

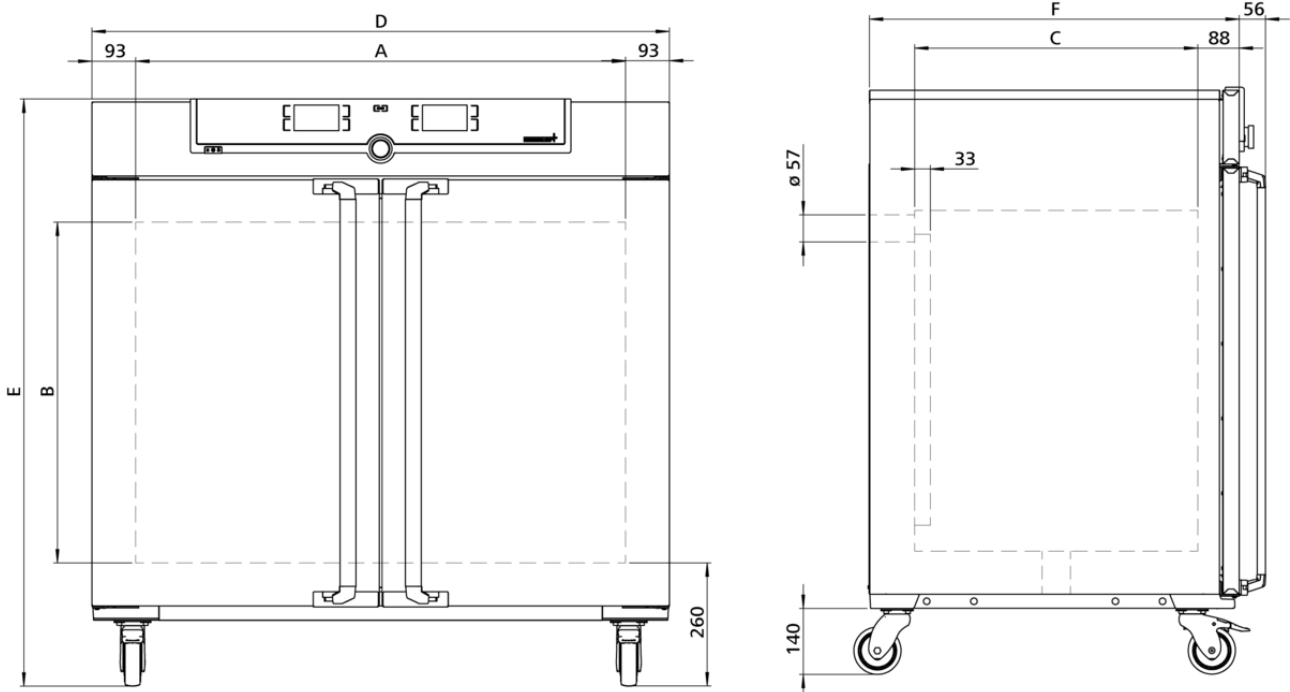
UF450plus

Precise drying, heating, ageing, burn-in and hardening in research, science, industry and quality assurance.



The universally applicable lab oven U is Memmert's classic appliance for temperature control in science, research and material tests in industry. The technologically perfected masterpiece made of high-quality, hygienic, easy-to-clean stainless steel leaves nothing to be desired in terms of ventilation and control technology, overtemperature protection and precisely tuned heating technology.

On this page, you can find all the essential technical data on the universal Memmert lab oven. Our customer relations team will be pleased to help if you want further information. If you should require a customised special solution, please contact our technical specialists at sales@memmert.com.



Temperature

Working temperature range	at least 5 (UN/UNplus/UNm/UNmplus) or 10 (UF/UFplus/UFm/UFmplus) above ambient temperature to +300 °C
Setting accuracy temperature	up to 99.9 °C: 0.1 / from 100 °C: 0.5
Setting temperature range	+20 to +300 °C
Temperature sensor	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error

Control technology

ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.
Language setting	German, English, Spanish, French, Polish, Czech, Hungarian
Timer	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
Function HeatBALANCE	adapting the distribution of the heating performance of the upper and lower heating circuit from -50 % to +50 %
Function SetpointWAIT	the process time does not start until the set temperature is reached
Calibration	three freely selectable temperature values
adjustable parameters	temperature (Celsius or Fahrenheit), fan speed, air flap position, programme time, time zones, summertime/wintertime

Ventilation

Fan	forced air circulation by quiet air turbine, adjustable in 10 % steps for each segment individually
Fresh air	Admixture of pre-heated fresh air by electronically adjustable air flap
Vent	vent connection with restrictor flap

Communication

Documentation	programme stored in case of power failure
Programming	AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port

Safety

Temperature control	mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature
Temperature control	overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection class 2, selectable on display
AutoSAFETY	additionally integrated over- and undertemperature monitor "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of overtemperature
Autodiagnostic system	for fault analysis
Alarm	visual and acoustic

Standard equipment

Works calibration certificate Calibration at +160°C

Door fully insulated stainless steel doors with 2-point locking (compression door lock)

Internals 2 stainless steel grid(s), electropolished

Stainless steel interior

Dimensions $w_{(A)} \times h_{(B)} \times d_{(C)}$: 1040 x 720 x 600 mm (d less 39 mm for fan)

Interior easy-to-clean interior, made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides

Volume 449 l

Max. number of internals 8

Max. loading of chamber 300 kg

Max. loading per internal 30 kg

Textured stainless steel casing

Dimensions $w_{(D)} \times h_{(E)} \times d_{(F)}$: 1224 x 1247 x 784 mm (d +56mm door handle)

Installation on lockable castors

Housing rear zinc-plated steel

Electrical data

Voltage 400 V and 3x 230 V w/o neutral, 50/60 Hz approx. 5800 W

Electrical load

Ambient conditions

Set Up The distance between the wall and the rear of the appliance must be at least 15 cm. The clearance from the ceiling must not be less than 20 cm and the side clearance from walls or nearby appliances must not be less than 5 cm.

Altitude of installation max. 2,000 m above sea level

Ambient temperature +5 °C to +40 °C

Humidity rh max. 80 %, non-condensing

Overvoltage category II

Pollution degree 2

Packing/shipping data

Transport information The appliances must be transported upright

Customs tariff number 8419 8998

Country of origin Federal Republic of Germany

WEEE-Reg.-No. DE 66812464

Dimensions approx incl. carton w x h x d: 1330 x 1440 x 1050 mm

Net weight approx. 161 kg

Gross weight carton approx. 227 kg

Standard units are safety-approved and bear the test marks

