

# Hot water circulator HC-03/06/09/12/15/24

**Circulation the hot water up to +80°C with high accuracy  $\pm 0.5^\circ\text{C}$ . Various customized such as heater output and pump capacity upon the request.**



HC-06

## Features

- Basic operating temperature range up to + 80°C.
- Available in cooling function by primary cooling water.
- Heater output, pumping capacity and wetted part etc. can be changed.

## Main Applications

- Hot water circulation to molding machine, Semiconductor manufacturing equipment, HVAC etc.
- A source of heat load for equipment testing.

**Hot water circulator with high accuracy. Various customized such as heater output and number of pumps etc.**

Heating temperature control with high accuracy  $\pm 0.5^\circ\text{C}$  in temperature range 40°C to 80°C.

Various customized such as heater output and number of pumps, piping material, etc. based on the following models. Please feel free to contact us.

Model	HC-03	HC-06	HC-09	HC-12	HC-15	HC-24
Temperature range (*1)	+40°C to +80°C					
Control accuracy	PID controller, $\pm 0.5^\circ\text{C}$					
Heater output	3.0kW	6.0kW	9.0kW	12.0kW	15.0kW	24.0kW
Pump ability (50/60Hz)	Max. discharge pressure [MPa]	0.52		0.59		
	Flow rate [L/min] (*2)	22/31		42/55		
	Motor output [kW]	0.4		0.75		
Water bath capacity (at 80% water level)	28L			110L		
Safety device/function	Short/Over current breaker, Phase-reversal relay, Warning and Cut off for low water, Circulating water high temperature, Pump overcurrent, Overheating protection					
Connecting pipe diameter (Circulating fluid in/out)	Rc3/4			Rc1		
Dimensions	386×512×865Hmm			627×772×1130Hmm		
Weight	approx. 105kg	approx. 110kg	approx. 120kg	approx. 190kg	approx. 200kg	approx. 220kg
Power Supply (three phase AC200V, 50/60Hz)	20A	30A	40A	50A	60A	100A
Operation current (50/60Hz)	12A	21A	29A	38A	46A	72A

(\*1)The lower limit might be changed depending on operating conditions. Cannot be used for applications circulating water return temperature increases. (\*2)Capacity when using tap water. The value when the discharge pressure at 0.3MPa. •The sensitivity current in ELCB should be set larger than 30 mA. •The primary cooling water is required when cooling function added. The cooling capacity depends on the cooling water conditions (Water temperature and Flow rate). •The fee for Delivery, Installing, Piping work and Wiring work are quoted separately.

## Examples of Customization

### •The primary cooling water is required when cooling function added.



The standard model of Hot water circulator HC series is equipped with only Heating function. The cooling function can be added to by increasing the cooling coils into the water bath when the steps to lower the temperature are required. Recommended when lower the tank temperature earlier than waiting for natural cooling.  
 ※ The primary cooling water is required when cooling function added. Please contact us for more information.

### •Addition of Pump (up to 4 units) and Steam trap.



Standard is One unit. Up to 4 units as an option. Reduce steam to the indoor can be by adding a steam trap.

※ The external dimensions might be changed depending on the number of pumps.

Example of Pump 2 units mounted