

Forced Convection Oven (Energy Saving)

Energy-saving

DNE650/650V/670/670V/850/850V

Operating temp. range RT +10°C~260°C

Temp. distribution accuracy ±2.0°C (at 260°C)

Internal capacity 150L DNE650/650V/670/670V

300L DNE850/850V

Ultra low power consumption oven that supports multi-power sources.

- Ultra energy saving eco oven with power consumption cut by 50% compared to the conventional model (DN).
- Highly hermetic bath construction prevents dusts or foreign matters from entering chamber.
- Time required to attain the highest temperature has been shortened by up to 15 minutes (with no-load, our DN ratio). Shortened wait time and recovery time minimize down time and make work effective.
- Silicon-free eco oven with Viton(R) fluoroelastomer door packing. (DNE650V/670V/850V)
- Supports multi-power sources by simply connecting to either 100/120V (DNE650) or 200-240V (DNE670/850).
- Four-fold overheat preventive functions (automatic overheat prevention, heater room overheat prevention, overheat prevention in the bath, and temperature fuse) assure optimal safety.
- Equipped with various functions: self-diagnostic, alarm history monitoring, key lock and over current electric leakage breaker.
- Additional functions such as RS485 communication, temperature output, external alarm and time-up output allow system upgrade based on specific application.



Specifications

Product code	212857	212881	212858	212882	212859	212883
Model	DNE650	DNE650V	DNE670	DNE670V	DNE850	DNE850V
System	Froced air circulation					
Operating temperature range	Room temp. +10°C to 260°C					
Temperature adjustment accuracy*1	± 0.2°C (at 260°C) JTM K05					
Temperature distribution accuracy*1	± 2.0°C (at 260°C) JTM K05					
Time to attain max. temp.*1 *2	Approx. 65 min.				Approx. 55 min.	
Interior/external material	Stainless steel plate/Electro-galvanized steel sheet with epoxy and melamine resin baking finish					
Heater/heat insulator	SUS pipe heater / glass wool					
Heater capacity	100 to 120V / 1.56 to 2.16 kW		200 to 240V / 1.56 to 2.16 kW		200 to 240V / 2.7 to 3.88 kW	
Fan	Scirocco fan					
Fan motor	Condenser type					
Source voltage switching	With the multi power source selector switch on the rear panel 30W					
Cable port	One port at the right side: I.D.30 mm					
Door packing	Silicon rubber	Fluoroelastomer	Silicon rubber	Fluoroelastomer	Silicon rubber	Fluoroelastomer
Air supply port	One on the side (heater room side)					
Exhaust port	I.D. 30 mm (with damper) × 1 (the top)				I.D. 30 mm (with damper) × 2 (the back)	
Controller	CR5 Multi functional program controller					
Heater control	SSR control					
Sensor	K-thermocouple (in the chamber and heater room)					
Safety functions	Self diagnostic function (Temp. sensor error, Heater disconnection, SSR short-circuit, Automatic overheat prevention, And other functions of CR5), Key lock, Program lock, Independent overheat protection in the chamber, Independent heater overheat protection in the heater room, Electric leakage breaker, Temp. fuse					
Other functions	RS485 external communication, External alarm, Time-up, and output on the logger					
Power supply (50/60 Hz)	Single phase: AC100 to 120V, 14 to 16.5A		Single phase: AC200 to 240V, 7 to 8.5A		Single phase: AC200 to 240V, 12.5 to 15A	
Internal capacity	150L				300L	
External dimensions*3	770×696×995 mm (W×D×H)				770×696×1,760mm (W×D×H)	
Internal dimensions	600×500×500 mm (W×D×H)				600×500×1,000mm(W×D×H)	
Weight	Approx. 90 kg				Approx. 130 kg	
Shelf	Stainless steel punching metal×2				Stainless steel punching metal×4	
Shelf loading	Approx. 15 kg / each					
Shelf steps/shelf pitch	13 steps / 30 mm				29 steps / 30 mm	

*1 Conditions: temperature and humidity : 23°C±5°C, 65%RH±20% (no load).

