Cooling pump CHV-750W~3750W

The equipped inverter enable to save energy and realize high accuracy. Water-cooled integrated standard model. Can be customized upon request.





CHV-3750W %The appearance is subject to change.

The equipped inverter enable to save energy and realize low operation noise and small consumption current.

Saves energy up to Max. 62% OFF (%Compared with our conventional products) of operating current and Realizes the high accuracy \pm 0.1 [°C] .

Customizable to upon request as 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°C are available as an option.

The water-cooled integrated type is ideal for cleanroom.

No exhaust heat from the compressor, no influence on the room. Primary cooling water and its piping construction (a separate fee) are required.

Equipped with Warning indicator lamp.

Failure diagnosis can be performed speedy to shorten a time required for recovery.

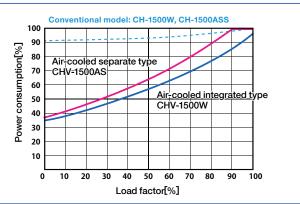
Features

- •The water-cooled integrated type is ideal for cleanroom.
- •The equipped inverter enable to save energy and realize low operation noise and small consumption current.
- •Customizable to upon request as special order.

Main Applications

•The temperature control for Semiconductor manufacturing equipment, roller part of printing machine, etc.

Power consumption curve (Compared with our conventional products)



Model		CHV-750W	CHV-1500W	CHV-2200W	CHV-3750W
Temperature range		+10°C to +25°C			
Control accuracy (*1)		±0.1 °C			
Cooling capacity [kW] (*2) (Circulation temperature at 10°C)		3.0	6.0	9.0	14.0
Compressor output, Refrigerant		0.75kW, R407C	1.1kW, R407C	1.9kW, R407C	3.75kW, R407C
Pumping capacity (50/60kHz) (*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, Refrigerant high pressure, Compressor unit abnormal			
Water bath capacity (at 80% water level)		26L	56L		110L
Required primary cooling water rate [L/min] (cooling water temperature: +20/+30°C) (*4)		9/22	16/36	23/50	40/86
Connecting pipe diameter (circulating fluid in/out, primary cooling water in/out)		Rc1/2, Rc1/2 (with valve)	Rc1, Rc3/4 (with valve)		Rc1-1/4, Rc1 (with valve)
Dimensions (Not include plumbing and protuberance)		450×573×1220Hmm	570×680×1420Hmm		720×900×1420Hmm
Weight		130kg	200kg	210kg	280kg
Power Supply (three phase AC200V, 50/60Hz) (*5)		10A 15A		15A	30A
Operation current		6A	8 A	10 A	20A

(*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 to 3.0°C due to the compressor On-Off control. (*2)Capacity when the ambient temperature at below +30°C. (*3)Capacity when using tap water. How rate when the discharge pressure at 0.3MPa. (*4)The required cooling water flow increases and decreases by the temperature. Please note that if the flow rate does not increase when the temperature is high it may cause trouble. (*5)The sensitivity current in ELCB should be set larger than 30 mA. •Since the water-cooled type requires primary cooling, please make sure the specified flow rate being secured. •Pure water is available as an option. •Please ask us when mixing chemicals for water treatment to circulating fluid. The fee for Delivery, Installing are quoted separately.