Natural Convection Laboratory Oven - PN

General Information

The PN natural convection oven is a bench mounted laboratory oven capable of temperatures up to 300°C.

In the PN oven air circulation depends upon natural convection. The resulting slow airflow is preferable, for example, for processes involving powders which may be disturbed by fan convection or where there is a risk of cross contamination between samples.

The reduced complexity in construction makes a natural convection oven an economical option for many applications.

Standard features

- Economical natural convection models
- 300°C maximum operating temperature
- Equipped with the R38 digital PID temperature controller
- Chemically resistant stainless steel liner
- Two nickel-chrome plated wire shelves
- Lever latch door & airtight silicone seal
- Compliant with safety standard BS EN 61010-2-010:2003

Options (specify these at time of order)

- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Access port for independent thermocouple
- Accessory shelves & runners
- Cable entry ports
- Viewing window
- Interior light
- Stacking frame
- Lockable door
- Door switch to isolate elements
- Floor stands & wheeled trolleys
- Routine spares kit

Technical Specifications

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PN30	
Max temp (°C)	300
Min temp (°C)	Ambient +30
Volume (litres)	27
Temp stability (°C)	±0.5
Temp uniformity (°C)	±7.0 @ 300°C
Heat-up time (mins)	52
Recovery time (mins)	8.5
Dimensions: Internal H x W x D (mm)	255 x 330 x 320
Dimensions: External H x W x D (mm)	470 x 665 x 470
Shelves fitted / accepted	2 / 3
Shelf loading each / total (kg)	10 / 20
Max power (W)	750
Holding power (W)	300
Weight (kg)	30
Power supply	220V - 240V, 50-60Hz, single phase

PN60	
Max temp (°C)	300
Min temp (°C)	Ambient +30
Volume (litres)	57
Temp stability (°C)	±0.5
Temp uniformity (°C)	±7.0 @ 300°C
Heat-up time (mins)	52
Recovery time (mins)	8.5
Dimensions: Internal H x W x D (mm)	350 x 392 x 420
Dimensions: External H x W x D (mm)	570 x 765 x 570
Shelves fitted / accepted	2 / 5
Shelf loading each / total (kg)	10 / 30
Max power (W)	1000
Holding power (W)	480
Weight (kg)	45
Power supply	220V - 240V, 50-60Hz, single phase

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PN120	
Max temp (°C)	300
Min temp (°C)	Ambient +30
Volume (litres)	115
Temp stability (°C)	±0.5
Temp uniformity (°C)	±7.0 @ 300°C
Heat-up time (mins)	52
Recovery time (mins)	8.5
Dimensions: Internal H x W x D (mm)	450 x 492 x 520
Dimensions: External H x W x D (mm)	670 x 865 x 670
Shelves fitted / accepted	2 / 9
Shelf loading each / total (kg)	10 / 40
Max power (W)	1500
Holding power (W)	720
Weight (kg)	60
Power supply	220V - 240V, 50-60Hz, single phase

PN200	
Max temp (°C)	300
Min temp (°C)	Ambient +30
Volume (litres)	215
Temp stability (°C)	±0.5
Temp uniformity (°C)	±7.0 @ 300°C
Heat-up time (mins)	58
Recovery time (mins)	10
Dimensions: Internal H x W x D (mm)	700 x 592 x 520
Dimensions: External H x W x D (mm)	920 x 965 x 670
Shelves fitted / accepted	2 / 15
Shelf loading each / total (kg)	10 / 50
Max power (W)	2250
Holding power (W)	1160
Weight (kg)	75
Power supply	220V - 240V, 50-60Hz, single phase

Please note:

- Uniformity is measured in an empty chamber with vents closed, after a stabilisation period
- Shelf loadings are based on evenly distributed weight
- Maximum power and heat up times based on a 240V supply

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- The uniform volume is smaller than the total chamber volume
- Minimum operating temperature is ambient +30 °C