

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. .



Hermetic Heating Cooling Circulator

## 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

## Technical Data:

Model	HRV-4A15
——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	220/380V
Phase	3P

Frequency	50/60HZ
Total Power [Kw]	23
Heating Power [Kw]	15
——COOLING CAPACITY [w]——	
RT	31438
0°C	25214
-40°C	2584
——COMPRESSOR——	
Type	Fully Enclosed
Brand	Danfoss
Power [Kw]	7.5
Phase	10
Refrigerating Fluid	R404A
——CONDENSER——	
Type	Sealed Air Cooling
Fans Type	Axial Flow Outer Rotor
Fans Quantity	2
——CIRCULATION PUMP——	
Type	Canned Motor Pump
Power [W]	280
Lift [m]	12
Rated Flow [L/min]	35
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	100
External Circulation Interface	G1"Outer Wire
——WEIGHT   DIMENSION——	
Unit Weight [Kg]	340
Unit Dimension [mm]	950×800×1320

## Package Information:

Length (cm)	Width (cm)
Height (cm)	CBM (m3)
Weight (kg)	Total capacity
Product Serial No. 9017	2025-09-02 11:08:22

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