

External Closed Circulation Type Circulator, Neocool Line  
**CFA302/611, CFW611**



Model		
CFA302	CFA611	CFW611
Operating Temp. Range		
-10deg.C to 60deg.C	-10deg.C to 80deg.C	
Temp. Adjustment Accuracy		
±0.1deg.C		

- Powerful cooling capacity  
(at Liquid Temp. 10deg.C, at Room Temp. 20deg.C)  
CFA302 Approx. 370W (318Kcal/h)  
CFA611: Approx. 850W (731Kcal/h)  
CFW611: Approx. 1300W (1,118Kcal/h)
- CFA302/611: Air-cooling  
CFW611: Water-cooling  
Suitable for clean room.
- Continuous monitoring for water level, abnormal refrigerating pressure, circulation pump, etc.

## ■ Specifications

Model	CFA302	CFA611	CFW611
<b>Performance</b>			
Circulation Type	Closed system circulation by pump		
Cooling type	Air cooling		Water cooling
Operating Temperature Range	-10deg.C to +60deg.C		-10deg.C to +80deg.C
Temp. adjustment accuracy / Temp. fluctuation	JTM K05 ±0.1 deg.C at 20 deg.C / JIS ±0.3 deg.C at 20 deg.C		JTM K05 ±0.1 deg.C at 20 deg.C / JIS ±0.2 deg.C at 20 deg.C
Temp. Indication Unit	0.1deg.C		
Cooling Capacity	Approx. 370W (318Kcal/h)	Approx. 850W (731Kcal/h)	Approx. 1300W (1,118Kcal/h)
	at Liquid temp. 10 deg.C at room temp. 20 deg.C	at Liquid temp. 10 deg.C at room temp. 20 deg.C	at Liquid temp. 10 deg.C at room temp. 20 deg.C
<b>Components</b>			
Temp. Sensor	Double sensor Pt100Ω(for temp. control) + K thermocouple (for overheat prevention)		
Refrigerator • Coolant	Air cooling 300W R404A	Air cooling 600W R404A	
Temp. control	PID control		
Circulation Pump	Magnet pump 45W	Magnet pump 65W	
Pump Max. Flow Rate (pump capacity)	8.9/10.3L/min (15.0/17.0L/min)	12.7/14.4L/min (22.0/25.0L/min)	
Pump Max. Lift (pump capacity)	6.6/9.0m (8.0/11.0m)	10/13.4m (10.0/13.5m)	
Heater	850W (SUS316)	2.5kW(SUS316)	3.2kW(SUS316)
Circulation port	Rc3/8 Φ13 (with straight circulation nozzle)	Rc3/8 (circulation nozzle is optional)	
Surrounding Operation Temp. Range	5 to 35 deg.C		
<b>Safety Device</b>			
Safety Countermeasures	Self diagnosis functions, Electric leakage breaker with over current protection, Refrigerator over load relay, Refrigerator pressure detector, Refrigerator protection-delay timer function, Float switch for pump dry running prevention, Circulation pump protection by-pass, Automatic overheat prevention function, Overheat preventer.		
Other Function	Drain cock, Dust prevention filter, RS485 external communication function, Refrigerator pressure indicator, Key lock function, Calibration off set function, Temp. output terminal (4-20mA).		
Accessories	Drain hose 0.5m x 1pc., Over flow hose 0.5m x 1pc.	Drain hose 0.5m x 1pc., Over flow hose 0.5m x 1pc., Strainer	Drain hose 0.5m x 1pc., Over flow hose 0.5m x 1pc., Strainer, Cooling water supplying hose (Supply side: Chemical faucet, CFW611 side: Coupler) x2m x 1pc., Drain water hose x2m x 1pc.
<b>Standard</b>			
Water Bath Dimension	W245 x D315 x H180mm	W127 x D317 x H160mm	
Water Bath Capacity	13L	6L	
External Dimension	W380 x D565 x H725 mm	W380 x D535 x H955 mm	
Power Source	AC100V 50/60Hz 13.8A/13.0A (20A)	AC200V 50/60Hz 18.6A (30A)	AC200V 50/60Hz 22A (30A)
Weight	Approx. 60kg	Approx. 76kg	Approx. 78kg

## ■ Control Panel



Water level monitor, Refrigerator monitor, Refrigerator operation indicator

## ■ Water tank (CFA611/CFW611)



■ Back Side (CFA302)



