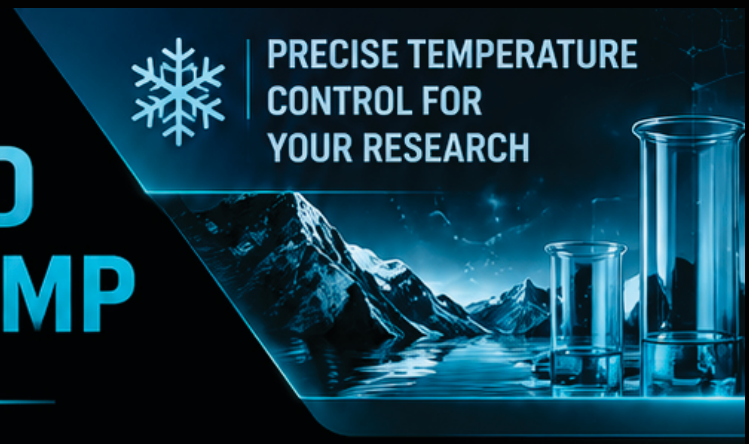
BIOSPECTRIX

ADVANCED LABORATORY SOLUTIONS

LOW TEMPERATURE COOLING LIQUID CIRCULATING PUMP

CLC-50/40

STABLE | EFFICIENT | RELIABLE





Wide Temperature Range
-40°C to 50°C

Stable Circulation
Continuous & Reliable Operation

High Efficiency
Advanced Cooling System

Low Noise Operation
Ideal for Laboratory Use

Compact Design
Space Saving

Reliable Performance
Long Service Life

APPLICATIONS

- Laboratory Equipment
- Industrial Processes
- Research Applications
- Pilot-Scale Systems
- Analytical Instruments

Low temperature cooling liquid circulating pump CLC-50/40

Working principle

This product is mechanically cooled by a totally enclosed compressor. The inner wall of the cooling tank has cooling copper coils. The refrigerant (Freon) continuously circulates through the coil on the inner wall of the water tank to cool the refrigerant in the tank. And then the refrigerant is conveyed to interlayer of the supporting equipment or the condensation coil through built-in circulation pump and external circulation pipeline. This method can cool the material in the reactor indirectly, and also cool & liquefied the steam in contact with condensation tube.

Generally speaking, this product can connect with the interlayer of a double-layer glass reactor, rotary evaporator, and condensation coil of the reactor for usage. It is also feasible to directly put objects or containers which need to be cooled into the bath for cooling or reaction.

The outlet pipe of this product is connected to the lower inlet pipe of the kettle or condenser. The circulating liquid comes out from the upper circulation port and returns to the inlet of this product through the pipe, forming a complete circulation.

Technical parameters

Name	Low temperature cooling liquid circulating pump	
Model	CLC-50/40	
Usage temperature range	-40℃ ~room temperature	
Environment temperature	5 ~35 ℃	
Environment humidity	≤70％ ventilation	
Power supply	Single phase 220V/60HZ	
Safety protection	Delay, overcurrent, overheating, phase sequence, phase loss protection	
Display	LCD display, key operation	
Temperature control accuracy	±0.1℃	
Sensor	PT100	
Total power	4035W	
Compressor	Specification	5P
	Quantity	1
	Power	3675W
	Cooling capacity	11025W-184W
	Power	100W
	Lift	4-6M
Circulation pump	Flow	20-40L/min
	Pressure	≤0.4bar
Air-cooling condenser	Power	260W
	Heating exchange area	21.2 ㎡
	Air volume	3400m³/h
Refrigerant	R404A	
Plate-type heat exchanger	Heating exchange area 1.46m2	
Equipment material	Cold plate spray, anti-corrosion	
Storage tank volume	About11L (300X300X120mm)	
Outer circulation interface	Pagoda joint with Φ16mm outer diameter (facing the left side of the equipment）	
Overall dimension(W*D*H)	670×730×1100 mm	
Net weight	124KG	
Packing dimension	840×790×1290mm wooden package 0.86m³	
Packing weight	178KG	