

Explosion-proof Ovens | Explosion-Proof, Precision

DF411SC/611SC, DH411SC/611SC

Forced
ConvectionAutomatic
Overheating
PreventerOverheating
PreventerSelf-diagnostic
FunctionKey Lock
FunctionPower Failure
Compensation
FunctionOvercurrent
Leakage Circuit
Breaker

Max. operating temp. DF: RT+10~260°C DH: RT+10~360°C

Temp. deviation DF: ±4°C (at 260°C) DH: ±5°C (at 360°C)

Internal capacity 91L 216L

Precision constant temperature ovens equipped with explosion pressure relief device.

Features

- Featuring a relief safety door (explosion port) and a robust interlocked door knob for secure body and door fastening.
- Contain the following interlock functions:
The device operates under locked door conditions via the door locking mechanism.
An explosion detection switch is installed on the ceiling; once activated, operation will be interrupted.
- Easy to operate, fixed temp. operation, program operation, quick auto stop operation, auto stop operation, and auto start operation.
- Quick exhaust and cooling through exhaust dampers.

Safety

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



Specifications

Model		DF411SC	DF611SC	DH411SC	DH611SC	
System		Forced convection and ventilation				
Operating temp. range		Room temp. +10~260°C		Room temp. +10~360°C		
Performance	GB standard	Temp. fluctuation ±0.2°C (at 260°C)		±0.3°C (at 360°C)		
		Temp. deviation ±2°C (at 100°C), ±3°C (at 200°C), ±4°C (at 260°C)		±2°C (at 100°C), ±3°C (at 200°C), ±4°C (at 300°C), ±5°C (at 360°C)		
	JTM standard	Temp. adjusting accuracy ±0.1°C (at 260°C)		±0.2°C (at 360°C)		
		Temp. distribution accuracy ±2.5°C (at 260°C)		±3.0°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		Stainless steel heating tubes with fins			
			2.1kW	3.0kW	2.7kW	3.75kW
	Fan blade/motor		Axial fan blades, motor 20W×1			
	Cable port		I.D. 30 mm, located at the back			
	Other additional mechanisms		Relief safety door (explosion port), exhaust vent (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)		1050×630×1250	1200×780×1400	1050×630×1250	1200×780×1400
	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 13A	AC220V 17.5A
Weight		Approx. 78kg	Approx. 109kg	Approx. 78kg	Approx. 109kg	
Accessories	Shelf		Stainless steel wire mesh plate			
			2 pcs	3 pcs	2 pcs	3 pcs
	Supports		4 pcs	6 pcs	4 pcs	6 pcs
Options	Stand		OP42C	OP62C	OP42C	OP62C
	Others		Shelf plate (1 shelf plate with 2 shelf supports), cable port (30/50mm), micro printer, data logger, combined warning light (standby/operation/fault), viewing window, external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, timer output terminal, central monitoring software, touchscreen 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