

Fine Oven

With high accuracy temperature control and exhaust damper

DF411/611 DH411

Operating temp. range

Room temp. +10~260°C(DF)
Room temp. +10~360°C(DH)

Temp. distribution accuracy

±1.5°C(at260°C) (DF) / ±2.5°C (at360°C) (DH)

Internal capacity

91L (411 model)
216L (611 model)

Circulates uniformed heated air in a horizontal air flow pattern



91L
DF411(Stand Optional item)

216L
DF611(Stand Optional item)

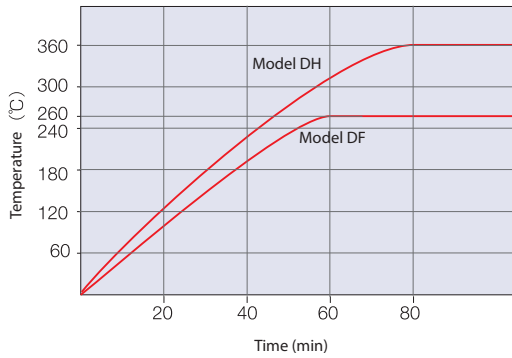
Highly reliable and accurate oven with simple settings for various temperature characteristics tests requiring complicated programming.

- Features main and sub displays and a jog dial with a center switch. User can operate the unit simply and quickly with only one dial
- Temperature display uses a 7-segment LED and fluorescent display tubes for setting and operation information to assure high visibility
- Fluorescent display provides the operation status of the heater and the fan
- Dedicated keys for program input (up to 16 segments) and edit to enable quick access
- Exhaust damper allows quick exhaust and cooling of inside chamber
- Equipped with exhaust and cable ports

Specifications

Model	DF411	DF611	DH411
System	Forced air circulation and ventilation		
Operating temp. range	Room temp. +10°C~260°C		Room temp. +10°C~360°C
Temp. adjustment accuracy	±0.1deg.C (at 260°C)		±0.2deg.C (at 360°C)
Temp. distribution accuracy	±1.5deg.C (at 260°C)		±2.5deg.C (at 360°C)
Max temp. reaching time	~60 min.		~80 min.
Temp. control system	PID control by microprocessor		
Temp. setting method	Digital setting and display with a jog dial		
Timer display range	Fixed value operation for 1 min. to 99 hrs. 59 mins. or 100 to 999 hrs.		
Operation functions	Auto start, auto stop, fixed temp, program operation		
Additional functions	Actual 24 hr timer, Accumulated operation time (up to 49,999 hrs), Calibration offset, Clock display (preset time display)		
Sensor	Double K-thermocouple		
Heater	Stainless pipe heater with fan		
Heater capacity	2.1kW	3.0kW	2.7kW
Blower fan (motor)	Axial flow fan (capacitor motor: 20W)		
Cable port	I.D. 30 mm (rear)		
Heat insulator	Glass wool		Ceramic fiber
Other additional mechanism	Exhaust damper (manual)		
Safety device	Self diagnostic functions (temp. sensor error, heater disconnection, SSR short-circuit, automatic overheat prevention function), key lock, door switch, electric leakage breaker, control box switch, independent overloading prevention		
Internal dimensions (mm)(WxDxH)	450×450×450	600×600×600	450×450×450
External dimensions (mm)(WxDxH)	1,050×630×850	1,200×780×1000	1,050×630×850
Internal capacity	91L	216L	91L
Shelf Max. Load	~30kg / pc		
Shelf Support Qty. / Pitch	9 steps / 45mm	9 steps / 60mm	9 steps / 45mm
Power source	AC 220V 12.5A	AC 220V 17.5A	AC 220V 15.5A
Weight	~78kg	~109kg	~78kg
Shelf / bracket	2 pcs. / 4 pcs.	3 pcs. / 6 pcs.	2 pcs. / 4 pcs.

Temperature Rising Curve

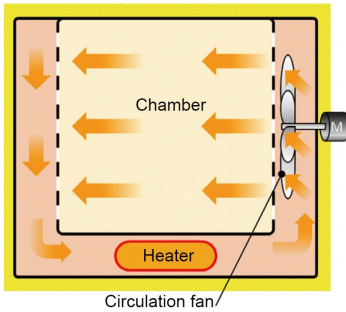


Control Panel



Method

[Front view]



Interior



Optional items



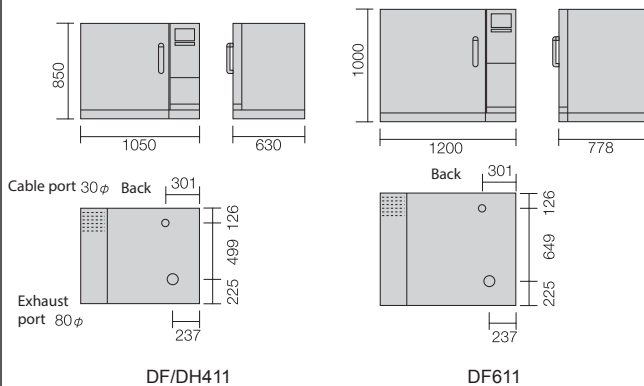
- (1) Exhaust duct (281068)
 (2) Recorder
 (3) Observation window (281070)

Optional items

Product name	Product code
Stand	
OP43 for DF/DH411 (without caster)	415464
OP63 for DF611 (without caster)	415465
OP45 for DF/DH411 (with caster stopper in front)	415461
OP65 for DF611 (with caster stopper in front)	415463
Stacking support	211065
Shelf (with support 2 pcs.)	
Stainless wire (loading up to 30 kg/shelf)	
For DF/DH411	211063
For DF611	211064
Stainless punching metal (loading up to 15kg/shelf)	
For DF/DH411	211098
For DF611	211099
*Wind velocity changeable function	
Fan Revolution Changeable Range	281060
50Hz: ~450 to 1,350rpm	
60Hz: ~450 to 1,550rpm	
*External communication adapter	281061
*Abnormal alarm display	281062
*Emergency stop switch	281063
*Manual recovery function from blackout	281066
*Automatic damper: 5 steps: 5%-25%-50%-75%-100%	281067
*Exhaust duct (80mm dia)	281068
*Flange for exhaust port	281069
*Observation window (for DF only)	281070
*Power cord, 5m.	281072
*Power plug	281074
*Cable port	
25mm dia	281075
50mm dia	281076

* Customized from factory. Please specify when ordering main unit.

Dimensions (Unit:mm)



Attention

- Never use in flammable or explosive gas atmosphere.
- Never use explosive or flammable material.
- Caution: High temperature components.