

External Closed Circulators, Inverter Type
CIW1100



Cooling water circulation system of high output, saving energy consumption by inverter control.

Operating temp. range
0 to +80 deg.C
Temp. adjustment accuracy
±0.1 deg.C (at 20deg.C)
Cooling capacity
Approx. 3200W at liquid temp. 20 deg.C

- Cooling water circulation system of high output, saving energy consumption by inverter control.
- Wide temperature control range from 0 to 80°C.
- Able to cool the heat load at very high temperature which surpass the limit of conventional products.
- Auto stop-start system, Calibration offset function and various amazing functions will be standard functioned. Also, it comes with electricity and CO2 emission monitoring.

■ Specifications

Model	CIW1100
Circulation Method	External closed system circulation
Cooling Method	Water-cooled type
Performance	
Temperature Control Range	0 - 80°C (Operation of entire freezer)
Operating Temperature Range	5 - 35°C
Temp. Adjustment Accuracy/Temp. Fluctuation	±0.1°C (JTM K05)/ ±0.3°C at 20°C (JIS)
Temperature Display Unit	0.1°C
Cooling Capacity	Approx. 3,200W (at Liquid Temp. 20 °C, Room Temp. 23°C, Water Supply Temp. 20°C)
External Circulation Flow Rate/Pump Max. Lift	Approx. 19/22ℓ/min Approx. 14.5/20.5m (50/60Hz)
Components	
Water Tank	
Material	SUS304
Dimension	W170 × D370 × H360mm
Water Tank Capacity (overflow)	Approx. 17L
Float Switch Operation	Approx. 12L water level
Exterior	
Material	Chrome-free electrogalvanized steel plate, Chemical resistance coating
Dimension	W420 × D650 × H1,021mm
Refrigerator	Swing Type Compressor (Inverter control) / R410A
Heater	3,200W
Temperature Sensor	Pt100Ω (Temp. control), T thermocouple (Water temp., Evaporation temp.), K thermocouple (Overheat)
Circulation Pump	180/216W
Circulation System Material	Stainless steel joint, Ethylene propylene hose
Condenser	Plate heat exchanger / SUS316
External Circulation Nozzle	Nozzle is option, Rc1/2
Water Supply Nozzle (for water cool)	Nipple, O.D. 16mm
Water Supply Facility	Temp.: 10-33°C, 15L/min or more, Water Pressure: 3~7kg/cm ²
Power Supply (50/60Hz)	Single phrase AC200V 22A (30A)
Safety Device	
Safety Countermeasures	Temp. sensor error, Liquid temp. upper/lower limit error, Over current electrical leakage breaker, Refrigerator high pressure, Refrigerator refrigerating protecting timer, Refrigerator over load, Float switch, Supply water pressure, Refrigerator overload reducing operation, Independent overheat prevention device
Other Function	External communication terminal (RS485), Water bath filter, Over flow / Drain cock, Calibration off-set, Auto start, Auto stop, Display the amount of Power consumption, Integration time
Accessories	Drain hose (I.D. 9×500mm), Cooled water supply hose, Cooled water drain hose (2m), Strainer set

*1 Conditions: Ambient temperature and humidity: 23 deg.C+/-5 deg.C, 65%RH+/-20% (no load). Liquid temperature 20 deg.C.

*2 External dimensions do not include protrusions.

■ Water Tank (Internal)



■ Control panel



■ External Communication Terminal



■ Strainer



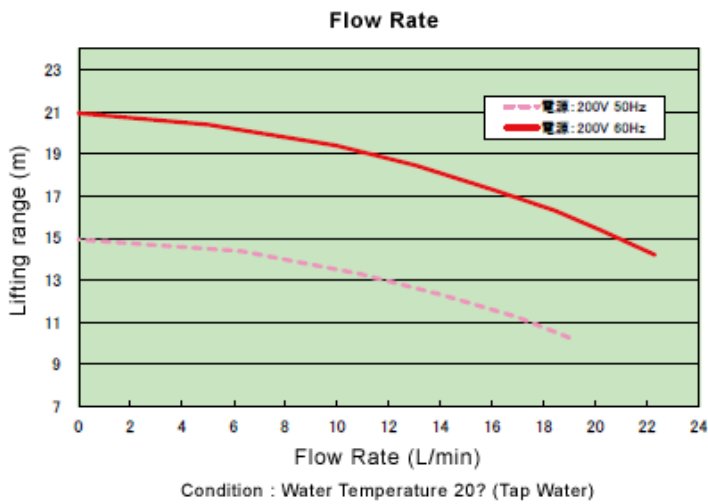
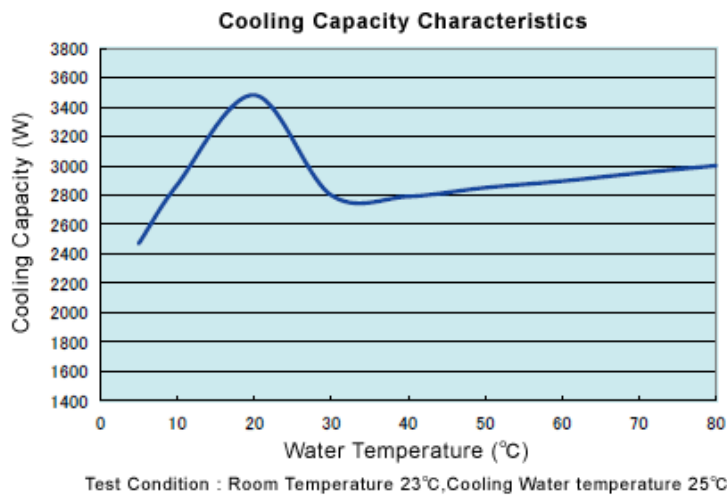
Connection Port: Rc1/2

■ Drain Cock



For Overflow and Drain (O.D. 10.5mm)

■ Cooling capacity / flow rate / line graph



■ Optional Accessories

Remark	Description	Item Code
	Straight circulation nozzle 9mm dia Rc1/2	221650
	Straight circulation nozzle 10.5mm dia Rc1/2	221651
	Straight circulation nozzle 12.7mm dia Rc1/2	221652
	Straight circulation nozzle 16.0mm dia Rc1/2	221653
	Straight circulation nozzle 19.0mm dia Rc1/2	221654
	Male/female elbow, Rc1/2 × Rc1/2	221655
•	Flow adjusting valve, Rc1/2 × Rc1/2	221656
•	Pressure meter, R1/2 × Rc1/2	221657
•	Filter set 50µm, should be connect with Nylon rigid hose	221658
•	Leak detection system	221661
•	Operation signal output terminal	221664
•	External combination terminal	221665
•	External alarm output terminal	221666
•	Temperature output terminal (4-20mA)	221667
	External Communication Adapter set (USB-RS485 adapter)	211884

Note: The item marked "•" in the column of "Remark" shall be ordered together with the main unit.



Straight circulation nozzle



Flow adjusting valve



Male/female valve



Pressure meter