

## **Universal Oven**

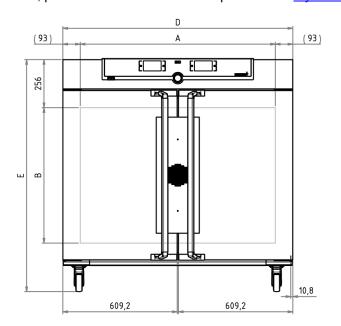
# UN450plus

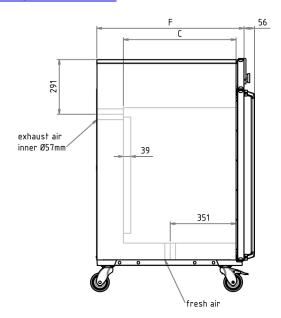
Precise drying, heating, ageing, burn-in and hardening in research, science, industry and quality assurance.



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 <a href="mailto:myAtmoSAFE@memmert.com">myAtmoSAFE@memmert.com</a>.





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Temperature	
Set temperature range in °C	min. 5°C above ambient up to +300°C
Temperature	2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
Control technology	
ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition
CONTOCOCKETT	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), air flap position, programme time, time zones, summertime/wintertime
Ventilation Convection	natural convection
Fresh air admixture	adjustment of pre-heated fresh air admixture by air flap control in 10 % steps for each segment individually
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
. omporatare control	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

visual and acoustic

Alarm

## Standard equipment

Works calibration certificate	Calibration at +160°C
Door	fully insulated stainless steel doors with2-point locking (compression door lock)
Internals	2 stainless steel grids

#### Stainless steel interior

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
Dimensions W x H x D in mm	w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 1040 x 720 x 600 mm
Max. number of internals	8
Max. loading of chamber	300 kg
Max. loading per internal	30 kg

### **Textured stainless steel casing**

Installation	on lockable castors
Dimensions	w <sub>(D)</sub> x h <sub>(E)</sub> x d <sub>(F)</sub> : 1224 x 1247 x 784 mm
Housing	rear zinc-plated steel

#### **Electrical data**

Voltage	400 V, 3 phases, 50 Hz approx. 5800 W
Electrical load	

### Packing/shipping data

the appliances must be transported upright

Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-RegNo.	DE 66812464
Dimensions approx incl. carton	B x H x T: 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









