

## NEW

## Cooling pump CHV-750AS/1500AS/2200AS/3750AS/4500AS

*The air-cooled separate type and ideal for cleanroom. The equipped inverter can save energy and realize high accuracy. It can be customized based on the following specifications upon request.*



CHV-750AS (Indoor unit)

CHV-750AS (Outdoor unit)

\*Plumbing for the indoor/chiller unit and the outdoor unit is required.



## Features

- The air-cooled separate type and no noise or vibration in the room
- The size of the equipped inverter is compact and can save energy
- Plumbing for the indoor unit and the outdoor unit is required

## Applications

- The temperature control for Transmission electron microscope.

**The size of the equipped inverter is compact, and it can save energy and realize low operation noise.**

Saves energy up to Max. 60% of operating current. Realizes high accuracy of  $\pm 0.1^{\circ}\text{C}$ . The indoor/outdoor units can realize a significant reduction in noise compared to our conventional products. Supports a variety of installation environments.

## Customizable upon request as a special order

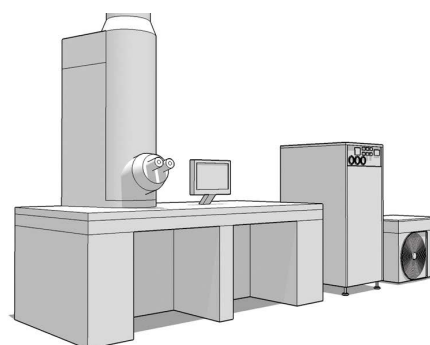
Can be customized based on the following specifications upon request. Please feel free to ask us. Cooling capacities other than the notation (see below) and precision temperature control  $\pm 0.05^{\circ}\text{C}$  are available as an option.

## Equipped with a Warning indicator lamp

Failure diagnosis can be performed quickly to shorten the time required for recovery.

## The wetted parts are made of stainless steel.

Restrains the generation of green copper rust to reduce defect.



The separate type is ideal for temperature control for precision equipment with no exhaust heat in the room.

(\*The chiller unit and the outdoor unit are not placed side by side as shown in the figure, in fact, they installed separately.)

Model		CHV-750AS	CHV-1500AS	CHV-2200AS	CHV-3750AS	CHV-4500AS
Temperature range		+10°C to +25°C				
Control accuracy (*1)		±0.1°C				
Cooling capacity [kW] (*2) (Circulation temperature at 10°C)		3	5	8	18	25
Compressor output, Refrigerant		0.75 kW, R407C	1.1 kW, R407C	2.2 kW, R407C	3.75 kW, R410A	4.5 kW, R410A
Pumping capacity (50/60 kHz) (*3)	Max. discharge pressure [MPa]	0.52			0.59	
	Flow rate [L/min]	22/31			42/55	
	Motor output [kW]	0.4			0.75	
Safety device/function		Short/Over current breaker, Warning and Cut off for low water, Pump overcurrent, Water temperature abnormal, Warning indicator lamp				
Water bath capacity (at 80% water level)		26 L	56 L		110 L	230 L
Connecting pipe diameter (Circulating fluid in/out)		Rc1/2	Rc1		Rc1-1/4	
Dimensions (W×D×H)	Indoor unit	450 × 555 × 896 mm	570 × 677 × 1236 mm		570 × 677 × 1241 mm	687 × 922 × 1657 mm
	Outdoor unit	900 × 320 × 890 mm			900 × 320 × 1540 mm	1196 × 442 × 1563 mm
Weight	Indoor unit	70 kg	110 kg	115 kg	125 kg	160 kg
	Outdoor unit	51 kg	58 kg	72 kg	116 kg	186 kg
Power Supply (three phase AC 200 V, 50/60 Hz) (*4)		15 A	20 A	30 A	50 A	60 A
Operation current		7 A	11 A	16 A	30 A	42 A

(\*1)Performance may not be maintained due to environmental temperature, heat load, circulation pipe distance, etc. When the thermal load becomes below approx. 30% of the cooling capacity, the control accuracy changes to  $\pm 2.0^{\circ}\text{C}$  due to the compressor On-Off control. (\*2)Capacity when the ambient temperature at below  $+30^{\circ}\text{C}$ . (\*3)Capacity when using tap water. Flow rate when the discharge pressure at 0.3 MPa. (\*4)Need a step-down transformer outside when used.

•The cooling capacity may not be maintained if the unit is placed in direct sunlight and hindrance of exhausting. •There is a distance limit between the indoor unit and outdoor unit, so please contact us for more information. •Standard products cannot use pure water as circulating fluid. •Please ask us when mixing chemicals for water treatment to circulating fluid. •The fee for Delivery, Installing, Piping work, and Wiring work are quoted separately.