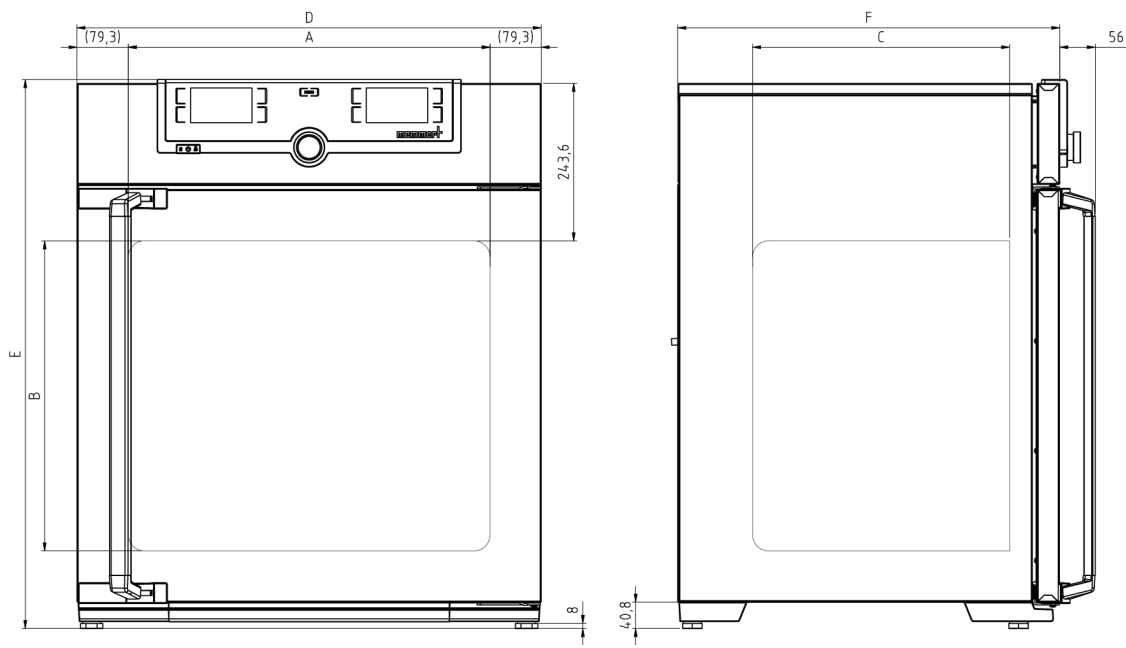# CO$_2$ Incubator

ICO105

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 CO$_2$ incubator ICO. 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 myAtmoSAFE@memmert.com.

Control of standard components

Temperature	2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
CO2 control	Digital electronic CO_2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation
Adjustment range CO2	0 to 20 % CO_2
Variation in time CO2	+/- 0.2 % CO_2
ControlCOCKPIT	adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays
Humidity control	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	40 to 97 % rh and rh-Off
Setting accuracy humidity	0.5 % rh
Adjustment range O2	1 to 20 % O_2
Setting accuracy O2	0.1 % O_2

Temperature

Working-temperature range	5 °C above ambient temperature up to +50 °C Standard sterilisation programme: 60 minutes at 180°C (without removing the sensors)
Setting temperature range	+18 to +50 °C
Setting accuracy temperature	0.1 °C

Control technology

Function SetpointWAIT	the process time does not start until the set temperature is reached
Language setting	German/English/Spanish/French

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

Alarm	visual and acoustic

Heating concept

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

Standard equipment

Internals	2 pcs stainless steel shelves, perforated
Door	inner glass door with opening (8 mm Ø) to take gas sample
Door	fully insulated stainless steel door with2-point locking (compression door lock)
Housing	rear zinc-plated steel
Interior	material 1.4301 (ASTM 304), corrosion resistant
Internals	1 pc stainless steel water dish
Scope of delivery	incl. works calibration certificate (measuring point chamber centre) at +37°C, 5 % CO2 for standard units
Scope of delivery	incl. works calibration certificate for +37°C, 5 % CO2 and 90 % rh (requires option K7); standard equipment for units with active humidity control
Scope of delivery	incl. works calibration certificate for +37°C, 5 % CO2, 90 % rh and 10 % O2 (requires option K7 and option T6); Standard equipment for units with O2 control

Stainless steel interior

Max. loading of chamber:	90 kg
Dimensions W x H x D in mm	$w_{(A)}$ x $h_{(B)}$ x $d_{(C)}$: 560 x 480 x 400 mm
Volume	107 l

Electrical data

Voltage **Electrical load**	115 V, 50/60 Hz approx. 1500 W
Voltage **Electrical load**	230 V, 50/60 Hz approx. 1500 W

Packing/shipping data

Dimensions approx incl. carton	B x H x T: 800 x 1030 x 800 mm
the appliances must be transported upright	
Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-Reg.-No.	DE 66812464
Net weight	approx. 75 kg
Gross weight carton	approx. 100 kg

Standard units are safety-approved and bear the test marks