

# Forced Convection Oven (Energy Saving)

Energy Saving Programmable Forced Convection Ovens

## DNE401/411/601/611/811/911

Operating temp. range RT +20°C~210°C  
DNE401/411/601/611 RT +15°C~210°C  
DNE811/911

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

Internal capacity 90L DNE401/411 150L DNE601/611 300L DNE811 540L DNE911

**High performance, environment-friendly eco-oven that reduces power consumption significantly.**

- Heat tightness and insulation design of the chamber saves 30 to 40% of energy during constant temperature compared to previous models
- Program operation with a maximum of 99 steps, 99 patterns, with repeat function
- Standard equipped with various support functions such as calibration offset, operation time integration, power failure recovery mode, save & access of user setting information and other operation modes
- Maximum 99 steps, 99 patterns program controller with repeat function
- Easy system upgrade with various option settings



90L  
DNE401+Stand (option)

150L  
DNE601+Stand (option)

### Specifications

Model	DNE401/411	DNE601/611	DNE811	DNE911
Circulation method	Forced air circulation			
Operating temperature range	Room temp. +20 to 210°C		Room temp. +15 to 210°C	
Temp. adjustment accuracy	±0.5°C (at 210°C) JTM K05			
Temp. distribution accuracy	±2.0°C (at 210°C) JTM K05			
Max. temp. reaching time	Approx. 60 min.	Approx. 70 min.	Approx. 45 min.	Approx. 60 min.
Interior/Exterior material	Stainless steel /Electro-galvanized steel sheet with epoxy and melamine resin baking finish			
Heat insulating material	Glass wool			
Heater	Stainless pipe heater 1.1 kW	Stainless pipe heater 1.2 kW	Stainless pipe heater 1.2 kW×2	Stainless pipe heater 1.5 kW×2
Fan/Motor	Scirocco fan/Condenser type motor			
Cable port	33mm I.D. (the right, upper) 1pc.			
Air in-take port	33mm I.D. (the right, lower) 1pc.			
Exhaust port	33mm I.D.×2 (the top)		33mm I.D.×2(the back)	
Temp. controller	PID control by microprocessor			
Temp. setting method	Digital setting by UP/DOWN key			
Temp display method	Digital Display by Green LED			
Timer/Min.division	1 min. to 99 Hrs. 59 min. /1 min.			
Operation function	Fixed temperature operation, Program operation, Auto start, Auto-stop, Quick automatic stop			
Additional functions	Total operation hours timer (to 65535hrs.), Calendar time ( 24 hours), Calibration offset, Power discharge, CO <sub>2</sub> discharge, Power failure return mode, User configuration information			
Heater circuit control	Triac zero-cross control			
Sensor	K-thermocouple (for temp. adjustment, Individual overheating prevention)			
Safety device	Self diagnosis functions (Temp. sensor abnormal, Heater disconnection, SSR- short, Main relay abnormal, Automatic overheating prevention), Key lock function, Independent overheat prevention, Electric leakage breaker			
Internal dimensions (W×D×Hmm)	450×450×450	600×500×500	600×500×1,000	1,090×500×1,000
External dimensions(W×D×Hmm)	580×645×860	730×695×910	730×695×1,660	1,220 ×695×1,660
Internal capacity	90L	150L	300L	540L
Shelf plate with standard load	Approx. 15kg/piece			
Shelf rest step number	11 steps	13 steps	29 steps	29 steps
Shelf rest pitch	30 mm			
Power source 50/60Hz	AC 115V/AC220V	AC 115V/AC220V	AC 220V	AC 220V
	single phase 11A/6A	single phase 12A/7A	single phase 12A	single phase 15A
Weight	Approx. 63 kg	Approx. 77 kg	Approx. 92 kg	Approx. 185 kg
Accessories	Shelf plate	Stainless steel, 2 pcs.		Stainless steel, 8 pcs.
	Shelf bracket	4 pcs. (1 pair - 2 pcs. is fixed)		16 pcs. (2 pairs are fixed)

Forced convection circulation

Auto overheat prevention

Independent overheat protector

Self-diagnosis

Key lock

Power outage compensation

Overcurrent ELB

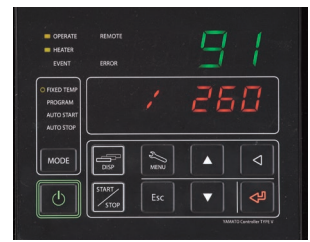


300L  
DNE811

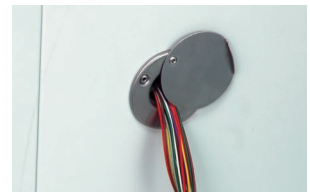


540L  
DNE911

## Control Panel



## Cable Port (Standard, Right side)



## Interior



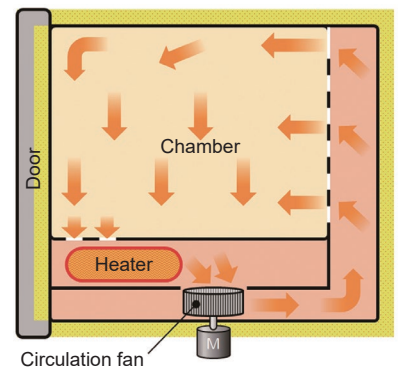
DNE401



DNE911

## Method

[Side view]



## Optional Items

Model No.	DNE401/411	DNE601/611	DNE811	DNE911
Stand	ON61(211856)		-	
	OT42(212348)	OT62(212349)	-	
Stacking support	ODN26(212806)	ODN28(212807)	-	
Shelf (with support 2 pcs.)	212246	212266	212266	212490
*Cable port, 25mm dia	ODM36(281454)			
*Cable port, 50mm dia	ODM38(281455)			
Sheath sensor	ODT48(212946)			
Silicon Stopper	ODT52(212947)			
Seismic isolation rubber	296902			
*Observation window	ODM40(281456)	ODM42(281457)	-	
*External communication function (RS485)	ODM12(281442)		ODM14(281443)	
*External communication adapter	OIN90(211880)			
*Temperature output terminal (4-20mA)	ODM16(281444)		ODM18(281445)	
*External alarm terminal	ODM20(281446)		ODM22(281447)	
*Time-up output terminal	ODM24(281448)		ODM26(281449)	
*Working signal output terminal	ODM28(281450)		ODM30(281451)	
*Event alarm output terminal	ODM32(281452)		ODM34(281453)	

\* Please specify when ordering main unit.

## Dimensions (Unit:mm)

