

Forced Convection Ovens | Precision, Horizontal

DF411C/611C, DH411C/611C

Operating temp. range DF: RT+10~260°C

DH: RT+10~360°C

Temp. deviation DF: ±3°C (at 260°C)

DH: ±4°C (at 360°C)

Internal capacity 91L

216L

High-precision constant temperature ovens for thermal processing.



■ Features

- Easy operation, available for fixed temp., program, quick auto stop, auto stop and auto start operations.
- Digital setting through special function menu keys and ▲/▼ keys. Programmable controller with 3 modes.
- Overheating protection, deviation correction and key locking through submenu keys.
- Quick exhaust and cooling through exhaust dampers.

■ Safety

- Equipped with self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit protection), overheating preventer, overcurrent leakage protection, key lock and other safety functions.

■ Specifications

Model		DF411C	DF611C	DH411C	DH611C	
System		Forced convection and ventilation				
Performance	Operating temp. range	Room temp. +10~260°C		Room temp. +10~360°C		
	GB standard	Temp. fluctuation	±0.1°C (at 260°C)		±0.2°C (at 360°C)	
		Temp. deviation	±1.5°C (at 100°C), ±2°C (at 200°C), ±3°C (at 260°C)		±1.5°C (at 100°C), ±2°C (at 200°C), ±3°C (at 300°C), ±4°C (at 360°C)	
	JTM standard	Temp. adjusting accuracy	±0.1°C (at 260°C)		±0.2°C (at 360°C)	
		Temp. distribution accuracy	±1.5°C (at 260°C)		±2.5°C (at 360°C)	
Max. temp. reaching time	Approx. 60 min (to 260°C)		Approx. 80 min (to 360°C)			
Composition	Interior material	Stainless steel plate				
	Exterior material	Cold rolled steel plate with chemical proofing coating				
	Insulating material	Rock wool + centrifugal glass wool				
	Heater	2.1kW	3.0kW	2.7kW	3.75kW	
	Fan blade/motor	Axial fan blades, motor 20W×1				
	Cable port	I.D. 30 mm, located on the back				
	Other additional mechanisms	Exhaust dampers (manual)				
Controllers	Temp. control method	3-stage PID				
	Temp. setting method	Digital setting through special function menu keys and ▲/▼ keys				
	Temp. display method	Achieved temp. display: Green 4-digit LED digital display				
		Setting temp. display: Red 4-digit LED digital display				
	Timer	1 min.~99 h 59 min. and 100~999 h 50 min (including timer waiting function)				
	Operation functions	Fixed temp. operation, auto start, quick auto stop, auto stop, program operation				
	Program mode	Programmable controller with 3 modes (30 segments×1, 15 segments×2, 10 segments×3)				
	Additional functions	Deviation correction, key lock, power failure compensation				
Heater circuit control	SSR drive					
Sensors	K thermocouple (Temp. controller and overheating protector)					
Safety device		Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit), overheating preventer, overcurrent leakage protection, key lock functions				
Specifications	Internal dimensions (W×D×H mm)	450×450×450	600×600×600	450×450×450	600×600×600	
	External dimensions (W×D×H mm)	1050×620×840	1200×770×990	1050×620×840	1200×770×990	
	Internal capacity	91L	216L	91L	216L	
	Shelf load	30kg/layer				
	Shelf layers/shelf support spacing	9 layers/45mm	9 layers/60mm	9 layers/45mm	9 layers/60mm	
	Power supply (50/60Hz) rated current	AC220V 10A	AC220V 14A	AC220V 12.5A	AC220V 17.5A	
	Weight	Approx. 112kg	Approx. 156kg	Approx. 112kg	Approx. 156kg	
Accessories	Shelf	Stainless steel wire mesh plate				
	Supports	2 pcs	3 pcs	2 pcs	3 pcs	
Options	Stand	OP42/45C	OP62/65C	OP42/45C	OP62/65C	
	Others	Shelf (1 shelf with 2 supports), cable port (30/50mm), micro printer, data logger, combination warning light (standby/running/fault), automatic door, viewing window, external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, time-up output terminal, centralized monitoring software, touch screen controller				

1 Sterilizers

2 Granulation and Spray Dryers

3 Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

10 Rotary Evaporators

11 Stirrers & Shakers

12 Options

Forced Convection

Automatic Overheating Preventer

Overheating Preventer

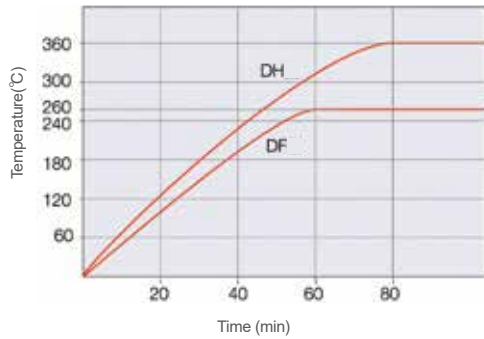
Self-diagnostic Function

Key Lock Function

Power Failure Compensation Function

Overcurrent Leakage Circuit Breaker

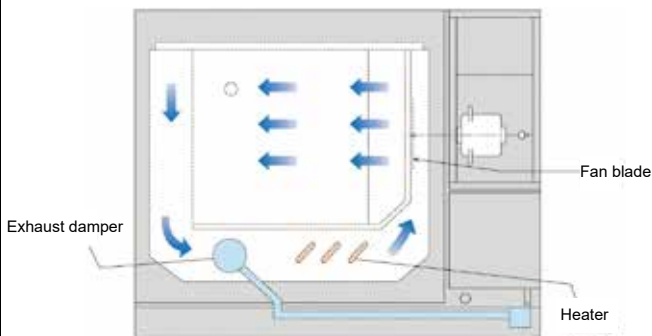
Temperature rise curve



Control panel



Structural diagram



Internal chamber

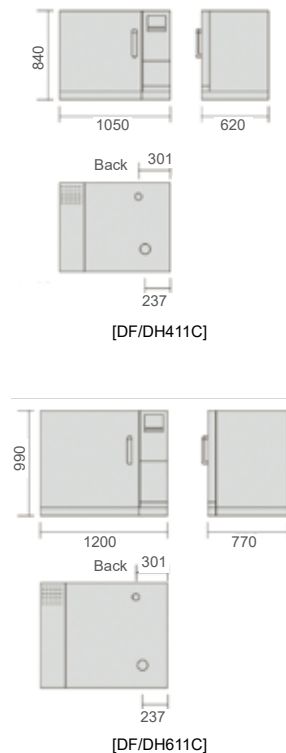


Options



- ① Exhaust pipe
- ② Data logger
- ③ Observation window

Dimension diagram (mm)



Sterilizers	1
Granulation and Spray Dryers	2
Furnaces	3
Ovens	4
Incubators	5
Plasma Equipment	6
Water Purifiers	7
Baths	8
Water Circulators	9
Rotary Evaporators	10
Stirrers & Shakers	11
Options	12