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# Cooling pump CH-6000W/7500W/9000W/11000W/15000W/18000W

## The water-cooled integrated type and ideal for cleanroom. Can be customized based on the following specifications upon request such as compressor output up to 18 kW, etc. from a wide range of options.

#### **Features**

The water-cooled integrated type is ideal for cleanroom

 Customizable upon request as a special order The compressor output above 18 kW can be custom-made

### **Applications**

 The temperature control for Semiconductor manufacturing equipment



When the water temperature of the cooling tower is not stable during the summer hot season, and by using it as the primary cooling water of water-cooled chiller, a stable temperature cooling water can be obtained. (The cooling tower is actually installed outdoors).

# **Cooling capacity curves (Reference)**



| Model  |                                  | CH-6000W   | CH-7500W             | CH-9000W      | CH-11000W      | CH-15000W         | CH-18000W         |
|--|----------------------------------|--|----------------------|---------------|----------------|-------------------|-------------------|
| Temperature range  |                                  | +5°C to +25°C  |                      |               |                |                   |                   |
| Control accuracy (*1)  |                                  | ±2.0 to 3.0°C, Compressor On-Off control   |                      |               |                |                   |                   |
| Cooling capacity [kW] (50/60 kHz,<br>Circulation temperature at +20°C) (*2)                  |                                  | 22.8/24.4  | 27.4/29.2            | 31.9/34.1     | 40.4/43.1      | 46.4/49.0         | 57.4/60.3         |
| Compressor output, Refrigerant   |                                  | 6.0 kW, R407C  | 7.5 kW, R407C        | 9.0 kW, R407C | 11.2 kW, R407C | 7.5 kW × 2, R407C | 9.0 kW × 2, R407C |
| Pumping capacity<br>(50/60 kHz) (*3)   | Max. discharge<br>pressure [MPa] | 0.32/0.45  | 0.33/0.47            |               | Ask us         |                   |                   |
|  | Flow rate [L/min]                | 40/110   | 83/140               |               | Ask us         |                   |                   |
|  | Motor output [kW]                | 0.77/1.2   | 1.02/1.69            |               | Ask us         |                   |                   |
| Safety device/function   |                                  | Short/Over current breaker, Overload protector, High and Low temperature, Refrigerant high and low pressure, Overheat protector for Compressor, Phase-reversal relay, Overheat protector for Compressor, Low water cut off, Warning indicator lamp |                      |               |                |                   |                   |
| Water bath capacity (at 80% water level)   |                                  | 280 L  | 315 L                |               | Ask us         |                   |                   |
| Required primary cooling water rate [L/min]<br>(cooling water temperature: +25°C/+34°C) (*4) |                                  | 50/64  | 57/74                | 75/112        | Ask us         |                   |                   |
| Connecting pipe diameter (circulating fluid in/out, primary cooling water in/out)            |                                  | Rc1-1/4, Rc1-1/4   |                      |               | Ask us         |                   |                   |
| Dimensions (W×D×H)   |                                  | 756 × 1020 × 1581 mm   | 1107 × 823 × 1882 mm |               | Ask us         |                   |                   |
| Weight   |                                  | Ask us   |                      |               |                |                   |                   |
| Power Supply/Operation current   |                                  | AC 200 V·50/60 Hz/three phase *Ask us for more information.  |                      |               |                |                   |                   |

(\*1)Performance may not be maintained due to environmental temperature, heat load, circulation pipe distance, etc. (\*2)Capacity when the ambient temperature at below +30°C. (\*3)Capacity when using tap water. Flow rate when the discharge pressure at 0.1 MPa. (\*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 problems. •Since the water-cooled type requires primary cooling water for cooling, please make sure the specified flow rate is secured. •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 and Installing are quoted separately.



209

CH-15000W \*The appearance is subject to change.