

Forced Convection Ovens | Energy-Saving

DNE411C/611C/811C/911C

Operating temp. range RT+10~210°C

Temp. distribution accuracy ±2.0°C (at 210°C)

Internal capacity 90L 150L 300L 540L

Power consumption reduced by over 30%, an environmentally friendly constant temperature oven that reduces CO₂ emissions.

Features

- Significantly reduces power consumption and features programmable functions in an environmentally friendly constant temperature oven. Achieves a 30% energy-saving design (compared to previous products) during constant temperature operation through airtight thermal insulation in the chamber.
- Maximum temperature reach time shortened by up to 15 min (compared to previous products). Standby time and recovery time are also reduced, achieving operational efficiency.
- Able to implement various operating modes and is equipped with calibration correction functions, power failure reset mode selection, and user-defined information save and recall functions, among other support features.
- Able to repeat program operation for up to 99 segments or 99 modes. Equipped with accumulated function for powered/operating time.
- Various optional features allow for system upgrades based on user needs.

Safety

- Features self-diagnostic circuits, independent overheating preventers with digital settings, overcurrent leakage protection, key locks, and other safety functions.



Specifications

Model		DNE411C	DNE611C	DNE811C	DNE911C
System		Forced convection			
Performance	Operating temp. range	Room temp. +10~210°C			
	GB standard	Temp. fluctuation	±0.5°C (at 210°C)		
		Temp. uniformity	±1.5% (at 210°C)		
	JTM standard	Temp. adjusting accuracy	±0.5°C (at 210°C)		
Temp. distribution accuracy		±2.0°C (at 210°C)			
Max. temp. reaching time		Approx. 60 min	Approx. 70 min	Approx. 45 min	Approx. 60 min
Composition	Interior material	Stainless steel plate			
	Exterior material	Cold rolled steel plate with chemical proofing coating			
	Insulating material	Glass fiber			
	Heater	Stainless steel heating pipe			
		1.1KW	1.2KW	1.2 KW×2	1.5 KW×2
	Forced air motor	High-temperature self-cooling motor			
		10W		30W	30W×2
Cable port	Inner diameter 33mm (one at upper right side)				
Intake vent	Inner diameter 33mm (one at lower right side)				
Exhaust vent	I.D. 33mm×2, located on the top		I.D. 33 mm×2, located at the back		
Controllers	Temp. control method	PID control			
	Temp. setting method	Use special function menu keys and up/down keys to realize digital setting			
	Temp. display method	Achieved temp. display: Green 4-digit LED digital display			
		Setting temp. display: Orange 5-digit LED digital display			
	Timer/timer resolution	1 min~99 hours 59 min/1 min			
	Operation functions	Fixed temp. operation, auto start, auto stop, program operation			
	Program mode	Program operation max 99 segments, repeat operation function			
Additional functions	Power/accumulated running time function (65535 hours), time display, deviation correction function, cumulative power consumption, CO ₂ emission, heater output, cumulative power-on time, power failure recovery mode selection, user defined information login				
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	600×500×500	600×500×1000	1090×500×1000
	External dimensions (W×D×H mm)	580×646×860	730×695×910	730×695×1675	1220×695×1675
	Internal capacity	90L	150L	300L	540L
	Shelf load	15kg/layer			
	Shelf layers/shelf support spacing	11 layers/30mm	13 layers/30mm	29 layers/30mm	29 layers/30mm×2 columns
	Power supply (50/60Hz) rated current	AC220V 5.5A	AC220V 6A	AC220V 11.5A	AC220V 14.5A
Weight	Approx. 63kg	Approx. 77kg	Approx. 92kg	Approx. 185kg	
Accessories	Shelf	Stainless punching mesh plate			
		2 pcs		4 pcs	8 pcs
	Supports	4 pcs		8 pcs	16 pcs
Options	Stand	ON61C		—	—
	Stacking fittings	ODN26C	ODN28C	—	—
	Others	Shelf plate (1 shelf plate with 2 shelf supports), cable port (30/50mm), data logger, combination warning lights (standby/running/fault), viewing window, external communication function (RS485), temperature output terminals (4~20mA), external alarm output terminals, time-up output terminals			

1 Sterilizers

2 Granulation and Spray Dryers

3 Muffle Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

10 Rotary Evaporators

11 Freeze Dryers & Cold Traps

12 Stirrers & Shakers

13 Washers

14 Analysis and Test Devices

15 Options

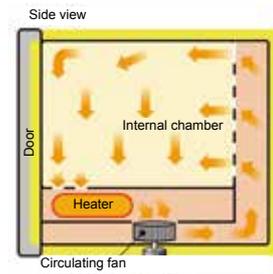
- Forced Convection
- Automatic Overheating Preventer
- Overheating Preventer
- Self-diagnostic Function
- Key Lock Function
- Power Failure Compensation Function
- Overcurrent Leakage Circuit Breaker



Control panel

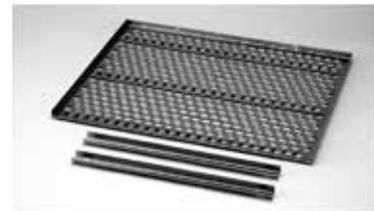


Structural diagram



DNE structural diagram

Shelf (Support)



Cable port (standard configuration)



Internal chamber

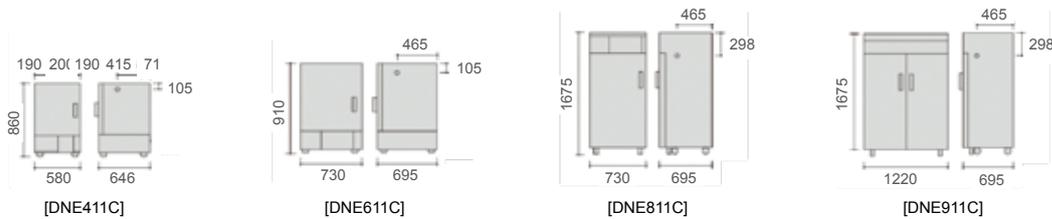


[DNE411C]



[DNE911C]

Dimension diagram (mm)



- Sterilizers 1
- Granulation and Spray Dryers 2
- Muffle Furnaces 3
- Ovens 4
- Incubators 5
- Plasma Equipment 6
- Water Purifiers 7
- Baths 8
- Water Circulators 9
- Rotary Evaporators 10
- Freeze Dryers & Cold Traps 11
- Stirrers & Shakers 12
- Washers 13
- Analysis and Test Devices 14
- Options 15