*2 Conditions: AC100V 50Hz at room temp.23°C(DNE650/650V), AC200V 50Hz at room temp.23°C(DNE670/670V/850/850V). *3 Do not include protrusions.

Forced convection
circulation

Auto overheat
prevention

Overheat protector

Independent
overheat protector

Self-diagnosis

Key lock

Power outage
compensation

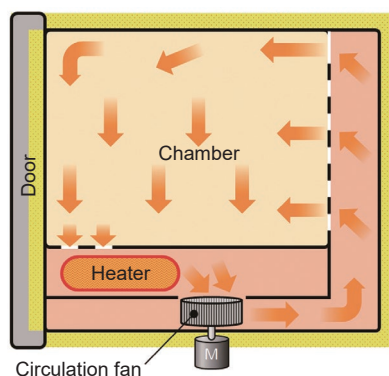
Overcurrent
ELB

Interior

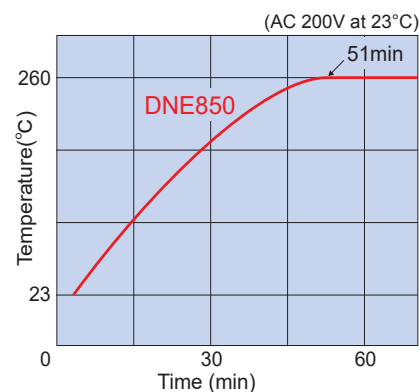


Method

[Side view]



Temperature Rising Curve



Control Panel



Multi power source selector switch



DNE650:
100 to 110V/115 to 120V
DNE670/850:
200 to 220V/230 to 240V

Cable Port (Standard, right side)



Major functions

Operation modes

1. Fixed operation
2. Fixed auto stop operation
3. Fixed quick auto stop operation
4. Fixed auto start operation
5. Program operation
6. Program auto start operation

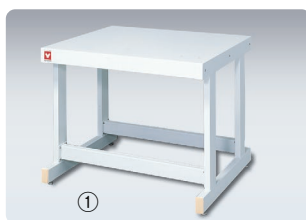
Useful functions

- Display switching during operation
- Heater output operation amount display
- Program name setting
- Operation guide function, etc.

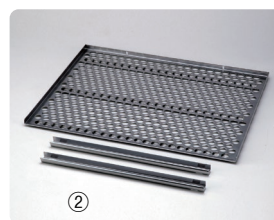
Optional Items

No.	Description	Product code
①	Stand ON62 for DNE650/650V/670/670V	281540
②	Stainless punching metal shelf for DNE650/650V/670/670V/850/850V	212266
③	Seismic mat for DNE650/650V/670/670V	296902
④	Stacking support ODN12 for DNE650/650V/670/670V	281541
⑤	*RS485-232C conversion adapter for DNE650/650V/670/670V/850/850V	281126
⑥	*Cable port of I.D. 25mm for DNE650/650V/670/670V/850/850V	281502
⑦	*Cable port of I.D. 50mm for DNE650/650V/670/670V/850/850V	281503

* Please specify when ordering main unit.



Stand (ON62)

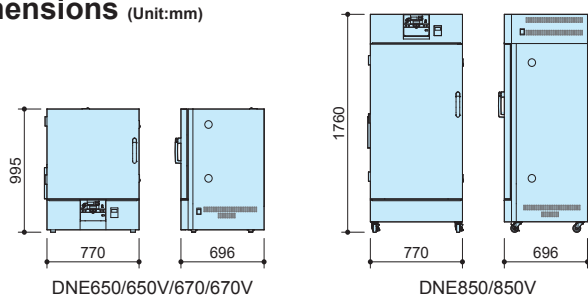


Stainless punching metal shelf

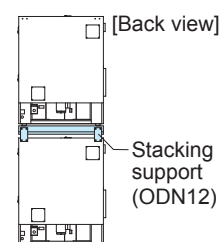


Seismic mat

Dimensions (Unit:mm)



Stacking support (ODN12)



[Back view]

Stacking support (ODN12)