to +100	9	2	1
R09BC2010A	-20 to +100	9	2	0.8
R09BC2510A	-25 to +100	9	2	0.8
R09BC3010A	-30 to +100	9	2	0.7
R13BC1010A	-10 to +100	13	2	1
R13BC2010A	-20 to +100	13	2	0.8
R20BC1010A	-10 to +100	20	2	0.8

Cooling Curve

Bath Liquid: Ethanol



2.1 Refrigerated Circulators

Prime Series (PS)

The ESCY Prime series refrigerated circulators (PS models) come equipped with advanced control features, including multiple set points, various safety features, and data logging capabilities.

- Microprocessor based PID controller with Dual LED Display, multiple set points & advance safety features viz Low liquid level audio visual alarm, over temp cut off.
- Optional features are Multiple Ramp and Soak, External Temperature control & RS485 communication port.
- High quality stainless steel bath tanks with bath lids and drain tap.
- Compact, space saving, easy operation & Robust Cooling.
- Models for internal and external circulation applications.
- Integrated pump connection with nozzles.



Standard Specification for all models:

- Temperature stability: $\pm 0.03^{\circ}\text{C}$
- Pump pressure (mbar): 300
- Pump Flow rate Max (lpm): 12
- No. of Set Points: 4
- Low liquid level alarm
- Over Temp Cut off.

Model	Temperature Range (°C)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)	RS485 Comm	External Temperature Control	Ramp and Soak
R05PS1010A	-10 to +100	5	1	0.3	○	○	○
R05PS2010A	-20 to +100	5	1	0.3	○	○	○
R05PS2510A	-25 to +100	5	1	0.6	○	○	○
R09PS1010A	-10 to +100	9	2	1	○	○	○
R09PS2010A	-20 to +100	9	2	0.8	○	○	○
R09PS2510A	-25 to +100	9	2	0.8	○	○	○
R09PS3010A	-30 to +100	9	2	0.7	○	○	○
R13PS1010A	-10 to +100	13	2	1	○	○	○
R13PS2010A	-20 to +100	13	2	0.8	○	○	○
R20PS1010A	-10 to +100	20	2	0.8	○	○	○

○ = Optional

2.2 Refrigerated Circulators

Prime Series (PB)

The ESCY Prime series refrigerated circulators (PB models) are equipped with all the features of the PS models. Additionally, they feature higher-capacity pumps designed to handle both high pressure and flow rates.



Standard Specification for all models:

- Temperature stability: $\pm 0.03^{\circ}\text{C}$
- Pump pressure (mbar): 700
- Pump Flow rate Max (lpm): 16.
- No. of Set Points: 4.
- Low liquid level alarm.
- Over Temp Cut off.
- Variable speed control.

Model	Temperature Range ($^{\circ}\text{C}$)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)	RS485 Comm	External Temperature Control	Ramp and Soak
R05PB1010A	-10 to +100	5	1	0.3	○	○	○
R05PB2010A	-20 to +100	5	1	0.3	○	○	○
R05PB2510A	-25 to +100	5	1	0.6	○	○	○
R09PB1010A	-10 to +100	9	2	1	○	○	○
R09PB2010A	-20 to +100	9	2	0.8	○	○	○
R09PB2510A	-25 to +100	9	2	0.8	○	○	○
R09PB3010A	-30 to +100	9	2	0.7	○	○	○
R09PB4010A	-40 to +100	9	2	0.63	○	○	○
R13PB1010A	-10 to +100	13	2	1	○	○	○
R13PB2010A	-20 to +100	13	2	0.8	○	○	○
R13PB6005A	-60 to +50	13	2	0.6	○	○	○
R13PB8005A	-80 to +50	13	2	0.6	○	○	○
R20PB1010A	-10 to +100	20	2	0.8	○	○	○

○ = Optional

Temperatures up to 200°C are available on request.



2.3 Refrigerated Circulators

Max Series (MX)

- TFT coloured display with Touchscreen, multiple set points & advance safety features viz Low liquid level audio visual alarm, over temp cut off.
- Optional features are Multiple Ramp and Soak, External Temperature control & RS485 communication port.
- High quality stainless steel bath tanks with bath lids and drain tap.
- Compact, space saving, easy operation & Robust Cooling.
- Models for internal and external circulation applications
- Selectable Display resolution of 0.1, 0.01.
- Integrated pump connection with nozzles.
- Powerful pump with variable speed.

Standard Specification for all models:

- Temperature stability: $\pm 0.01^{\circ}\text{C}$
- Pump pressure (mbar): 700
- Pump Flow rate Max (lpm): 16.
- No. of Set Points: 4.
- Low liquid level alarm.
- Over Temp Cut off.
- Variable speed control.



RS485
Communication
Port



USB
Connection
Port



RS232
Interface
Connection



Alarm
Alert



Cell Phone
Alert



Data
Logging



Email
Alert



TFT
Display

Model	Temperature Range ($^{\circ}\text{C}$)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)	RS485 Comm	External Temperature Control	Ramp and Soak
R09MX1010A	-10 to +100	9	2	1	○	○	○
R09MX2010A	-20 to +100	9	2	0.8	○	○	○
R09MX2510A	-25 to +100	9	2	0.8	○	○	○
R09MX3010A	-30 to +100	9	2	0.7	○	○	○
R09MX4010A	-40 to +100	9	2	0.63	○	○	○
R13MX1010A	-10 to +100	13	2	1	○	○	○
R13MX2010A	-20 to +100	13	2	0.8	○	○	○
R13MX6005A	-60 to +50	13	2	0.6	○	○	○
R13MX8005A	-80 to +50	13	2	0.6	○	○	○
R20MX1010A	-10 to +100	20	2	0.8	○	○	○

○ = Optional

Temperatures up to 200°C are available on request.

2.3 ESCY MAX SERIES REFRIGERATED CIRCULATORS



The ESCY Max series refrigerated circulators (MX models) are equipped with all the features of the PB models. Additionally, they feature multiple data logging options, TFT Colour display (Touchscreen) & Software.

3. Mini Chillers

Basic (BC) & Prime (PS) Series

ESCY Mini chillers help cool various laboratory equipment, including rotary evaporators, and are suitable for applications such as separations, chemical reactions, spectroscopy, and lab automation.

- Accurate Temperature control.
- Robust, powerful cooling.
- Small Filling port.
- Models with fixed Tank capacities (5, 9 litres) or Reservoir with Brazed Plate Heat Exchanger (BPHE Technology).



Standard Specification for all models:

- Temperature stability: $\pm 0.03^{\circ}\text{C}$ / 0.5°C
- No. of Set Points: 1.
- Magnetic Pump

Additional features in PS models

- RS485 communication port
- Integrated PID controller
- Low Liquid level Alarm
- Over Temp cutoff
- Timer

Model	Temperature Range (°C)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)	Pump Pressure (mbar)	Pump Flow Rate Max (lpm)	RS485 Comm	External Temperature Control
M05BC2040A	-20 to +40	5	1	0.6	350	15	X	X
M05BC1040A	-10 to +40	5	1	1	350	15	X	X
M09BC2040A	-20 to +40	9	2	1.2	600	20	X	X
M09BC1040A	-10 to +40	9	2	1.5	600	20	X	X
M05PS2040A	-20 to +40	5	1	0.6	350	15	O	O
M05PS1040A	-10 to +40	5	1	1	350	15	O	O
M09PS2040A	-20 to +40	9	2	1.2	600	20	O	O
M09PS1040A	-10 to +40	9	2	1.5	600	20	O	O

O = Optional

X = Not Available

Temperatures up to 80°C available on request.

3.1 Recirculating Chillers

Prime Series (PS)

The ESCY Prime series recirculating chillers (PS models) come equipped with advanced control & safety features and integrated controller.

- Accurate Temperature control.
- Robust & powerful cooling.
- Small Filling port.
- Safety features viz. Low liquid level audio visual alarm, over temp cut off.
- External Temperature control & RS485 communication port, are optional features.
- Provided with positive displacement pump (max pressure 4 bar & flow rates 6, 12 or 25 lpm).
- Models with fixed Tank capacities (5, 9 litres) or Reservoir with Brazed Plate Heat Exchanger (BPHE Technology).



Standard Specification for all models:

- Temperature stability: $\pm 0.03^{\circ}\text{C}$ / 0.5°C
- Temperature control PID I On/Off
- Low liquid level alarm.
- No. of Set Points: 1.
- Over Temp Cut off.
- Pump Pressure (bar): 4

Model	Temperature Range (°C)	Bath Volume (L)	Cooling Capacity @ 20°C (kW)	Pump Flow Rate Max (lpm)	RS485 Comm	External Temperature Control
C05PS0510A	+5 to RT	5	1	6	○	○
C09PS0515A	+5 to RT	9	1.5	6	○	○
C09PS0520A	+5 to RT	9	2	6	○	○
C09PS0528A	+5 to RT	9	2.8	6	○	○
C09PS0550A	+5 to RT	9	5	6	○	○
C09PS0570A	+5 to RT	9	7	6	○	○

○ = Optional

Pump flow rates 12 & 25 lpm available on request

4. Immersion Circulators

ESCY Immersion circulators precisely control temperature in baths or tanks of up to 55 litres. The circulator comes with a clamp, facilitating easy installation onto an existing tank with a thickness of 25mm. All parts immersed in the bath liquid are made of high-quality stainless steel or synthetic material.



