

## Vacuum ovens XF line



Vacuum oven XF240 with options

A highly versatile range of compact vacuum ovens. These vacuum ovens enable heat sensitive materials to be dried at low temperature.

More stable samples can be dried at higher temperature up to 200°C or 300°C as an option (with an optimised thermal insulation and higher power rating).

They have a place in every laboratory and every industry.

▲ **Performances:** Designed to operate from room temperature + 20°C up to 200°C (300°C in option)

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Final vacuum of 10<sup>-2</sup> mbar, depending on the vacuum pump used

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Temperature time fluctuation: less than ± 0,2°C

### ▲ Construction :

4 sizes of ovens from 20 to 240 liters.

The inner casing is made of corrosion resistant stainless steel, with rounded corners.

The outer casing is made of sheet steel, finished in a tough stoved epoxy paint (colour light grey RAL 7035).

No contact between inner and outer casing and an optimised insulation minimises heat dissipation.

The walls are insulated with glass fibre. The insulation is 70 mm thick, ensuring efficient operation, low external temperatures and excellent thermal stability.

The door is a thick toughened glass plate.

The silicone rubber gasket provides a good seal between the door and the oven body.

The insulation and the gasket are asbestos-free.

The door is hinged on the right hand side.

### ▲ Heating :

The chamber is heated by large area heaters strapped to its outer surface.

No-wear switching (solid state relay) is used for activating and deactivating the heating elements.

As an option, internal heating plates can be installed instead of the external heating elements.

### ▲ Vacuum control :

An exhaust solenoid valve is situated for convenience connection to a vacuum pump.

The inlet solenoid valve accept air entry or inert gas connection.

A vacuum gauge is fitted showing vacuum pulled from 0 to 1000 mbar.

The valve is a 3-position manual for the 20 liters model.

### ▲ Temperature control and safety :

Temperature sensor is a J thermocouple inside the chamber.

The temperature is controlled by a precise microprocessor based-controller that provides a high accuracy and prevents the set temperature from being exceeded.

The independent over temperature thermostat cut out has an adjustable upper limit, giving a class 3:1 protection.

The auto tune PID digital controller digitally displays the set and actual values of temperature, and incorporates a heater indicator lamp.

The control panel houses an ON/OFF switch and a fault indicator lamp which lights when the safety thermostat comes into operation.

### ▲ Equipment :

Multiple position shelving for convenient loading / unloading. Additional shelves are available.



Vacuum oven XF020

A wide range of factory-fitted options and accessories to meet your exact requirements ...



## Technical data

Vacuum ovens	XF020	XF050	XF120	XF240
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### Performances

Temperature range	ambient +20°C to 200°C (300°C in option)				
Maximum final vacuum (primary vacuum pump)	mbar	10 <sup>-2</sup>	10 <sup>-2</sup>	10 <sup>-2</sup>	10 <sup>-2</sup>
Temperature fluctuation	±°C	< 0,2	< 0,2	< 0,2	< 0,2

### Dimensions

Work chamber volume	dm <sup>3</sup>	20	51	112	223
Internal width	mm	250	320	470	470
Internal depth	mm	320	500	500	1000
Internal height	mm	250	320	470	470
External width*	mm	410	530	750	750
External depth*	mm	530	710	775	1275
External height*	mm	515	635	840	840
Glass thickness (securit)	mm	8	10	15	15

\* without option

### Shelves in stainless steel

Supplied / maximum		1 / 2	1 / 2	1 / 3	1 / 3
Shelf dimensions (W x D)	mm	215 x 260	285 x 440	435 x 440	435 x 940
Maximum load per shelf / in the oven	kg	30 / 60	30 / 60	30 / 60	30 / 90
Weight (empty)	kg	44	70	149	230

### Electrical supply 50 Hz 230 Volts single-phase (1) power > 4000 Watts: 400 Volts three-phase five wire

Power heating 200°C	Watts	500	1005	2010	3015
With 300°C extension (option)	Watts	800	1860	3720	5580 (1)

## Factory options (To be specified when ordering the main unit)

(please consult us for special dimensions or other options: heating shelf, secondary vacuum 10<sup>0</sup>)

OG9001	Extension of the maximum temperature up to 300°C	OP0093	Pressure regulation with digital display
OG9002	Outside casing in stainless steel	OG9007	Additional safety thermostat class 2.1
OG9004	Special colour for external casing (indicate the RAL)	OP0001	Sound alarm
OG9021	Temperature profiler (4 programs of 16 segments each)	OP0051	Additional Pt100 probe and connector
OG0014	Portable paper recorder 1 temperature	OP0037	Precision control exhaust valve
OG0015	Portable paper recorder 2 temperatures		
OG9016	Furniture for vacuum pump	-	Heating shelf
OP0046	Piezo-electric vacuum gauge and digital display		

## Accessories (can be ordered separately)

GA9001	Extra shelf 30 kg and its supports	-	Vacuum pump 8,5 m <sup>3</sup> /h
-	Vacuum pump 4 m <sup>3</sup> /h	-	Vacuum pump 17 m <sup>3</sup> /h
-	Vacuum pump 5,4 m <sup>3</sup> /h		

