



CO₂ Incubator ICOMed with TwinDISPLAY
Software AtmoCONTROL

Model sizes: 50 / 105 / 150 / 240

+18 °C to +50 °C

Humidity 40 to 97 % rh

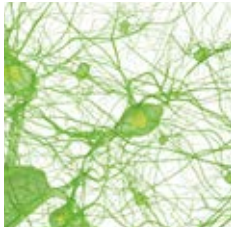
CO₂ concentration 0 to 20 %

O₂ concentration 1 to 20 %

CO₂ INCUBATOR ICOMed Safety at all times. When it comes to safety and user friendliness, the highly modern CO₂ incubator ICOMed is the perfect solution: Thanks to the battery-buffered ControlCOCKPIT, the operating display, logging and CO₂ control remain fully functional even when there is a power failure. All parameters are logged in accordance with the FDA and, when individually adjusted ranges for CO₂, O₂, temperature and humidity are exceeded, notifications can be sent to a mobile phone in addition to an alarm.

The control technology is so finely tuned that the setpoint temperature is guaranteed to be reached without temperature overshoots. With its rounded corners, the interior is easy to clean and can be sterilised for 60 minutes at 180 °C (including all sensors).

All ICOMed models are classified as medical product class IIa.



Comfort options for every application

These are only a few of the numerous features that don't let anything open to be desired:

- Two gas connections with quick release connectors for automatic switch-over of gas cylinders
- Electropolished working chamber
- Electronic control for active humidification and dehumidification (40 to 97 % rh)
- Control of oxygen concentration by introducing nitrogen, adjustment range from 1 % to 20 % O₂

Unrivalled user friendliness

All parameters can be set easily and intuitively both with the ControlCOCKPIT or the AtmoCONTROL software. The shutter box can be opened, allowing fast access to controls. Maintenance is possible even if the appliances are stacked. The appliance has USB and Ethernet connections as well as a data logger with a ten-year storage capacity. Data can be read and programmes can be transferred by remote access.

Minimising vaporisation and condensation

The active humidity control minimises vaporisation in the interior and ensures short recovery times after the door has been opened. Together with the heating of the interior from all six sides including the heated inner glass door, it prevents the dangerous formation of condensation and offers maximum protection for cell and tissue cultures. The turbulence-free chamber ventilation ensures a constant and uniform atmosphere.

+ CO₂ Incubator ICOfed is a medical device:

Memmert subjected its CO₂ incubator ICOfed to a comprehensive medical device evaluation. Every Memmert CO₂ incubator ICOfed is classified as a Class IIa medical device. The ICOfed is intended for the creation and maintenance of constant environmental conditions for application in the field of in vitro fertilisation (IVF), especially for the incubation of oocytes, spermatozoa and zygotes in special culture dishes for IVF application as well as for gene expression and the biosynthesis of RNA and proteins. The CE label on the appliances includes the mark 0197, denoting TRLP – TÜV Rheinland as the notified body.



CO₂ INCUBATORS ICOMed

with standard sterilisation programme

(Humidity and CO₂ sensor sterilised inside the CO₂ incubator)

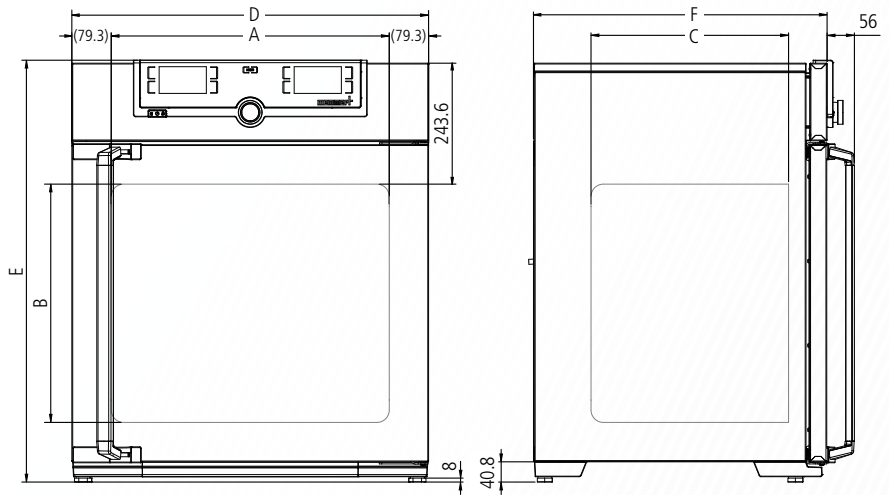
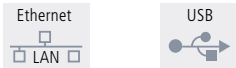
Standard units are safety-approved and bear the test marks:



according to 12880:2007-05, EN 61010-1 (IEC 61010-1), 61010-2-010

Standard equipment

- Interior: Stainless steel, material 1.4301 (ASTM 304), deep-drawn, seamlessly welded
- Internals: Perforated stainless steel shelves size 50: 1, sizes 105 – 240: 2; and 1 stainless steel water dish (all sizes)
- Housing: Textured stainless steel, rear zinc-plated steel, intuitively operated TwinDISPLAY (TFT colour display) with touchscreen; fully insulated stainless steel door and heated inner glass door
- Connection: Mains cable with plug (German type)
- Installation: 4 adjustable feet
- Interfaces:



