

Lab1st HR-F series hermetic heating cooling circulators have a working range of -25°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: -25°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	HR-70-F
——TECHNICAL DATA——	
Design Temperature Range [°C]	-25~200°C;±0.5°C
Ambient Temperature [°C]	≤30°C
Optimum Ambient Humidity	85%
Temp.Sensor	PT100
Safety	Self-diagnosis, Overload Protection, Pressure Switch, Thermal Protection
——ELECTRICAL REQUIREMENTS——	
Voltage	220/380V
Phase	3P

Frequency	50/60HZ
Total Power [Kw]	11.8
Heating Power [Kw]	7.5
——COOLING CAPACITY [w]——	
20°C	7000
5°C	6600
-20°C	3800
——COMPRESSOR——	
Type	Fully Enclosed
Brand	HITACHI
Power [Kw]	3.75
Phase	5
Quantity	1
Refrigerating Fluid	R404A
——CONDENSER——	
Type	Aluminum Fins
Fans Type	Axial Flow Fan
Fans Quantity	2
——CIRCULATING PUMP——	
Type	Regenerative Pump
Power [W]	250
Pressure [bar]	2
Rated Flow [L/min]	35
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	17
External Circulation Interface	G3/4"
——WEIGHT DIMENSION——	
Unit Weight [Kg]	205
Unit Dimension [mm]	640×530×1400

Package Information:

Length (cm)	Width (cm)
Height (cm)	CBM (m3)
Weight (kg)	Total capacity
Product Serial No. 9095	2025-05-28 15:14:09

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

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Technical Data:

Model	HR-100-F
——TECHNICAL DATA——	
Design Temperature Range [°C]	-25~200°C;±0.5°C
Ambient Temperature [°C]	≤30°C
Optimum Ambient Humidity	85%
Temp.Sensor	PT100
Safety	Self-diagnosis, Overload Protection, Pressure Switch, Thermal Protection
——ELECTRICAL REQUIREMENTS——	
Voltage	220/380V
Phase	3P

Frequency	50/60HZ
Total Power [Kw]	17
Heating Power [Kw]	12
——COOLING CAPACITY [w]——	
20°C	10000
5°C	8000
-20°C	4600
——COMPRESSOR——	
Type	Fully Enclosed
Brand	HITACHI
Power [Kw]	4.4
Phase	6
Quantity	1
Refrigerating Fluid	R404A
——CONDENSER——	
Type	Aluminum Fins
Fans Type	Axial Flow Fan
Fans Quantity	2
——CIRCULATING PUMP——	
Type	Regenerative Pump
Power [W]	370
Pressure [bar]	2.8
Rated Flow [L/min]	42
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	35
External Circulation Interface	G3/4"
——WEIGHT DIMENSION——	
Unit Weight [Kg]	250
Unit Dimension [mm]	610×610×1400

Package Information:

Length (cm)	Width (cm)
Height (cm)	CBM (m3)
Weight (kg)	Total capacity
Product Serial No. 9095	2025-05-28 15:14:30

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