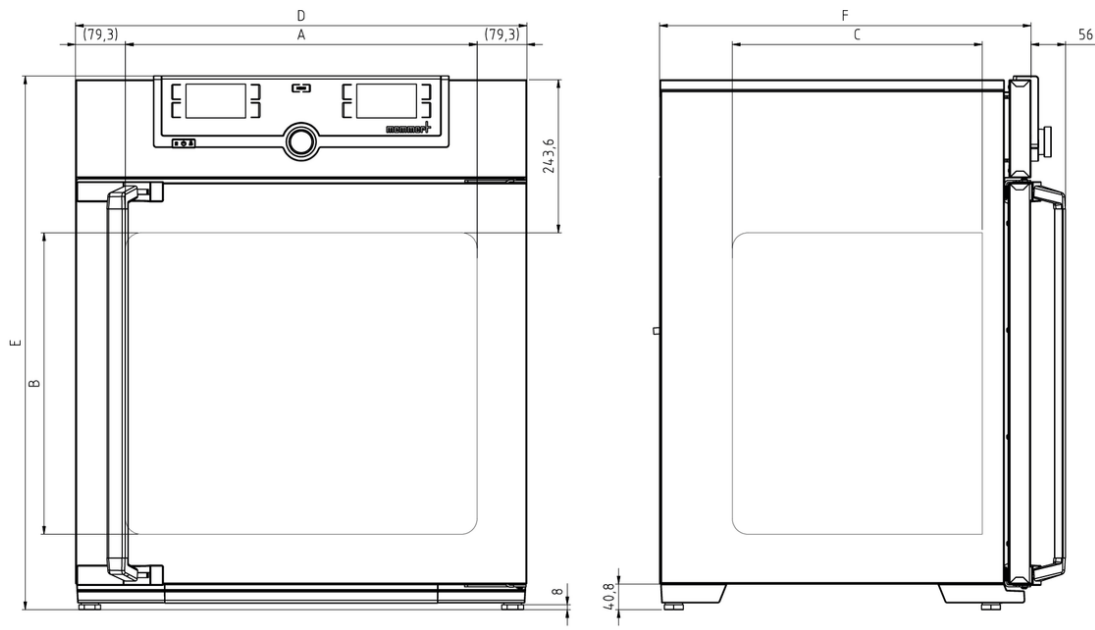


CO₂ Incubator ICO50

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

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|---|---|
| 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

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|---|--|
| 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

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|----------------------|--|
| 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

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|------------------------------|--|
| 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

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| 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

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|--------------------------------------|---|
| 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) x h _(E) x d _(F) : 22 x 31.3 x 20.5 inches (d +2.2" door handle) |
| Housing | rear zinc-plated steel |

Electrical data

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|------------------------|------------------------|
| Voltage | 230 V (±10%), 50/60 Hz |
| Electrical load | approx. 1100 W / 4.8 A |

| | |
|------------------------|------------------------|
| Voltage | 115 V (±10%), 50/60 Hz |
| Electrical load | approx. 1100 W / 9.6 A |

Ambient conditions

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| 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 |
|----------------------------|----------------|

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|--------------------|---------------------------|
| Humidity rh | max. 70 %, non-condensing |
|--------------------|---------------------------|

| | |
|---------------------------------|------------------------------|
| Altitude of installation | max. 2,000 m above sea level |
|---------------------------------|------------------------------|

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|-----------------------------|----|
| Overvoltage category | II |
|-----------------------------|----|

| | |
|-------------------------|---|
| Pollution degree | 2 |
|-------------------------|---|

Packing/shipping data

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| Transport information | The appliances must be transported upright |
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|------------------------------|-----------|
| Customs tariff number | 8419 8998 |
|------------------------------|-----------|

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|--------------------------|-----------------------------|
| Country of origin | Federal Republic of Germany |
|--------------------------|-----------------------------|

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|----------------------|-------------|
| WEEE-Reg.-No. | DE 66812464 |
|----------------------|-------------|

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