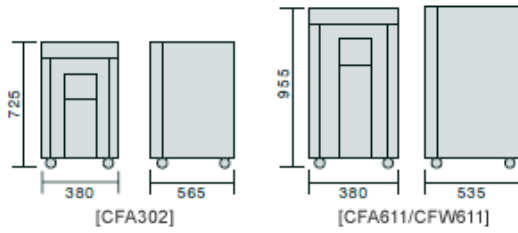
Note: L-Shape circulation nozzle is option.  
(Straight nozzle is set as standard)

■ Back Side (CFA611/CFW611)



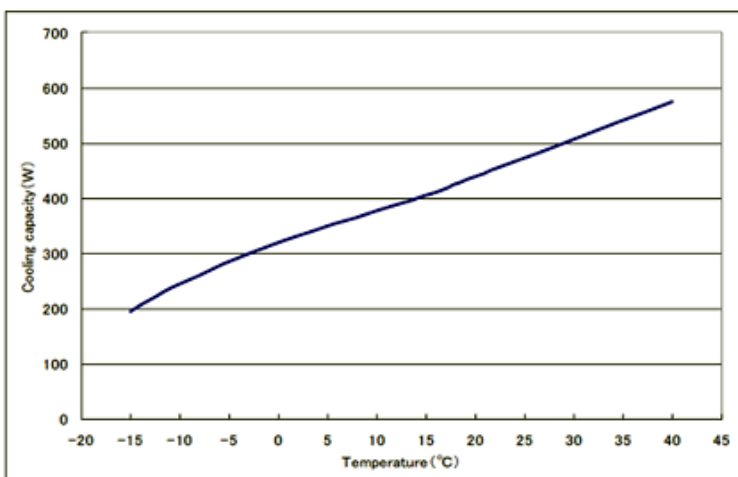
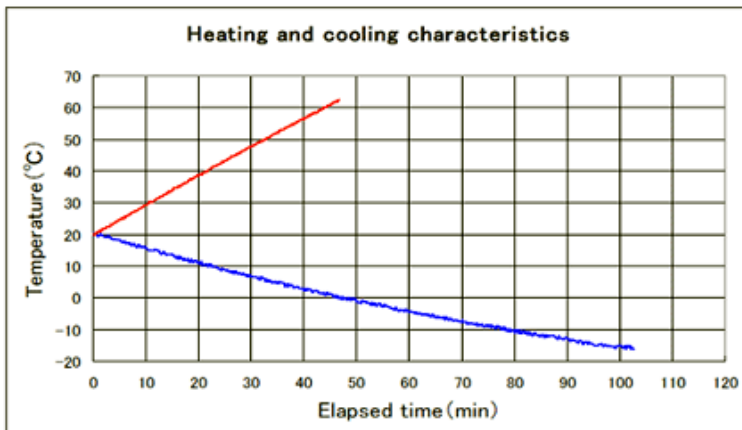
Note: Circulation port is Rc3/8. Nozzle is option.

■ Dimension drawing

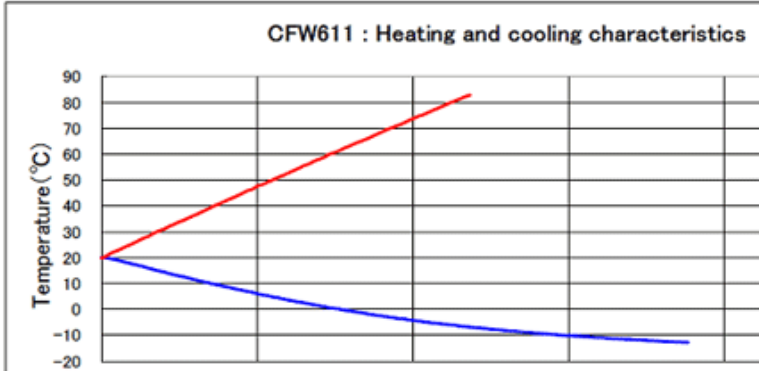
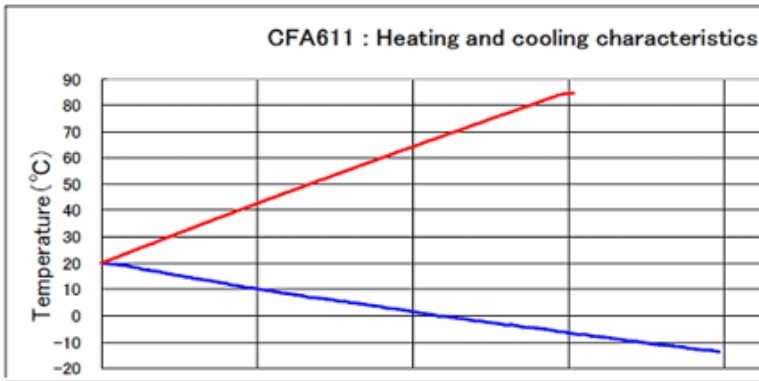