● = Standard

○ = Optional

X = Not Available

Model	Basic	PRIME (PS)	PRIME (PB)
Model Code	I00BC0510A	I00PS0510A	I00PB0510A
Type of Control	PID Stand Alone	PID Integrated	PID Integrated
Working Temperature Range (°C)	Rt+5 to 100	Rt+5 to 100	Rt+5 to 200
Temperature Stability (°C)	+/- 0.03	+/- 0.03	+/- 0.03
Number of Set Points	1	4	4
Circulation Pressure (mbar)	300	300	700
Circulation flow rate, max (l/min)	8/10	8/10	8/16
Heater Capacity (kW)	1 or 2	1 or 2	2 or 3
Low liquid level alarm	X	●	●
Over temperature cut off	X	●	●
RS 485 Communication	X	○	○
External temperature control	X	○	○
Programmable Ramp and Soak	X	○	○
Number of programs	X	10	10

4.1 Immersion Coolers

Model	IMC 20	IMC 30	IMC 40	IMC 80
Temperature Range (°C)	-20 to +40	-30 to RT	-40 to RT	-80 to RT
Cooling Capacity (kW)				
@ 20 °C	0.3	0.35	0.35	0.3
@ -10 °C	0.2	0.2	0.25	0.28
@ -40 °C	X	X	0.5	0.17
@ -70 °C	X	X	X	0.1
Supply Voltage V/Hz	230 / 50	230 / 50	230 / 50	230 / 50

Note: Bath volume 5L

ESCY Immersion coolers are valuable tools used in laboratories for precise and efficient low-temperature cooling. They offer better cooling performance compared to using water, water ice, or dry ice.

Typical applications include Vapour Trapping, Freezing point testing, Freeze drying, Exothermic Reactions, Dry Ice replacement, Direct Cooling Custom Applications, Solvent Trapping, Thermal analysis.

5. Unstirred Water Baths

ESCY Unstirred Water Baths are high quality devices with a Temperature stability of +/- 0.2°C. The working temperature range from RT+5°C to 95°C enables a wide variety of applications, including routine laboratory work, temperature control for samples, incubation, material testing, corrosion testing, culture applications & food and beverage temperature testing.

- Microprocessor based PID controller.
- 4 Pre-set temperature settings.
- Easy operation.
- Bright Dual LED Display
- Integrated Timer
- Integrated protection against running dry.
- Integrated drain.
- No obstructing elements in the bath
- Platform included as standard.
- Non-slip Rubber feet.
- Ergonomic recessed grip for easy handling.
- Available with the option of 3 different lids:
 1. Flat Lid
 2. Gable Cover
 3. Concentric Ring



Standard Specification for all models:

- Temperature stability: ± 0.2°C.
- Low liquid level alarm.
- Over Temp Cut off.

Top Flat Cover Model	Temperature Range (°C)	Bath Volume (L)	Heater Capacity (kW)	Cooling Capacity @ 20°C (kW)	Top Gable Cover	Top Concentric Rings
U05FL0595A	RT+5 to 95	5	1	0.4	○ (U05GC0595A)	○ 2 (U05CR0595A)
U13FL0595A	RT+5 to 95	13	2	0.7	○ (U13GC0595A)	○ 6 (U13CR0595A)
U20FL0595A	RT+5 to 95	20	2	1.4	○ (U20GC0595A)	○ 12 (U20CR0595A)
U28FL0595A	RT+5 to 95	28	2.5	1.4	○ (U28GC0595A)	○ 12 (U28CR0595A)

○ = Optional

6. Software

- Microsoft Windows 10 based secured SQL database.
- Auto and Manual Data back-up.
- Web-based connectivity.
- User management.
- Data restore.
- Email alerts.
- SMS alerts.
- Date & Time stamped Reports with configurable Title, Header & Footer, in excel & pdf formats:
 - Data Log report.
 - Alarm Log report.
 - History Graph report.
 - Audit Trail report.
 - Configurable data Print facility.

*Note: The images in this catalog are for illustrative purposes only. Actual products may vary. For dimensions, weight & updated information, please refer www.escyequipments.com



◦ Group Global Presence



Certifications & Approvals



ESCY

ESCY Equipments Pvt Ltd is a premier manufacturer specializing in precise temperature control instruments for research, science, and industry. For over 25 years, we have adhered to the ideology of 'Temperature Engineered'. Our unwavering commitment to delivering optimal temperature control solutions, coupled with a solution-oriented approach, underscores our dedication to excellence.



Thermolab Group is a leader in the manufacturing and exporting of stability chambers, providing comprehensive testing services, stability storage and contract manufacturing of pharmaceutical products. With over 55 years of experience and a strong global presence, we are committed to delivering innovative and energy-efficient solutions that meet the highest standards of quality and reliability. Our dedicated team excels in after-sales support, ensuring our clients receive unparalleled service and expertise.



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