

ESCY

25
years of
excellence



Temperature Engineered

A Thermolab Group Company
www.escyequipments.com

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:

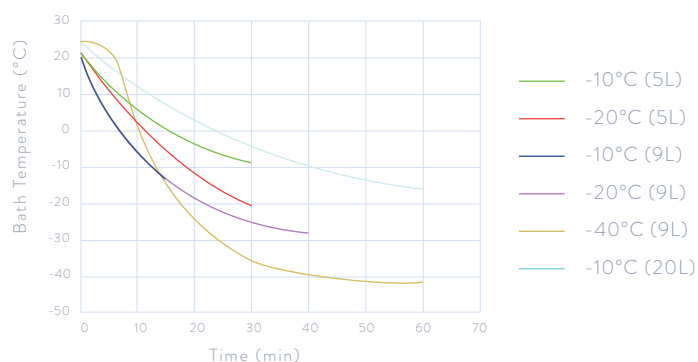
- Temperature stability: $\pm 0.03^{\circ}\text{C}$
- Pump pressure (mbar): 300
- Pump Flow rate Max (lpm): 12
- No. of Set Points: 1



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.