# CO<sub>2</sub> Incubator

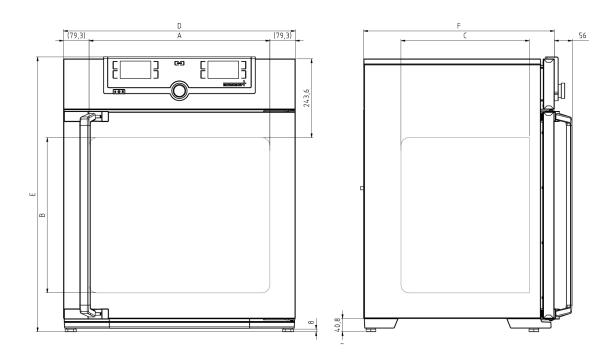
Safety at all times: High-end functions for the protection of cell cultures, bacteria cultures or tissue cultures.



**Experts in Thermostatics** 

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On this page, you can find all the essential technical data on the Memmert  $CO_2$  incubator ICOmed. 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.



## 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
Temperature	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error

# 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 accuracy humidity	0.5 % rh
Setting range active humidity control (with option K7)	40 to 97 % rh and rh-Off
Addtional humidity control (standard)	Capacitive humidity sensor for measuring and displaying the relative humidity (regular Option K6 - free of charge till 31st March 2018)

## **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-colour 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), fan speed, CO2, programme time, time zones, summertime/wintertime

#### Communication

Interface	Ethernet LAN, USB
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

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, CO2 and humidity limit control
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

## Standard equipment

Door	fully insulated stainless steel door with 2-point locking (compression door lock)
Internals	2 perforated stainless steel shelf/shelves
Works calibation certificate	incl. works calibration certificate (measuring point chamber centre) at +37°C, 5 % CO2 for standard units
Internals	1 stainless steel water dish
Door	inner glass door with opening (8 mm $\emptyset$ ) to take gas sample

## Stainless steel interior

Interior	material 1.4301 (ASTM 304), corrosion resistant
Volume	241
Dimensions	w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 600 x 810 x 500 mm
Max. number of internals	12
Max. loading of chamber	140 kg
Max. loading per internal	15 kg

## Textured stainless steel casing

Dimensions	w <sub>(D)</sub> x h <sub>(E)</sub> x d <sub>(F)</sub> : 759 x 1180 x 691 mm
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. 2000 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.
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	П
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: 840 x 1360 x 900 mm
Net weight	approx. 110 kg
Gross weight carton	approx. 145 kg

# Standard units are safety-approved and bear the test marks