| Model sizes/Description | | | 50 | 105 | 150 | 240 |
|---------------------------------|--|-------------------|---------------------------------------|--------------------------|--------------------------|--------------------------|
| Stainless steel interior | Volume | approx. l | 56 | 107 | 156 | 241 |
| | Width | (A) mm | 400 | 560 | 560 | 600 |
| | Height | (B) mm | 425 | 480 | 700 | 810 |
| | Depth (less 35 mm for fan) | (C) mm | 330 | 400 | 400 | 500 |
| | Stainless steel shelves, perforated (standard equipment) | number | 1 | 2 | 2 | 2 |
| | Max. number of perforated shelves | number | 5 | 6 | 10 | 12 |
| | Max. loading per perforated shelf | kg | 15 | | | |
| | Max. loading of chamber | kg | 75 | 90 | 120 | 140 |
| Stainless steel exterior | Width | (D) mm | 559 | 719 | 719 | 759 |
| | Height (variable through adjustable feet) | (E) mm | 791 | 846 | 1066 | 1176 |
| | Depth (without door handle, depth of door handle 56 mm) | (F) mm | 521 | 591 | 591 | 691 |
| | Fully insulated stainless steel door | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Additional heated inner glass door | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Further data | Electrical load at 230/115 V, 50/60 Hz | approx. W | 1000 | 1500 | 2000 | 2000 |
| | Working-temperature range | °C | 5 above ambient temperature up to +50 | | | |
| | Standard sterilisation programme: 60 minutes at 180 °C (without removing the sensors) | °C | +18 to +50 | | | |
| | Setting temperature range | °C | 0.1 | | | |
| | Setting accuracy | °C | +/- 0.1 | | | |
| | Temperature fluctuations with time at 37 °C (to DIN 12880:2007-05) | K | +/- 0.3 | | | |
| | 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 % | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Setting range active humidity control (with option K7) | % rh | 40 to 97 and rh-Off | | | |
| | Setting accuracy humidity | % rh | 0.5 | | | |
| | Digital electronic CO ₂ control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Adjustment range CO ₂ | % CO ₂ | 0 to 20 | | | |
| | Variation in time CO ₂ | % CO ₂ | +/- 0.2 | | | |
| | Setting accuracy CO ₂ | % CO ₂ | 0.1 | | | |
| | Adjustment range O ₂ | % O ₂ | 1 to 20 | | | |
| Setting accuracy O ₂ | % O ₂ | 0.1 | | | | |
| Standard accessories | Stainless steel water dish | | 1 | 1 | 1 | 1 |
| | Works calibration certificate (measuring point chamber centre) at +37 °C, 5 % CO ₂ for standard units | | | <input type="checkbox"/> | | |
| | Works calibration certificate at 37 °C, 5 % CO ₂ and 90 % rh (requires option K7); standard equipment for units with active humidity control | | | <input type="checkbox"/> | | |
| | Works calibration certificate at 37 °C, 5 % CO ₂ , 90 % rh and 10 % O ₂ (requires option K7 and option T6); standard equipment for units with O ₂ control | | | <input type="checkbox"/> | | |

| Model sizes/Description | | | 50 | 105 | 150 | 240 |
|--|---------------------------------|------------|-----------------|------------------|------------------|------------------|
| Packing data | Net weight | approx. kg | 55 | 75 | 90 | 110 |
| | Gross weight (packed in carton) | approx. kg | 74 | 100 | 116 | 145 |
| | Width | approx. cm | 73 | 80 | 80 | 84 |
| | Height | approx. cm | 95 | 103 | 125 | 136 |
| | Depth | approx. cm | 64 | 80 | 80 | 90 |
| Order No. CO₂ Incubators | | | ICO50med | ICO105med | ICO150med | ICO240med |

| Options | 50 | 105 | 150 | 240 |
|---|----|-----|----------------------|-----|
| Voltage 115 V, 50/60 Hz | | | X2 | |
| Battery-buffered ControlCOCKPIT Uninterrupted supply for the entire display unit (ControlCOCKPIT) and therefore complete documentation of all parameters even when there is a power failure. The CO ₂ parameter is continuously regulated | | | C2 | |
| Two gas connections with quick release connectors for automatic switch-over of gas cylinders | | | T1 | |
| Electropolished interior | | | T2 | |
| Active microprocessor control for humidifying and dehumidifying (40 – 97 % rh), incl. digital indication and auto-diagnostic system ensures even more rapid reaching of set humidity and very short recovery times while avoiding condensate formation. Humidity supply with distilled water (from an external tank) by a self-priming pump; integral bacteria block by generating hotsteam, dehumidifying via sterile filter | | | K7 | |
| Control of oxygen concentration by N ₂ inlet; adjustment range 1 % up to 20 % O ₂ ; setting accuracy 0.1 %. (requires option K7) | | | T6 | |
| Peltier cooling unit enables a working temperature of 37 °C even at higher ambient temperatures of up to 35 °C | | | K5 | |
| Capacitive humidity sensor for measuring and displaying the relative humidity | | | K6 | |
| Entry port (silicone), 40 mm clear diameter, for introducing connections, moisture tight, can be closed by silicone stopper, at the back, centre right; not available for ICO50med with active humidity control (option K7) or humidity display (option K6) | | | F7 | |
| Inner door with partitioned glass doors | – | | K4 | |
| 4 – 20 mA current loop interface | | | V3 V7 V9 V1 | |
| Temperature controller, actual value (0 to +70 °C ± 4 to 20 mA) | | | V3 | |
| Humidity controller, actual value (0 – 100 % rh ± 4 – 20 mA) | | | V7 | |
| CO ₂ controller, actual value (0 – 25 % CO ₂ ± 4 – 20 mA) | | | V9 | |
| O ₂ controller, actual value (0 – 25 % O ₂ ± 4 – 20 mA) | | | V1 | |
| Works calibration certificate for 5 %, 7 % and 10 % CO ₂ (measured at +37 °C) special works calibration certificates upon request | | | D00106 | |
| Start-up of ICOmed incubators and brief training (D, A, CH only), through Memmert service | | | K9 | |

| Accessories | 50 | 105 | 150 | 240 |
|--|--------|-----|--------|--------|
| