

Industrial & Laboratory Constant Temperature Ovens

DKN302/402/602/612/812/912



DKN402/602

Forced convection ovens of standard type, Programmable.

A forced convection, programmable constant temperature oven incorporating programmable operation functions and a wide range of other function, and boasting enhanced safety features and operability.

Model				
302	402	602/612	812	912
Operating temp. range				
Room temp. +10deg.C to 260deg.C	Room temp. +10deg.C to 250deg.C	Room temp. +10deg.C to 210deg.C		
Temp. distribution accuracy				
±2.5deg.C(at210deg.C)				

- Fixed setting, programmed, Quick Auto stop, Auto stop, and Auto start operating modes are possible, along with easy control capabilities.
- Settings can be made digitally using the dedicated operation menu keys or the keys. Incorporates a 30-step, 3-pattern program controller with repeat functions.
- Over-heating prevention and calibration offsetting are possible through the auxiliary functions.
- Comprehensive safety features.

■ Specifications

	DKN302	DKN402	DKN602/612	DKN812	DKN912
Performance					
Circulation method	Forced air circulation				
Operating temperature range	Room temp.+10 to 260deg.C	Room temp.+10 to 250deg.C	Room temp.+10 to 210deg.C		
Temp. control accuracy Temp. distribution accuracy	±1.0deg.C(at 210deg.C) ±2.5deg.C(at 210deg.C)				
Max. temp. reaching time	Approx. 90 min.			Approx. 60 min.	
Components					
Interior material Exterior material	Stainless steel Cold rolled steel plate with melamine resin baking finish				
Heat insulating material	Glass wool				
Heater	Stainless pipe heater				
	0.8KW	1.2KW	1.34KW	1.2KW x 2	1.5KW x 2
Fan type	Scirocco fan, Condenser type				
Motor	10W			30W	10W x 2
Exhaust port/Cable port	30 mm I.D.×2 pcs.(the top) /30 mm I.D.×1 pc. (right side)			30 mm I.D.×2 pcs.(the back)/30 mm I.D.×1 pc. (right side)	
Observation window	180×180mm	250×280mm		None	
Controller					
Temp. controller	3 patterns program controller, PID control by microprocessor				
Temp. setting method	Digital setting by UP/DOWN key				
Temp display method	Measurement temp. : Digital display by green LED Setting temp. : Digital display by red LED				
Timer	1 min. to 99 Hrs. 59 min. and 100 Hrs. to 999 Hrs. 50 min.				
Min. division	1 min. or 1 Hrs.				
Operation function Program mode	Fixed temperature operation, Program operation, Auto start, Quick Auto-stop, Program operation : 3 pattern, 30 steps(30 steps×1, 15 steps×2, 10 steps×3) Pattern repeat function				
Additional functions	Calibration off-set function, Key lock, Uninterruptible power for memory				
Heater circuit control Sensor	SSR control K-thermocouple				
Safe Device					
Safety countermeasures	Self diagnosis functions (temp. sensor abnormal, Heater disconnection, SSR- short, Automatic overheating prevention), Key lock function, Overheat prevention, Electric leakage breaker with over current protection				
Standard					
Internal dimensions (W×D×Hmm)	300×300×300	450×450×450	600×500×500	600×500×1,000	1,070×500×1,000
External dimensions(W×D×Hmm)	410×451×670	560×601×820	710×651×870	710×651×1,608	1,180×651×1,616
Internal capacity	27 liters	90 liters	150 liters	300 liters	535 liters
Shelf plate with standard load	Approx. 15kg/piece				
Shelf rest step number	6 steps	9 steps	12 steps	29 steps	29 steps x 2
Shelf rest pitch	30mm				
Power source 50/60Hz	100V/220V single phase, 8.5A/3.9A	100V/220V single phase, 12.5A/5.7A	100V/200V/220V single phase, 14A /7A/6.4A	200V/220V single phase, 12.5A/11.4A	200V/220V single phase, 15.5A/14.1A
weight	Approx. 35 kg	Approx. 50 kg	Approx. 65 kg	Approx. 110 kg	Approx. 190 kg
Accessories					
Shelf plate	Stainless steel, 2 pcs.			Stainless steel, 4 pcs.	Stainless steel, 8 pcs.
Shelf bracket	4 pcs. (1 pair - 2 pcs. is fixed)			8 pcs. (Same as left)	16 pcs. (2 pairs are fixed)

* The performance shown here is the value under the condition of the ambient temperature of 23deg.C±5deg.C, humidity of 65%RH±20%.

