

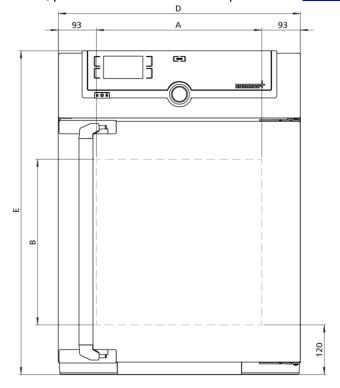
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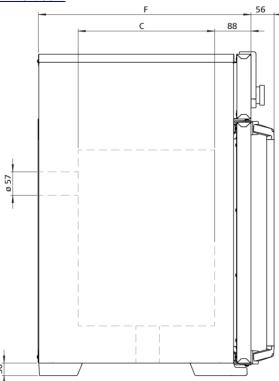
Precise drying, heating, ageing, burn-in and hardening in research, science, industry and quality assurance.



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.





### Working temperature range to +300 °C Setting accuracy temperature ### Up to 99.9 °C: 0.1 / from 100 °C: 0.5 ### Up to 99.9 °C: 0.1 / from 100 °C: 0.1 ### Up to 99.9 °C: 0.1 / from 100 °C: 0.1 ### Up to 99.9 °C: 0.1 / from 100 °C: 0.1 ### Up to 99.9 °C: 0.1 / from 100 °C: 0.1 ### Up to 99.9 °C: 0.1 / from 100 °C: 0.1 ### Up to 99.9 °C: 0.1 / from 100 °C: 0	Temperature	
Setting temperature range	Working temperature range	
Control technology Language setting German, English, Spanish, French, Polish, Czech, Hungarian ControlCOCKPIT SingleDISPLAY, Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-colour display Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days 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 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 for reading out, managing and organising the data logger via Ethernet interface (imporrary frail version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand). Safety Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature Autodiagnostic system for fault analysis Standard equipment Works calibration certificate Calibration sat +160°C Door	-	up to 99.9 °C: 0.1 / from 100 °C: 0.5
Control technology Language setting German, English, Spanish, French, Polish, Czech, Hungarian ControlCOCKPIT SingleDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-colour display Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days 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 subminimental convection in the process of proces	Setting temperature range	+20 to +300°C
ControlCOCKPIT SingleDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-colour display Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days 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/winterrime Ventilation Convection natural convection 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 for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand). Safety Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature Autodiagnostic system for fault analysis Standard equipment Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	Temperature sensor	1 Pt100 sensor DIN class A in 4-wire-circuit
ControlCOCKPIT SingleDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with high-definition TFT-colour display Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days 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/winterrime Ventilation Convection natural convection 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 for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand). Safety Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature Autodiagnostic system for fault analysis Standard equipment Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)		
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Convection Presh 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 AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand). Safety Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature Autodiagnostic system Standard equipment Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	adjustable parameters	
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Communication Documentation programme stored in case of power failure Programming AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand). Safety Temperature control adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature Autodiagnostic system for fault analysis Standard equipment Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	Fresh air	Admixture of pre-heated fresh air by electronically adjustable air flap
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Standard equipment Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	Temperature control	adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature
Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	Autodiagnostic system	for fault analysis
Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)		
Works calibration certificate Calibration at +160°C Door fully insulated stainless steel door with 2-point locking (compression door lock)	Standard equipment	
		Calibration at +160°C
Internals 1 stainless steel grid(s), electropolished	Door	fully insulated stainless steel door with 2-point locking (compression door lock)
	Internals	1 stainless steel grid(s), electropolished

Stainless	steel	interior
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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	53 I
Dimensions	w _(A) x h _(B) x d _(C) : 400 x 400 x 330 mm
Max. number of internals	4
Max. loading of chamber	80 kg
Max. loading per internal	20 kg

Textured stainless steel casing

Dimensions	w _(D) x h _(E) x d _(F) : 585 x 784 x 514 mm (d +56mm door handle)
Housing	rear zinc-plated steel

Electrical data

Voltage Electrical load	230 V, 50/60 Hz approx. 2000 W	
Voltage Electrical load	115 V, 50/60 Hz approx. 1700 W	

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-RegNo.	DE 66812464
Dimensions approx incl. carton	w x h x d: 730 x 950 x 670 mm
Net weight	approx. 57 kg
Gross weight carton	approx. 76 kg

Standard units are safety-approved and bear the test marks







