

For Information and to Order Yamato Ovens,
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Yamato Scientific *America*

NEW

Programmable Forced Convection Industrial Lab Ovens **DKV SERIES** 400/410/600/610/810/910



Equipped with 3.5 in.
color LCD controller



* Stands Sold Separately

SIX (6) MODELS TO CHOOSE FROM



DKV400/410
3.1 CuFt



DKV600/610
5.3 CuFt



DKV810
10.6 CuFt



DKV910
19.2 CuFt

Yamato Ovens continue to earn the trust of customers worldwide. Designed to meet a wide range of needs—from testing to production—our ovens have advanced even further. This latest model now features two new functions that enhance versatility and performance.

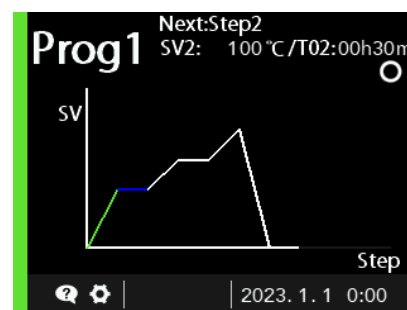
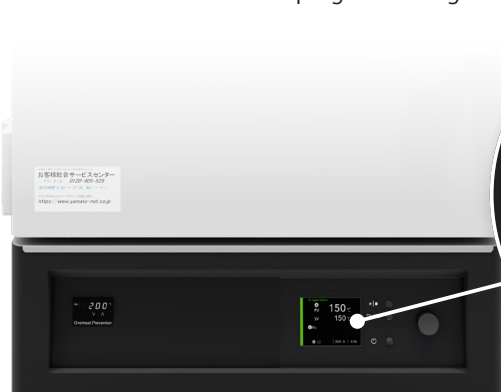


NEW

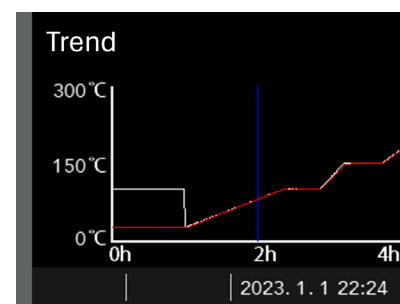
Feature 1

Easy to use, highly visible color LCD controller VSD-1 type (3.5 inches)

Experience the ease of use with program settings and trend display



Program operation display



Temperature trend display

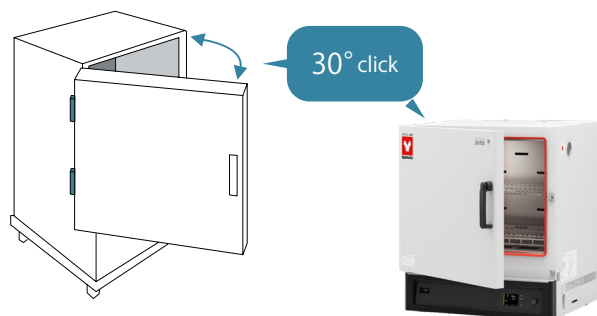
Functions

- Fixed Temperature Operation
- Quick Auto-Stop Operation / Auto-Stop Operation / Auto-Start Operation / Programmed Auto-Start Operation (Time and Clock Settings)
- Programmed Operation (Time Settings)

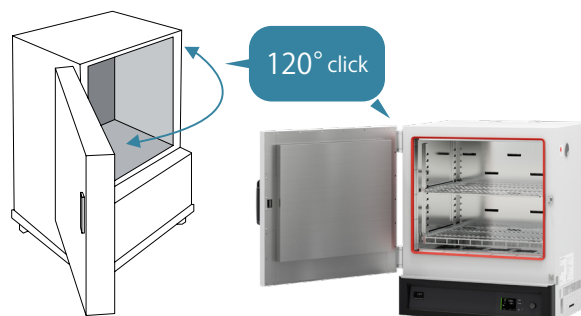
Feature 2

Door hinges with click function

Door hinges have a click function that can hold the door at two angles: 30° and 120° (operating range is 180°). Samples can be safely inserted and removed without worrying about burns or contact.



Prevents the door from closing when unit is tilted



Specially designed door handle

The door can be opened effortlessly with one hand. A generously sized push button ensures smooth, stress-free operation. This durable, highly reliable handle has been proven over many years in demanding production environments where frequent access is essential.