■ Cooling curve

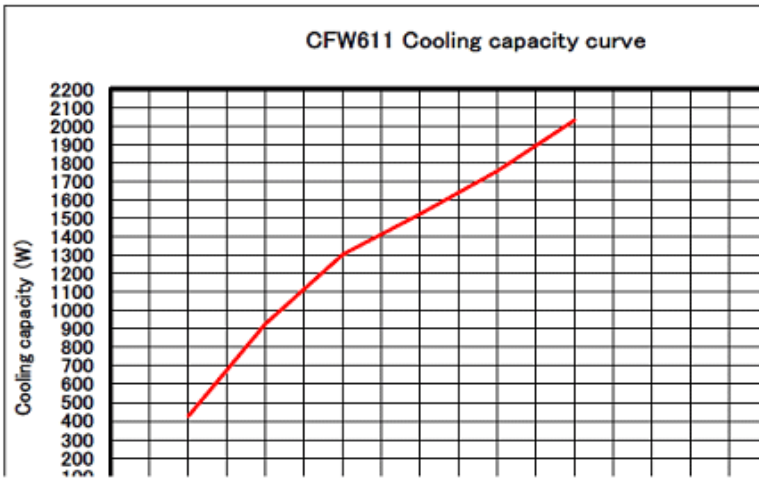
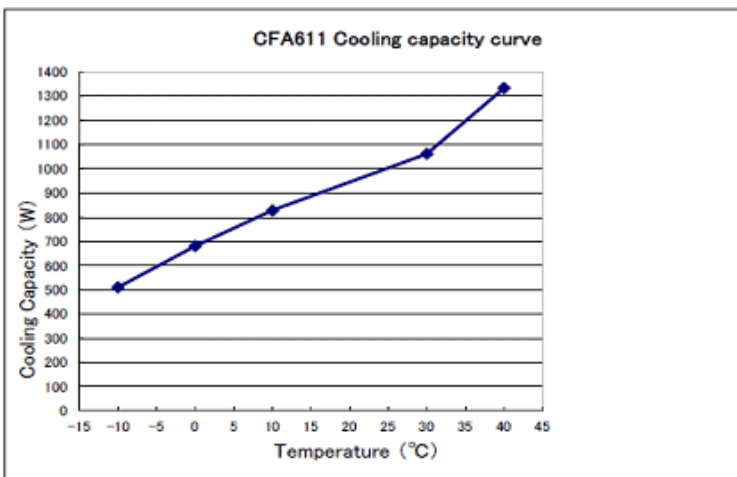
CFA302



CFA611



CFW611



## ■ Optional Items

Description	Specification	Model No.	Product code
Straight circulation nozzle	Dia 10.5 Rc3/8	CFA302/CFA611/CFW611	221394
	Dia 13.0 Rc3/8	CFA302/CFA611/CFW611	221399
	Dia 16.0 Rc3/8	CFA302/CFA611/CFW611	221395
L type circulation nozzle	Dia 10.5 Rc3/8	CFA302/CFA611/CFW611	221396
	Dia 13.0 Rc3/8	CFA302/CFA611/CFW611	221397
	Dia 16.0 Rc3/8	CFA302/CFA611/CFW611	221398
Straight rotating circulation nozzle	Dia 10.5 Rc3/8, 2pcs./set	CFA302/CFA611/CFW611	221681
	Dia 13.7 Rc3/8, 2pcs./set	CFA302/CFA611/CFW611	221682
L shape rotating circulation nozzle	Dia 10.5 Rc3/8, 2pcs./set	CFA302/CFA611/CFW611	221683
	Dia 13.7 Rc3/8, 2pcs./set	CFA302/CFA611/CFW611	221684
External Communication Adapter	RS485-RS232C exchange	CFA302/CFA611/CFW611	281388
● High performance pump		CFA611/CFW611	281441
Circulation heat insulation hose	Dia 9mmx2m, 2pcs	CFA302/CFA611/CFW611	221581
Caster stopper		CFA302/CFA611/CFW611	282440

Note: The item marked " ● " shall be ordered together with the main unit.



L shape rotating circulation nozzle



Circulation heat resistant hose



Straight & L type circulation nozzle