RECIRCULATING HEATER CHILLER

UHC-1040

-40°C to 200°C 6L Heater Chiller for 10L Reactors

The UHC-10/40 provides a uniform temperature liquid loop for reactor jackets or other heat exchangers, using both heating and cooling across -40°C to 200°C with +/- 2°C accuracy. A plate heat exchanger achieves large changes in temperature rapidly, and the closed loop 6L reservoir is built for 10L reactors.

- **Wide temperature range.** -40°C to 200°C with high performance silicone oil.
- **Heating and cooling.** 3kW heating wattage and 1.9kW refrigerating wattage.
- **Rapid temperature changes.** Plate heat exchanger achieves large changes in temperature rapidly.
- **Closed loop design.** Small in-feed hole keeps the reservoir closed off from the outside environment.
- **Portable on casters.** Casters aid portability; insulated metal flex hoses included.

MODEL UHC-1040



-40 to 200 °C	6,247 BTU	3 kW	6 L
TEMPERATURE RANGE	COOLING AT 20°C	HEATING WATTAGE	RESERVOIR CAPACITY

Technical Specifications

Model **UHC-1040**

TEMPERATURE CONTROL

Temperature range	-40°C to 200°C
Accuracy	+/- 2°C
Over-temperature protection	Over temperature safety dial
Recommended fluids	High performance silicone oil (-40°C to 200°C); PG 60% : DW 40% (-40°C to 110°C)

REFRIGERATION

Refrigerating wattage	1.9kW
Compressor BTU capacity	6,247 @20°C / 3,412 @-40°C
Refrigerant	R-448 (2025+)
Heat exchanger	Plate heat exchanger
Gauges	Compressor gauges

OPERATION

Controls	LCD control panel on the front
Duty cycle	Maximum operation time 16 hours; not for 24-hour operation
Compressor cycling	No more than 5 times per day
Compressor cool-down	10 minutes before restart
Ambient operating temperature	70°F or 20°C

CIRCULATION

Loop type	Closed loop with small in-feed hole
Pump flow	35L/min
Pump pressure	28.48 psi | 20m / 65.62 ft.
Pump wattage	250W
Fluid connection	3/4" MNPT

ELECTRICAL

Power supply	220-240V, Single Phase
Amperage	30A
Acceptable voltage	219V - 253V; not compatible with 208V
Total wattage	5kW
Heating wattage	3kW
Plug	NEMA 6-20P
Frequency	60 Hz

BATH AND DIMENSIONS

Reservoir capacity	6L
Fluid level indicator	Sight glass
Dimensions	25" x 22" x 42"
Weight	327 lb
Mobility	Casters

ORDERING INFORMATION

CATALOG NO.	DESCRIPTION	ELECTRICAL
UHC-1040	6L Heater Chiller for 10L Reactors -40°C to 200°C, 6L reservoir	220-240V, Single Phase NEMA 6-20P plug

IDEAL APPLICATIONS

Jacketed 10L reactors · Vacuum systems · Rotary evaporators · Columns · Solvent tanks · Analytical instruments

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