

Constant Temperature Oven

Yamato

Forced Convection

Model DKN301/401/611/811/911

Model				
301	401	611	811	911

Operating Temperature Range
Room temp.+5°C~210°C

Temp. Distribution Accuracy
±1.0°C (at 210°C)

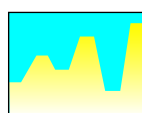
Internal Capacity (ℓ)				
27	72	150	300	535

Forced convection ovens of standard type.

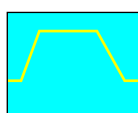
A forced convection, programmable constant temperature oven incorporating programmable operation functions and a wide range of other function, and boasting enhanced safety features and operability.

- 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.

Control Panel

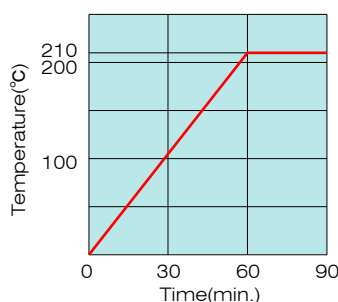


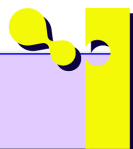
Programming operation



Automatic Start & Stop

Temp. Rising Curve





Constant Temperature Oven



Forced Convection

Specifications

Model	DKN301	DKN401	DKN611	DKN811	DKN911
■ Performance					
Circulation method	Forced air circulation				
Operating temperature range	Room temp.+5~210℃				
Temp. control accuracy	±1.0℃(at 210℃)				
Temp. distribution accuracy	±2.5℃(at 210℃)				
Max. temp. reaching time	Approx. 60 min.				Approx. 75 min.
■ Components					
Interior material	Type 304 Stainless steel				
Exterior material	Cold rolled steel plate with melamine resin baking finish				
Heat insulating material	Rock wool			Glass wool	
Heater	Iron-chrome wire heater			Stainless pipe heater	
	0.6 kW	1.1 kW	1.34 kW	1.2 kW × 2	1.5 kW × 2
Fan type	Scirocco fan, Condenser type				
Motor	10 W			30 W	10 W × 2
Exhaust port	30 mm I.D. × 2 pcs.(the top)			30 mm I.D. × 2 pcs.(the back)	
Observation window	180 × 180mm		180 × 280mm	None	
■ Controller					
Temp. controller	3 patterns program controller, PID control by microprocessor				
Temp. setting method	Digital setting with ▲▼ key				
Temp display method	Measurement temp. : Digital display by green LED Setting temp. : Digital display by red LED				
Timer	1 min.~99 Hrs. 59 min. and 100 Hrs.~999 Hrs. 59 min.				
Min. division	1 min. or 1 Hrs.				
Operation function	Fixed temperature operation, Program operation, Auto start, Quick Auto-stop,				
Program mode	Program operation : 3 pattern, 30 steps(30 steps × 1, 15 steps × 2, 10 steps × 3) Pattern repeat function				
Additional functions	Temperature preset function, Integration time function (max. 49999 Hrs.)				
Heater circuit control	SSR control				
Sensor	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 × 400 × 400	600 × 500 × 500	600 × 500 × 1,000	1,069 × 500 × 1,010
External dimensions(W × D × Hmm)	400 × 440 × 672	550 × 540 × 777	700 × 640 × 877	710 × 650 × 1,630	1,180 × 650 × 1,630
Internal capacity	27 liters	72 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 × 2
Shelf rest pitch	35 mm				
Power source 50/60Hz	100V/230V single phase, 6.5A/3.1A	100V/230V single phase, 12A/5.7A	200V/230V single phase, 7.5A/6.6A	200V/230V single phase, 13A/11.4A	200V/230V single phase, 16A/14A
weight	Approx. 31 kg	Approx. 45 kg	Approx. 64 kg	Approx. 125 kg	Approx. 190 kg
■ Accessories					
Shelf plate	Stainless steel, 2 pcs.			Stainless steel, 4 pcs.	Stainless steel, 8 pcs.
Shelf bracket	4 pcs.			8 pcs.	16 pcs.
■ Optional Accessories					
Stand / Additional shelf plate / Cable hole(25/50mm) / External communication terminal / Temp. output terminal (4~20mA) / Time up out-put terminal / Out-put terminal for alarm device / Independent overheating prevention / Electric leakage breaker etc.					