SPECIFICATIONS

MODEL		DKV-400 DKV-410	DKV-600 DKV-610	DKV810	DKV910
Images displayed with open door					
System		Forced convection			
Ambient temp. range		5~35℃			
Setting temp. range		0~270℃			0~220℃
Performance*1	Temp. range	Room temp. +10℃~270℃			Room temp. +10℃~220℃
	Temp. fluctuation*2	±0.6℃ (at270℃)	±0.5℃ (at270℃)	±0.6℃ (at270℃)	±0.5℃ (at220℃)
	Temp. gradient*2	9℃ (at270℃)		11℃ (at270℃)	11℃ (at220℃)
	Temp. rise rate*2	3.3℃ /min	2.1℃ /min	3.4℃ /min	2.5℃ /min
	Temp. rise time*2	~75 min	~115 min	~75 min	~80 min
Composition	Exterior	Chromium-free electrogalvanized steel sheet, baked-on finish			
	Chamber	Stainless steel			
	SUS tube heater	1.5kW		2.5kW	3.0kW
	Cable port	Inner diameter 1.3" (1 piece on right side)			
	Exhaust port	2 pcs (1.3" I.D.) (top)		2 pcs (1.3" I.D.) (back)	
Safety devices*3		Self-diagnostic functions (automatic overtemperature protection, temperature sensor error, SSR short circuit, heater disconnection, fan error, clock element error, main relay error, memory error, internal communication error) / independent overheat prevention device / door switch (door alarm) / overcurrent leakage breaker / fall prevention fitting (Model 810/910)			
Controller	Controller type	VSD-1 Controller			
	Temp. control system	PID control by microcomputer			
	Temp display system	3.5-inch color LCD panel Digital display			
	Timer / Clock timer	1 minute to 99 hours 59 minutes / Date: hour: minute (up to 31 days later)			
	Operation modes	Fixed temperature / Timer·Hourly quick auto stop operation / Timer·Hourly auto stop operation / Timer·Hourly auto start operation / Program operation / Timer·Hourly program auto start operation			
	Additional functions	Calibration offset / Power failure return mode selection function / Timer Wait function / Security management function / Temperature upper/lower limit alarm function / Fan OFF delay function / Power failure alarm / External communication terminal (RS-485) / Temperature output terminal (4-20mA) / Time-up output terminal / Error output terminal / Recorder terminal / Program preview function / Operation trend function			
	Sensor	Temperature controller / independent overheat prevention device : K thermocouple			
Standard	Internal dimension (W x D x H In)	17.7"×17.7"× 17.7"	23.6"×19.6"× 19.6"	23.6"×19.6" X 39.4"	42.9"×19.6"×39.4"
	External dimension*4 (W x D x H In)	22.8"×25" X 32.7"	28.7"× 27"×34.6"	28.7"×27"×63.3"	48"×27"×63.5"
	Internal volume	3.1 CuFt	5 CuFt	10.6 CuFt	19.2 CuFt
	Number of shelves / pitch	11 steps / 1.3"	13 steps / 1.3"	29 steps / 1.3"	29 / 1.3"×2 columns
	Chamber shelf load	33 Lbs / shelf			
	Chamber load capacity	66Lbs		132 Lbs	264 Lbs
	Power supply (50/60Hz) Rated current	DKV400: AC115V 13.5A DKV410: AC220V 7.5A	DKV600: AC115V 13.5A DKV610: AC220V 7.5A	Single phase AC220V 12A	Single phase AC220V 14.5A
	Breaker capacity	DKV400: 15A DKV410:10A	DKV600:15A DKV610:10A	15A	16A
	Weight (kg)	~132 Lbs	~165 Lbs	~264 Lbs	~430 Lbs
Accessories	Shelf plate / brackets	1pc. / 2 pcs.		3 pc. / 6pcs.	6 pc. / 12 pcs.
	Fall prevention fittings	-	-	4 pcs (fixing hole diameter Φ 14 M12 recommended)	

^{*1} Performance (excluding temperature rise time) is measured at rated voltage, 50Hz or 60Hz frequency, room temperature 23° C ±5° C, humidity 65%RH ±20%, and no load. Note that the maximum temperature in the temperature control range may not be reached if the power supply voltage is below the rating or if the outside temperature is low.

^{*2} The temperature rise time is reference data for rated voltage, 50 Hz or 60 Hz, room temperature 23° C, humidity 65%, and no load. Note that the temperature rise time may be longer when the power supply voltage is below the rating or when the outside temperature is low. ^{*3} If the product is used beyond the operating voltage range (±10% of rating), there is a possibility that the safety function will malfunction. Pay attention to the power supply voltage when using the product. ^{*4} Protrusions are not included.

*OPTIONAL ITEMS

DESCRIPTION			DKV Models				Additional Information
			400 410	600 610	810	910	
Stand			●	●	—	—	Unit can be secured on this stand with screws (Caster less)
			●	—	—	—	
			—	●	—	—	
Stacking kit			●	—	—	—	Fixing bracket for stacking two units
			—	●	—	—	
Shelf and brackets			●	—	—	—	Stainless steel perforated metal shelf Includes two brackets Same shelf as standard accessories
			—	●	●	—	
			—	—	—	●	
Seismic isolation mat			●	●	—	—	Secures devices in place by fastening them to the base, preventing tipping
Sheath sensor (K thermocouple)			●	●	●	●	Temperature sensor for checking chamber temperature, sample temperature, etc.
Silicone stopper (1 piece with hole, ϕ 2mm)			●	●	●	●	Silicone rubber plug for cable hole ϕ 2mm hole for sensor
* Cable port (inner diameter 25 mm)			●	●	●	●	Not available for installation after delivery
* Cable port (inner diameter 50 mm)			●	●	●	●	
* Rubber feet			●	●	—	—	Rubber feet attachable to the main unit legs

* Please specify when ordering main unit. Not available for installation after delivery.



Optional Stand



Optional Stand



Optional Stacking kit

The standard DKV910 model includes a center column, as shown in the photo. However, we can accommodate special orders for versions without the center column.

*Please note that the maximum temperature will be limited.



Q&A DKV SERIES

Q Is it possible to install an observation window on the door?

A This can be arranged as a custom order; however, insulation performance may be slightly reduced, and the specified performance might not be achieved depending on the operating temperature. Please consider this when placing your order.

Attention: The product specifications and performance data provided in this catalog are intended as a general user guide. Please carefully review the instruction manual before use and ensure the product is operated correctly. Note that we are not responsible for any personal injury or property damage resulting from use of the product outside the conditions outlined in the instruction manual.

Specifications and appearance may change without notice for improvement purposes. Product colors may appear different from the actual colors due to photography and printing ink. Company names, product names, and logos listed are trademarks of our company or the respective companies.



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