

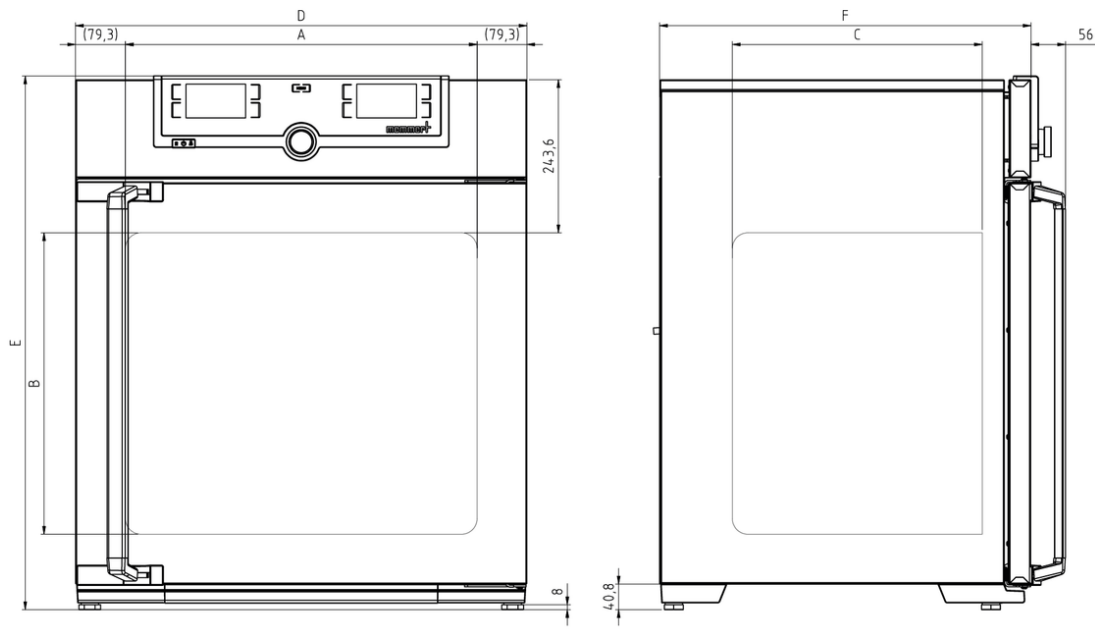
CO₂ Incubator

ICO50

Safety at all times: High-end functions for the protection of cell cultures, bacteria cultures or tissue cultures.



On this page, you can find all the essential technical data on the Memmert CO₂ incubator ICO. Our customer relations team will be pleased to help if you want further information. If you should require a customized special solution, please contact our technical specialists at info@memmertusa.com



Temperature

Working-temperature range	5 °C above ambient temperature up to +50 °C Standard sterilization program: 60 minutes at 180°C (without removing the sensors)
Setting temperature range	+18 to +50 °C
Setting resolution temperature	0.1 °C
Temperature sensor	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error
Temperature variation in chamber	at 37 °C (to DIN 12880:2007-05) +/- 0.3 °C
Temperature fluctuations with time	at 37 °C (to DIN 12880:2007-05) +/- 0.1 °C

Humidity

Humidity control (standard)	Humidity limitation thanks to a Peltier element; when water dish is full and inserted, the Peltier element limits the value of relative humidity in the interior to 93 % rh +/- 2.5 %
Setting range active humidity control (with option K7)	40 to 97 % rh and rh-Off
Setting resolution humidity	0.5 % rh

Control of standard components

CO2 control	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation
Adjustment range CO2	0 to 20 % CO2
Setting accuracy CO2	0.1%
Variation in time CO2	+/- 0.2 % CO2
Adjustment range O2 (with option T6)	1 to 20 % O2
Setting accuracy O2	0.1 % O2

Control technology

ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-color displays.
Language setting	German, English, Spanish, French, Polish, Czech, Hungarian
Function SetpointWAIT	the process time does not start until the set temperature is reached
Adjustable parameters	temperature (Celsius or Fahrenheit), CO2, timer

Communication

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

Safety

AutoSAFETY	additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating function is switched off in case of overtemperature, cooling function in case of undertemperature
Autodiagnostic system	integral fault diagnostics for temperature and CO2
Alarm	visual and acoustic

Heating concept

6 sides	large-area multi-function heating system on four sides with additional door and back heating to avoid condensation
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Standard equipment

Standard accessories	Membrane filter (in order to remove impurities and pollutants, all incoming gases pass through a membrane filter before they reach the chamber)
Door	fully insulated stainless steel door with 2-point locking (compression door lock)
Shelving	1 perforated stainless steel shelf
Works calibration certificate	incl. works calibration certificate (measuring point chamber center) at +37°C, 5 % CO2 for standard units
Internals	1 stainless steel water dish
Door	inner glass door with opening (8 mm Ø) to take gas sample

Stainless steel interior

Dimensions	$w_{(A)} \times h_{(B)} \times d_{(C)}$: 15.7 x 16.7 x 13 inches (d less 1.4" for fan)
Interior	material 1.4301 (ASTM 304), corrosion resistant
Volume	56 l / 2 cu ft
Max. number of shelves	5
Max. loading of chamber	165 lbs
Max. loading per shelf	33 lbs

Textured stainless steel casing

Dimensions	$w_{(D)} \times h_{(E)} \times d_{(F)}$: 22 x 31.3 x 20.5 inches (d +2.2" door handle)
Housing	rear zinc-plated steel

Electrical data

Voltage	230 V ($\pm 10\%$), 50/60 Hz
Electrical load	approx. 1100 W / 4.8 A

Voltage	115 V ($\pm 10\%$), 50/60 Hz
Electrical load	approx. 1100 W / 9.6 A

Ambient conditions

Set Up	The distance between the wall and the rear of the appliance must be at least 6". The clearance from the ceiling must not be less than 8" and the side clearance from walls or nearby appliances must not be less than 2".
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Ambient temperature	10 °C to 35 °C
Humidity rh	max. 70 %, non-condensing
Altitude of installation	max. 2,000 m above sea level
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: 29 x 38 x 26 inches
Net weight	approx. 122 lbs
Gross weight carton	approx. 164 lbs

Standard units are safety-approved and bear the test marks

