

Laboratory ovens

XU range



Laboratory oven
XU045

These ovens are suitable for many thermal processes : heated storage, heat treatment, thermal testing, sterilization, aging processes and conventional or complex drying processes in every laboratory and every industry.

All laboratory ovens are strongly ventilated for the temperature accuracy and homogeneity in the volume.

- Temperature range : from 10°C above ambient up to 200°C or 300°C as an option
- Regulator digital display accuracy : 0,1°C
- Regulation stability better than $\pm 0,2^\circ\text{C}$
- Homogeneity in volume : $\pm 1,2^\circ\text{C}$ at 105°C (9 points measurement)

| Dimensions (mm) | Chamber useful | | | Chamber overall | | | Useful volume (dm ³) | Unloaded weight (kg) |
|-----------------|----------------|-----|------|-----------------|------|------|----------------------------------|----------------------|
| | W | D | H | W | D | H | | |
| XU 027 | 300 | 300 | 300 | 445 | 490 | 560 | 27 | 28 |
| XU 064 | 400 | 400 | 400 | 545 | 600 | 675 | 64 | 45 |
| XU 125 | 500 | 500 | 500 | 645 | 705 | 775 | 125 | 66 |
| XU 250 | 500 | 500 | 1000 | 645 | 705 | 1275 | 250 | 115 |
| XU 343 | 700 | 700 | 700 | 845 | 910 | 975 | 343 | 150 |
| XU 490 | 700 | 700 | 1000 | 845 | 910 | 1275 | 490 | 180 |
| XU 686 | 700 | 700 | 1400 | 845 | 910 | 1675 | 686 | 235 |
| XU 980 | 1000 | 700 | 1400 | 1155 | 1015 | 1675 | 980 | 295 |

| Model | Power rating 200°C (W) | Electrical supply 50Hz (V) | Power rating with extension 300°C (option) (W) | Electrical supply 50Hz (V) |
|--------|------------------------|---------------------------------|--|---------------------------------|
| XU 027 | 1000 | 230 mono | 1000 | 230 mono |
| XU 064 | 1000 | | 1500 | |
| XU 125 | 1500 | | 2000 | |
| XU 250 | 3000 | | 4000 | |
| XU 343 | 4000 | 400 tri + Earth + Neutral | 6000 | 400 tri + Earth + Neutral |
| XU 490 | 4000 | | 6000 | |
| XU 686 | 6000 | | 9000 | |
| XU 980 | 9000 | | 12000 | |



Construction

10 volumes of laboratory oven are available, from 18 litres to 980 litres. Control panels are on the top part of the ovens to minimize their size.

The inner casing is made of corrosion and heating resistant 321 stainless steel. The outer casing is made of electro-galvanized steel coated with light grey epoxy paint (RAL 7035).

No contact between inner and outer casings and an optimized insulation minimize heat dissipation.

Walls and door are insulated with 70mm thick glass wool, which ensures low external temperatures and an excellent thermal stability.

A silicone gasket provides a good seal between the door and the oven body. The insulation and gasket are asbestos-free.

The door is hinged on the right hand side.

Heating

The tubular heating elements are sheathed and made of stainless steel. They are ideally placed in the air blow for an excellent temperature homogeneity.

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

Inside ventilation

The air flow speeds up the drying process and also evens the temperature distribution within the oven.

The fan and heaters are in the rear of the oven, shielded from the workspace by a stainless steel baffle.

Air is drawn into the fan from the centre of the oven and passes over the temperature sensor and the sheathed heater elements. The heated air is distributed around the baffle to both left and right and then re-circulated by the fan.

Air renewal

Through access vent, fresh air is provided and pre-heated before entering the chamber.

A 30mm Ø exhaust vent is provided with an adjustable valve to control the exhaust air flow.

Regulation, control, security

The measurement temperature is ensured by a J type thermocouple.

The controller digitally displays continuously the set and actual temperature.

An independent, and adjustable, class 3.1 safety thermostat shuts down the heating in case of failure of the main regulation system and ensures the safety of the oven and its load.

Temperature rising ramp function, loop and delayed start.

Equipment

Multiple position shelving for convenient loading/unloading.

18, 27 and 75 litres ovens are delivered with one shelf.

Other models are delivered with 2 shelves.



Laboratory ovens XU490, XU250 and XU686

Options (to be ordered with the oven)

| | | | |
|--------|--|--------|--|
| OG9001 | Extension of max temperature up to 300°C | OG9018 | Cooling extractor |
| OG9002 | Outer casing in brushed finish stainless steel | OG9019 | Air forced renewal, adjustable speed |
| OG9003 | Inner cabinet in unpolished finish stainless steel | OG9021 | Cycles programmer (4 prog. of 16 segments) |
| OG9004 | Special outer casing colour (indicate RAL) | OP0001 | Temperature sound alarm |
| OG9005 | Inside ventilationspeed variator | OP0010 | 1 temperature 1 point factory temperature control |
| OG9006 | Door viewing window | OP0012 | 1 temperature 9 points factory temperature control |
| OG9007 | Class 2.1additional safety thermostat | OP0014 | Inside lighting |
| OG9008 | Weekly automation with digital timer | OP0041 | Ø 40mm porthole and silicone cork |
| OG9014 | 1 temperature portable paper recorder | OP0042 | Ø 60mm porthole and silicone cork |
| OG9015 | 2 temperatures portable paper recorder | OP0051 | Additional Pt100 probe and connector |

Contact us for specific dimensions or any other options

Climats