* The projection is not included for Internal dimensions and External dimensions.



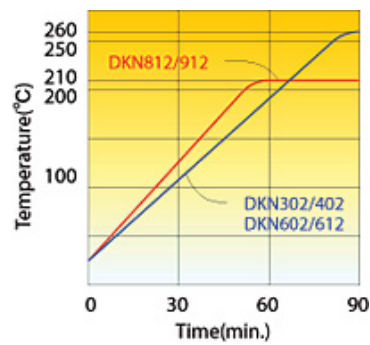
DKN812/300L

DKN912/535L

■ Control Panel



■ Temp.Rising Curve



■ Interior

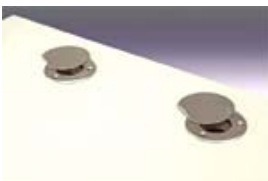


DKN602



DKN912

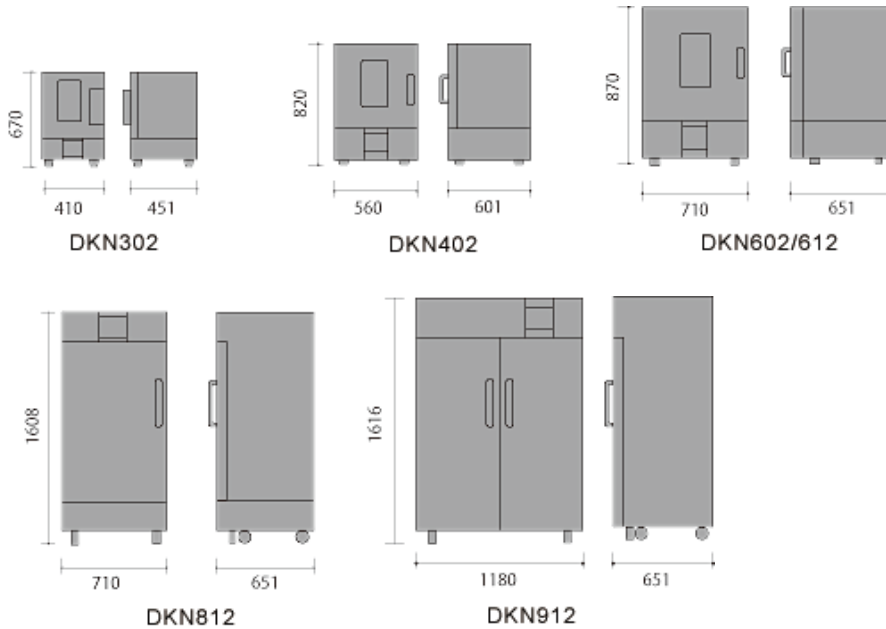
■ Exhaust Holes



■ Cable Hole



■ Dimensions (Unit:mm)



■ Optional items

Remark	Description	Model No.	Product Code
○	Stand for DKN302, ON30	DKN Series	211180
○	Stand for DKN402/602, ON61	DKN Series	211856
	Stacking support for DKN402, OD40	DKN Series	212822
	Stacking support for DKN602/612, OD60	DKN Series	212823
	Shelf (with support 2 pcs) for DKN302	DKN Series	212094
	Shelf (with support 2 pcs) for DKN402	DKN Series	212246
	Shelf (with support 2 pcs) for DKN602/612/812	DKN Series	212266
	Shelf (with support 2 pcs) for DKN912	DKN Series	212490
●	Cable port, 25mm dia	DKN Series	281121
●	Cable port, 50mm dia	DKN Series	281122
●	Temperature output terminal (4-20 mA)	DKN Series	281123
●	External alarm terminal/ time-up output terminal (to choose either) *	DKN Series	281124
	* In case auto damper is chosen, external alarm terminal will become time-up output terminal.	DKN Series	
	* Signal tower is also available upon request.	DKN Series	
●	External communication function (RS485)	DKN Series	281125
●	External communication adapter (changeable to RS232C)	DKN Series	281126

Note:

1. The item marked "●" in the column of "Remark" shall be ordered together with the main unit.
 2. The transportation cost will not be required if the order is together with main unit except the item marked "○".
- In case you order the item marked "○" together with the main unit, please ask Yamato to obtain the correct transportation cost.

Stand



ON Model

Shelf (with 2 support)



Stainless Punching Metal (Weight Tolerance 15kg/pc)