

Industrial & Laboratory Forced Convection Constant Temperature Ovens

DN411H/611H



DN411H/611H

High precision constant oven which can be easy to do the heat treatment and heat insulation test. Due to high precision control system, high performance temperature control is realized, and the CO₂ discharge, power discharge can be also displayed at the monitor.

Model	
411H	611H
Operating Temperature Range	
Room temp. +15deg.C to 360deg.C	
Temp. Distribution Accuracy	
±3.0deg.C (at 360deg.C)	
Internal Capacity (L)	
95	223

- Suitable for Heat Insulation Test and Curing Process up to 360deg.C.
- Simple Operation by Interactive Key Input.
- Calibration offset function, power failure recovery mode, the user configuration information and various function are standard added.
- Incorporates with maximum 99 steps, 99 patterns program controller with repeat function.
- Loaded with Total Operation Hours Timer.
- Data acquisition from internal test device is easy because of cable holes.

■ Specifications

Model	DN411H	DN611H
Performance		
Convection Type	Forced Convection	
Operating Temp. Range	Room Temp. +15 to 360deg.C	
Temp. Adjustment Accuracy	±0.2deg.C (at 360deg.C)	
Temp. fluctuation	±0.6deg.C (at 360deg.C)	
Temp. Distribution Accuracy	±3.0deg.C (at 360deg.C)	
Temp. Gradient	12deg.C (at 360deg.C)	20deg.C (at 360deg.C)
Time to Reach to Max. Temp.	Approx. 60min.	
Components		
Interior / Heat Insulation Material	Stainless Steel / Glass Wool + Ceramic Fiber	
Heater	SUS Pipe Heater 3.0kW	SUS Pipe Heater 4.0kW
Fan	Sirocco Fan, Condenser Type Motor 30W	
Cable holes	33mm diameter (right side)	
Exhaust port	33mm diameter x 2 (back side)	
Temp. Control Type	PID Control by Micro Computer	
Temp. Setting Type	Digital Setting by UP/DOWN Key	
Temp. Display	Digital Indication by Green LED	
Other Display	Temp. Pattern Display for Operating Display by LED	
Timer / Timer Resolution	1min. to 99hrs. 59min. or 100hrs. to 999hrs. / 1min. or 1hrs.	
Operating Function	Fixed Temp. Operation, Automatic Start, Automatic Stop, Quick automatic stop, Program Operation	
Additional Function	Calendar time(24 hours), Calibration Off Set Function, electricity consumption, CO2 discharge, Heater output operation display monitor, power failure return mode, user configuration information saving/summoning.	
Heater Circuit Control / Sensor	Triac Zero-cross Type / K-Thermocouple(for temp. adjustment, individual overheating prevention)	
Safety Device		
Safety Countermeasure	Self Diagnosis Function (Sensor, Heater, Fan, Triac, Main Relay, Automatic Overheat Prevention), Key Lock Function, Independent Overheating Prevention, Door Switch, Electric Leakage Breaker	
Standard		
Internal Dimensions	W470 x D450 x H450mm	W620 x D600 x H600mm
External Dimensions	W640 x D695 x H915mm	W790 x D845 x H1,065mm
Internal Capacity	95L	223L
Shelf Max. Load	Approx. 30kg / shelf	
Shelf Support Qty. / Pitch	12pcs. / 30mm	17pcs. / 30mm
Power	1-phase, AC200V, 50/60 Hz, 16A	1-phase, AC200V, 50/60 Hz, 21A
Weight	Approx. 90kg	Approx. 130kg
Accessories		
Shelf material	Stainless wire	
Shelf / Shelf support	2 pcs/ 4pcs	

■ Control Panel



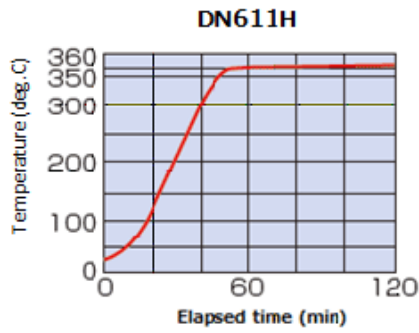
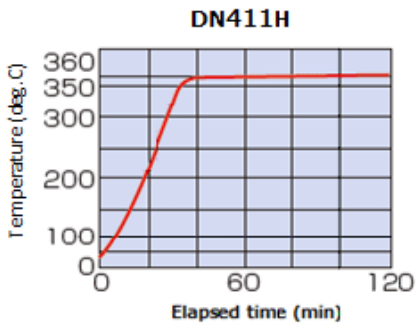
■ Stand (Optional Item)



■ Overheat prevention



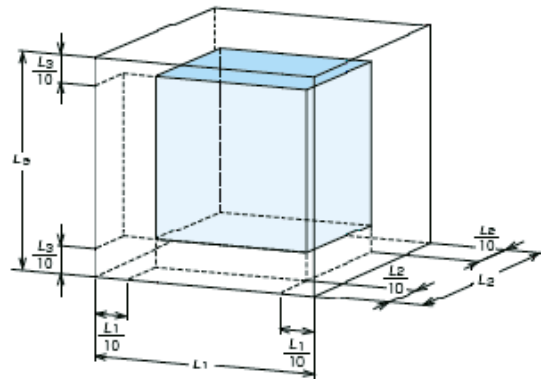
■ Temp rise curve



■ 9 points of distribution reference data

Model	Top right back	Top left back	Top right front	Top left front	Bottom right back	Bottom left back	Bottom right front	Bottom left front	Center
DN411H	359	358	363	361	359	359	359	356	359
DN611H	361	357	362	357	359	355	350	350	357

(Deg.C)



Conditions:

1. Measure points are the points at 1/10 distance (minimum 50mm) from the wall and the center point
2. Room. Temp 23deg.C, AC200V, 50Hz, Temp. setting 360deg.C at stable condition
3. No load

■ Optional items

Remark	Description	Product Code
	Stand OH41(for DN411H/I)	212477
	Stand OH61(for DN611H/I)	212478
	Stainless wire shelf (with support 2 pcs., loading up to 30 kg/shelf) for DN411H/I	211063
	Stainless wire shelf (with support 2 pcs., loading up to 30 kg/shelf) for DN611H/I	211064
	Stainless punching metal shelf (loading up to 15kg/shelf) for DN411H/I	211098
	Stainless punching metal shelf (loading up to 15kg/shelf) for DN611H/I	211099
	External Communication Adapter set	211880
•	Additional cable port, 25mm dia	281056
•	Additional cable port, 50mm dia	281057
•	External Communication terminal	212975
•	Temperature output terminal	212976
•	External alarm output terminal	212977
•	Time up output terminal	212978
•	Operation signal output terminal	212979
•	Event output terminal	212980

Note:

The item marked "•" in the column of "Remark" shall be ordered together with the main unit.

■ Dimension drawing

