

Inert Ovens | N₂ Replacement, Oxygen-free Heating

DN410IC/610IC

Forced
ConvectionAutomatic
Overheating
PreventerOverheating
PreventerSelf-diagnostic
FunctionKey Lock
FunctionPower Failure
Compensation
FunctionOvercurrent
Leakage Circuit
BreakerCE
Certification

Operating temp. range RT+15~360°C

Temp. distribution accuracy ±3°C (at 360°C)

Internal capacity 95L 223L

Specific constant temperature ovens for thermal treatment experiments in an oxygen-free environment.



Features

- Support performing high-temperature resistance tests and thermal processing at 360°C.
- Wide operating temperature range, high accuracy in temperature control.
- Easy operation, available for fixed temp., program, quick auto stop, auto stop and auto start operations.
- Digital setting through special function menu keys and up/down keys. 6 modes with a total of 90 segments program controller.
- Flow setting and introduction through N₂ flow meter.

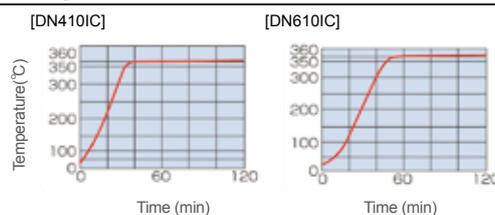
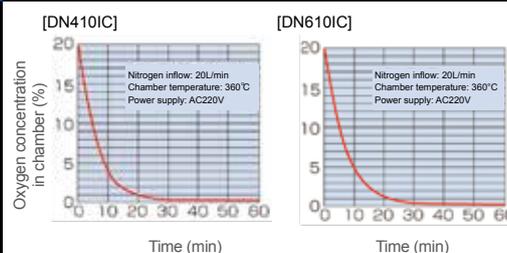
Safety

- Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit protection), overheating preventer, overcurrent leakage protection, key lock and other safety functions.

Specifications

Model		DN410IC	DN610IC
System		Forced convection	
Operating temp. range		Room temp. +10~360°C	
Performance	GB standard	Temp. fluctuation ±0.2°C (at 360°C)	Temp. uniformity ±1.5% (at 360°C)
	JTM standard	Temp. adjusting accuracy ±0.2°C (at 360°C)	Temp. distribution accuracy ±3.0°C (at 360°C)
		Temp. distribution accuracy ±3.0°C (at 360°C)	
	Max. temp. reaching time	Approx. 60 min	
Composition	Interior material	Stainless steel plate	
	Exterior material	Cold rolled steel plate with chemical proofing coating	
	Insulating material	Rock wool	
	Heater	Stainless steel heating tube, 3.0KW	Stainless steel heating tube, 4.0KW
	Fan blade/motor	Centrifugal fan blades, high-temperature self-cooling motor 30W	
	Flow meter	Maximum flow: 40L/min	
	N ₂ inlet interface	Φ8	
Controllers	Temp. control method	3-stage PID	
	Temp. setting method	Digital setting through special function menu keys and up/down keys	
	Temp. display method	Achieved temp. display: Green 4-digit LED digital display Setting temp. display: Red 4-digit LED digital display	
	Timer	1 min~99 h 59 min and 100~999 h 50 min (including timer waiting function)	
	Operation functions	Fixed temp. operation, auto start, auto stop, program operation	
	Program mode	Program operation 6 modes with a total of 90 segments (30 segments×1, 15 segments×2, 10 segments×3)	
	Additional functions	Deviation correction, key lock, power failure compensation	
	Sensors	K thermocouple (temp. controller and overheating protector)	
Safety device		Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit, overheating preventer, overcurrent leakage protection, key lock functions)	
Specifications	Internal dimensions (W×D×H mm)	470×450×450	620×600×600
	External dimensions (W×D×H mm)	640×695×915	790×846×1065
	Internal capacity	95L	223L
	Shelf load	30kg/layer	
	Shelf layers/shelf support spacing	12 layers/30mm	17 layers/30mm
	Power supply (50/60Hz) rated current	AC220V 14A	AC220V 19A
	Weight	Approx. 80kg	Approx. 120kg
Accessories	Shelf	Stainless steel wire mesh plate	
	Supports	2 pcs	
	Stand	OH41C	OH61C
Options	Others	Shelf plate, cable port (30/50mm), micro printer, data logger, combined warning light (standby/operation/fault), viewing window, exhaust vent, external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, timer output terminal, central monitoring software	

Temperature rise curve

N₂ replacement performance curveN₂ inlet (outer diameter 9mm)

1 Sterilizers

2 Granulation and Spray Dryers

3 Muffle Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

10 Rotary Evaporators

11 Freeze Dryers & Cold Traps

12 Stirrers & Shakers

13 Washers

14 Analysis and Test Devices

15 Options