

SINCE 1889



Forced Convection Oven

DKN303/403/603/613

NEW

Renewal of our best-selling standard oven!



DKN303



DKN403



DKN603



DKN613

Features

- Excellent temperature performance
- Monotone design for intuitive operation
- A new operation panel with improved visibility and operability
- Independent overheat protection device equipped as standard

Interior

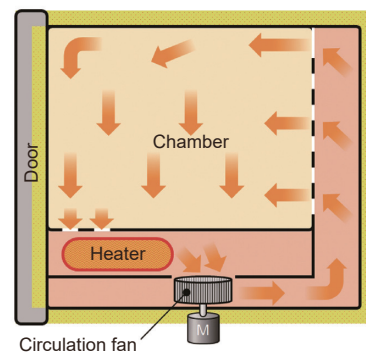


Control Panel



Method: Forced convection

[Side view]



Yamato Scientific Co., Ltd.

Specifications

Model	DKN303	DKN403	DKN603	DKN613	
Product code	213010	213011	213012	213013	
Circulation method	Forced convection				
Operating temp. range	5 to 35°C				
Temperature setting range	0 to 260°C		0 to 250°C	0 to 260°C	
Performance	Temperature setting range	Room temp.+10 to 260°C		Room temp.+10 to 260°C	
	Temperature fluctuation*1	±0.4°C (at 260°C)	±0.6°C (at 260°C)	±0.8°C (at 250°C)	
	Temperature gradient*1	9°C (at 260°C)	10°C (at 260°C)	9°C (at 250°C)	
	Temperature rise speed*1	3.9°C/min	2.6°C/min	2.1°C/min	
	Temperature rise time*2 Room temp. to 260°C (250°C)	Approx. 60min.	Approx. 90min.	Approx. 120min.	Approx. 80min.
Configuration	Exterior material	Chrome-free electrogalvanized steel sheet, baked coating			
	Interior material	Stainless steel plate			
	Stainless pipe heater	0.8kW	1.2kW	1.34kW	1.5kW
	Cable hole/Exhaust port	Inner diameter 33mm (1 hole on right side) / Inner diameter 33mm (2 ports on top)			
	Observation window	180×180mm, Chemically strengthened glass×3 pcs.	250×280mm, Chemically strengthened glass×3 pcs.		
Safety functions	Self-diagnostic function (automatic overheat prevention, temperature sensor error, heater disconnection, SSR short, main relay failure, memory error, internal communication error, measured temperature error) / Independent overheat protector / Set value lock function / Overcurrent leakage breaker				
Control	Temp. controller	PID control by microprocessor			
	Timer	0min. to 99hrs. 59min. and 100 to 999hrs .50min. (with timer wait function ON/OFF available)			
	Operation function	Fix temp. operation / Programmed operation / Quick auto stop operation/Auto stop operation / Auto start operation / Programmed auto start operation			
	Additional functions	Calibration offset function / Set value lock function / Power failure return mode selection function			
Standard	Sensor	Temperature controller: K thermocouple, Independent overheat protection: Liquid expansion overheat protector			
	External dimensions	W410×D450×H670mm	W560×D600×H820mm	W710×D650×H870mm	
	Internal dimensions	W300×D300×H300mm	W450×D450×H450mm	W600×D500×H500mm	
	Internal capacity	27L	90L	150L	
	Shelf support step number/pitch	6steps/30mm	11steps/30mm	13steps/30mm	
	Shelf load capacity	15kg/piece Total load capacity 30kg			
	Power Source (50/60Hz)	AC 115V8A/220V4A Single-phase	AC 115V11A/220V6A Single-phase	AC115V13A Single-phase	AC220V7A Single-phase
	Weight	Approx. 35kg	Approx. 50kg	Approx. 70kg	Approx. 71kg
Accessories	1 shelf (SUS perforated metal), 2 shelf brackets (1 set) (the bottom shelf is already fixed in the chamber)				

*1 Measurement standard :JIS C 60068-3-5(2020) *2 Reference

Optional Items

Product name	Model	Product code	Supported models, DKN			
			303	403	603	613
Stand(W550×D550×H610mm)*3	OA115	281353	●	-	-	-
Stand(W740×D660×H600mm)*3	OA116	281354	-	●	●	●
Stand(W560×D610×H611mm)	OA117	281355	-	●	-	-
Stand(W710×D660×H611mm)	OA118	281356	-	-	●	●
Stacking support	OA119	281357	-	●	-	-
Stacking support	OA120	281358	-	-	●	●
Shelf (type 300)	-	212068	●	-	-	-
Shelf (type 400)	-	212246	-	●	-	-
Shelf (type 600)	-	212266	-	-	●	●
Cable hole (φ25)*4	ODK32	281121	●	●	●	●
Cable hole (φ50)*4	ODK34	281122	●	●	●	●
Seismic mat	-	296902	●	●	●	●
Sheath sensor (K thermocouple)	ODT48	212946	●	●	●	●
Silicone plug (2mm dia. with 1 hole)	ODT52	212947	●	●	●	●

*3 Height can be adjusted by adjuster *4 Please specify when ordering main unit.

Product name	Model	Product code	Supported models, DKN			
			303	403	603	613
Temperature output terminal*4	OA137	281375	●	●	●	●
External alarm terminal*4	OA138	281376	●	●	●	-
	OA141	281379	-	-	-	●
Time-up output terminal*4	OA139	281377	●	●	●	-
	OA142	281380	-	-	-	●
External communication terminal(RS485)*4	OA140	281378	●	●	●	●
External communication adapter (RS485-USB conversion)	OA017	281146	●	●	●	●



Stand OA115 Stand OA116 Stand OA117 Stand OA118 Stacking support OA119



Caution The specifications and performance figures of the products listed in this catalog are presented as a user guide under general operating conditions. When using the product, please understand the contents of the instruction manual and use the product correctly. Please note that we cannot be held responsible for any damage to persons or property caused by using the product outside the conditions of use described in the instruction manual.

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For the development of scientific technologies

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