

# Water Circulator (Chiller)

Powerful closed cooling system

## CF Series

Operating temp. range

-20°C~Room temp.

Capacity

4L  
CF301/311

16L  
CF800/811

### Closed system and water saving with excellent cooling capacity

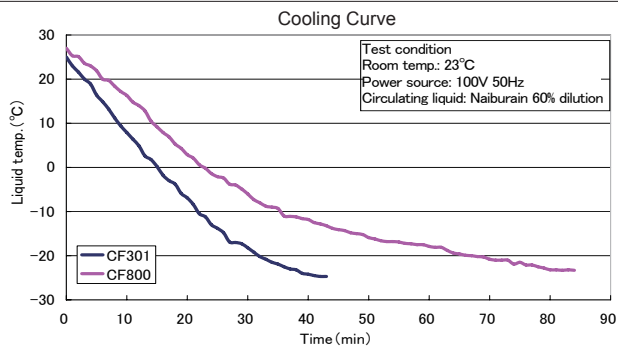


- Environment friendly coolant used for refrigeration
- Waterproof touch panel with big LED display and sheet key for easier setting
- Less energy use and less cooling capacity loss by fixing the heat-resistant lid
- Powerful cooling and big energy saver in combination with Rotary Evaporator distillation
- When using CF800/810 up to 4 Rotary Evaporators can be connected saving investment and operation cost

### Specifications

Model	CF301	CF311	CF800	CF810
Circulation type	Closed circulation			
Operational ambient temperature	5 to 35°C			
Operating temp. range	-20°C ~ Room temperature			
Cooling capacity	~450W (385Kcal/h) at liquid temp. 10°C ~360W (380Kcal/h) at liquid temp. 0°C ~270W (230Kcal/h) at liquid temp. -10°C		~1050W (830Kcal/h) at liquid temp. 10°C ~910W (780Kcal/h) at liquid temp. 0°C ~670W (570Kcal/h) at liquid temp. -10°C	
Temp. control	Refrigerator on/off control			
Temp. sensor	T-Thermocouple (with SUS Protection Tube)			
Temp. setting / Display	Digital setting / LED display			
Refrigerator	Air cooling, 450W		Air cooling, 600W	
Coolant	R404A			
Circulation pump	Magnet pump 10/15W		Magnet pump 65/65W	
Circulation capacity (50/60Hz)	Max. flow rate	6.3/7.2L/min	10.0/11.8L/min	
	Pump max. flow rate	12.8/14.3L/min	22.0/22.0L/min	
	Max. lift	4.0/5.6m	10.3/14.3m	
	Pump max. lift	4.1/5.7m	10.0/13.5m	
Cooling Coil	Nickel plated copper			
External circulation nozzle	O.D. 10.5mm for in and out with hose nipple			
Safety device	Electric leakage breaker, refrigerator over load relay, pump thermal protector, refrigerator-protection delay timer			
Other functions	Drain, over flow			
Water bath dimension	ø151x177mm		ø300 x H235mm	
Water bath material	SUS304			
Water bath capacity	~4L (Liquid amount 3L)		~16L (Liquid amount 14L)	
Power source (50/60Hz)	AC115V 5.6A	AC220V 3A	AC115V 12.5A	AC220V 7A
External dimension (W x D x H mm)	228 x 508 x 790	228 x 612 x 790	350 x 480 x 1240	350 x 480 x 1240
Weight	~50kg	~50kg	~72kg	~72kg
Accessories	Circulation hose (1.5m) x2, Wire clamp x2, cover			

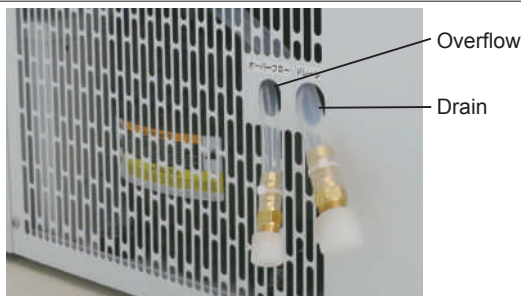
## Cooling Curve



## Control Panel



## Drain, Overflow (Left Side)



## External Circulation Nozzle (CF800 at the back)



## Optional items



Circulation insulation hose



Straight circulation nozzle



One touch rotation L-shaped nozzle

Product code	Product name	Specifications
221581	Circulation insulation hose	ø9 2m×2pcs
221596	Straight circulation nozzle	ø8 Rc3/8
221394		ø10.5 Rc3/8
221399		ø13 Rc3/8
221395		ø16 Rc/8
221681	One touch fixing holder	ø10.5 Straight 2pcs/set
221682		ø13.7 Straight 2pcs/set
221683		ø10.5 L shape 2pcs/set
221684		ø13.7 L shape 2pcs/set
281440	Cast fixing holder	4pcs/set



Installation of one touch rotation L shape nozzle