

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.