

DCP-5

Low-Temperature Cooling Circulator Series

NEW

The low-temperature cooling circulator (or thermostat) is an efficient temperature control device that regulates temperature through pumping low-temperature cooling fluid. It is suitable for laboratories, pharmaceuticals, chemicals, and semiconductor industries where stable low-temperature environments are required.



Features

- **Easy Operation:** LED display, simple menu, one-touch start.
- **Compact Design:** Small size, suitable for desktops and fume hoods.
- **Precise Temperature Control:** Built-in sensor and PID technology ensure high temperature stability.
- **Convenient Handling:** Top liquid filling, rear draining, clear liquid level, with overflow protection.
- **Rapid Response:** Quickly adjusts to load and temperature changes, with strong adaptability.
- **Eco-Friendly Refrigerant:** Non-toxic, non-polluting, with excellent cooling performance.
- **Energy Efficiency:** Proportional cooling adjustment for low-energy operation.
- **Stable Circulation System:** Powerful pump ensures uniform cooling.
- **Extended Lifespan:** Low-speed operation reduces wear.
- **Low Noise:** Suitable for quiet environments.
- **Easy Cleaning:** Removable panel for easy filter cleaning and convenient drainage.
- **High-Quality Insulation:** Reduces heat exchange, ensuring temperature stability.
- **Rapid Heat Dissipation:** Prevents overheating, maintaining stable equipment operation.

Application Fields

- **Laboratory Cooling:** Provides stable low-temperature environments for condensers, rotary evaporators, spectrometers, and other equipment.
- **Chemical Reaction Cooling:** Controls reaction temperatures, preventing overheating and ensuring product quality.
- **Pharmaceutical and Biotech Applications:** Precise low-temperature control for freeze drying, enzyme reactions, blood preservation, and more.
- **Semiconductor Manufacturing:** Supplies low-temperature environments for semiconductor equipment, ensuring process stability.
- **Food and Beverage Processing:** Maintains constant low temperatures during food processing and storage, extending product freshness.

Specifications	DCP-5	DCP-17	DCP-20	DUC-10
Temperature range [°C]	-20-40			5-35
Temperature control accuracy [°C]	±0.3	±0.5		±0.1
Temperature display	LED			3.5-inch LCD touch screen
Display accuracy [°C]	0.1			
Temperature control method	Intelligent PID			
Control temperature sensor	PT 100			
Cooling capacity @20°C [W]	700	2400	3200	1000
Cryogen	R404a			
Maximum pump pressure [bar]	0.3	1.5		1.3
Maximum flow rate of pump [L/min]	22			2-20 (Adjustable)
Tank capacity [L]	4.5	17	20	7
Instrument fixing method	Floor standing			
Allow continuous operation [%]	100			
Allow ambient temperature [°C]	5-40			
Allow relative humidity [%]	80			
Internal diameter of external pipe mouth [mm]	8	10		
Overall Dimensions (WxDxH) [mm]	230×490×450	400×560×705	450×600×1100	310×650×530
Power Supply [VAC/Hz]	100-120V/200-240V, 50/60Hz			
Power [W]	700 Max.	1000 Max.	1500 Max.	650 Max.
Electric current [A]	3.5 Max.	5 Max.	7.5 Max.	3.5 Max.