

HRV-425

Hermetic Heating Cooling Circulator

Lab1st HRV-4 series hermetic heating cooling circulators have a working range of -40°C to 200°C, and are widely used in pharmaceutical, chemical, biological and other industries to provide heat and cold sources. The machine adopts a fully enclosed pipeline design and is equipped with a high-efficiency plate heat exchanger, which reduces the demand for heat transfer fluid and improves the heat utilization rate of the system to achieve rapid temperature rise and fall. The heat transfer medium is in a hermetic system with an expansion tank. The heat transfer medium in the expansion tank does not participate in the circulation. Whether it is high temperature or low temperature, the expansion tank is kept at 60°C, which effectively reduces the risk of the heat transfer medium absorbing moisture and volatilizing during operation.

Features

Design temperature range: -40°C to 200°C

Pre-cooling device, cooling system and heating system can be used in combination

Fast cooling rate, forced rapid cooling

Real-time monitoring of liquid level tube to avoid lack of heat carrying fluid

Circulation system is closed, no volatilization, to protect the health of the experimenter

The liquid storage tank and circulation pipeline are made of 304 stainless steel with good corrosion resistance

With high and low voltage protection, overload protection, over current protection, grounding protection and other protection functions



Parameters

Model	HRV-425
——TECHNICAL DATA——	
Design Temperature Range [°C]	-40~200°C;±1°C
Ambient Temperature [°C]	≤30°C
Optimum Ambient Humidity	0.6
Temp. Sensor	PT100
Safety	Multi-protection: Overvoltage, Delay, Overcurrent, Overheating, Leakage, Protector
——ELECTRICAL REQUIREMENTS——	
Voltage	220V
Phase	1P
Frequency	50/60HZ
Total Power [Kw]	2.8
Heating Power [Kw]	2
——COOLING CAPACITY [w]——	
RT	1900



0°C	1200	
-40°C	250	
COMPRESSOR		
Туре	Fully Enclosed	
Brand	Panasonic	
Power [Kw]	0.73	
Phase	1	
Refrigerating Fluid	R404A	
CONDENSER		
Туре	Sealed Air Cooling	
Fans Type	Axial Flow Outer Rotor	
Fans Quantity	1	
CIRCULATION PUMP		
Туре	Canned Motor Pump	
Power [W]	100	
Lift [m]	6	
Rated Flow [L/min]	25	
——EXTERNAL CIRCULATION——		
Expansion Tank Volume [L]	7	
External Circulation Interface	G1/2"Outer Wire	
WEIGHT DIMENSION		
Unit Weight [Kg]	60	
Unit Dimension [mm]	540×420×800	
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ackages		
W (mm)	CBM (m3)	
D (mm)	Weight (kg)	
H (mm)		

^{*} Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.