# CO<sub>2</sub> Incubator

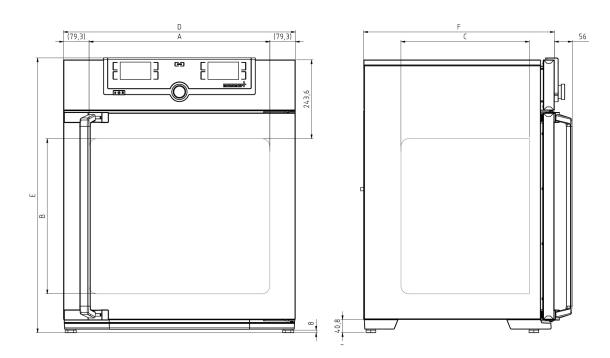
Safety at all times: High-end functions for the protection of cell cultures, bacteria cultures or tissue cultures.



**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<br>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<br>humidity control (with<br>option K7) | 40 to 97 % rh and rh-Off  |

## **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<br>via Ethernet interface or USB port |

## Safety

| AutoSAFETY            | additionally integrated over- and undertemperature protection "ASF", automatically following the<br>setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating<br>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           |   |
|------------------------------|---|
| 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)   |
| 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                    | 156 l   |
| Dimensions                | w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 560 x 700 x 400 mm |
| Max. number of internals  | 10  |
| Max. loading of chamber   | 120 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> : 719 x 1070 x 591 mm |
|------------|--|
| Housing    | rear zinc-plated steel   |

#### **Electrical data**

| Voltage<br>Electrical load | 230 V, 50/60 Hz<br>approx. 2000 W |  |
|----------------------------|-----------------------------------|--|
| Voltage                    | 115 V, 50/60 Hz                   |  |
| Electrical load            | 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     | Π   |
| 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.<br>carton | w x h x d: 800 x 1250 x 800 mm             |
| Net weight                        | approx. 90 kg                              |
| Gross weight carton               | approx. 116 kg                             |

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

