Cooling pump CH-151BF/601B

Air-cooled type CH series with excellent portability for 100 V power supply. Built-in heater makes precise temperature control. Various output and external sensors are available.

•Pump unit (Sold separately) --> P.200 •External dimensions --> P.201

Features

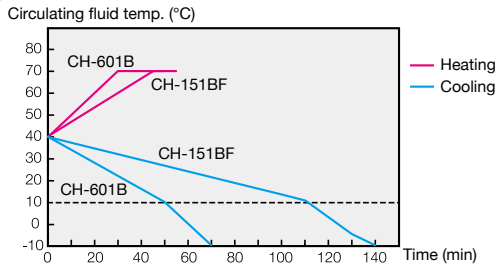
- The air-cooled integrated chiller does not require primary cooling water and plumbing
- The unit type pumps can be selected according to the purpose
- Can be used with 100 V power supply, External temperature sensors are available

Applications

- Temperature control for the machine in the facility equipped with a 100 V power supply

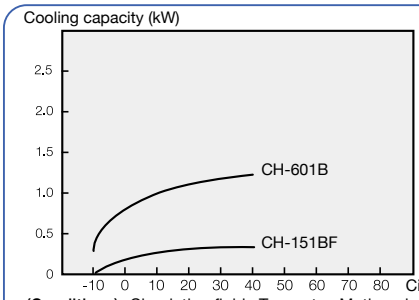
Since this unit is for AC 100 V, even if there is no AC 200 V facility, it can be used as the authentic chiller unit.

Heating/Cooling curve



(Conditions) Circulating fluid : Tap water, Methanol (below +10°C)
Liquid measure : CH-151BF --> 14 L
CH-601B --> 26 L
Environmental temp. : 25°C average
Power supply : AC 100 V, 50 Hz

Cooling capacity curve



(Conditions) Circulating fluid : Tap water, Methanol
Liquid measure : CH-151BF --> 14 L
CH-601B --> 26 L
Environmental temp. : 25°C average
Power supply : AC 100 V, 50 Hz

*The compressor is stopped when the circulating fluid temperature is above 40°C.

Note: Methanol was used for the circulating fluid for testing purposes and is not recommended for actual use.

CH-151BF

CH-601B

The pump unit is sold separately.

Various output and external sensors can be used.

Temperature setting can be the range of -10°C to + 80°C.
The constant temperature circulation can be with stable and high accuracy as the compressor is operated continuously and the temperature is controlled by the heater. It can be used with a 100 V power supply. Remote temperature setting and external sensor (Optional) can be used. Various safety devices equipped are output actuation signals.

Model	CH-151BF	CH-601B
Temperature range (*1)	-10°C to +80°C	
Ambient temperature range	+5°C to +35°C	
Control accuracy (*2)	±0.5°C, Heater PID control	
Compressor output, Refrigerant	150 W, R134a	600 W, R404A
Cooling capacity (at 50 Hz) (*3)	approx. 0.29 kW	approx. 1.0 kW
Heater output	0.6 kW	1.8 kW
Temperature setting display	Digital system (setting/display switching system)	
Safety device/function	Short/Over current breaker, Alarm and warning for compressor, High and Low temperature, Alarm and warning for pump motor, Abnormal temperature sensor diagnosing circuits, Alarm for replenishing liquid, Lowwater cut off, Phase-reversal relay	
Other Functions	Temperature check monitor, Remote temperature setting, Safety signal for safety devise, External temperature sensor connection (*4)	
Water bath capacity (water level 80%) (*5)	approx. 14 L	approx. 26 L
Applicable pump unit (*6)	Contact us	P-310
Dimensions (W×D×H) (Pump unit is not included)	407 × 485 × 676 mm	407 × 565 × 766 mm
Weight (Pump unit is not included)	approx. 46 kg	approx. 75 kg
Power Supply (Pump unit is not included)	AC 100 V 50/60 Hz, Single-phase	
	15 A	40 A
Operation current (Pump unit is not included)	10 A	27 A
Standard accessories	Power cord, Drain hose × 1 pc, Connector for signal × 1 pc	

(*1)When setting below +7°C, please be sure to use antifreeze (Please ask us for details). The compressor is stopped when the circulating fluid temperature is above 40°C.
(*2)Performance may not be maintained due to the heating medium, environmental temperature, heat load, circulation pipe distance, etc.
(*3)Capacity when using tap water and the circulating fluid temperature at 10°C. The capacity varies with the pump unit mounted. The capacity decreases when the ambient temperature is above +30°C.
(*4)External temperature sensor (φ4 × 250 mm) is available as an option.
(*5)Due to the structure not being sealed, the circulating fluid may evaporate and reduce depending on the set temperature and heating medium type.
(*6)Please refer the pump units on P.200.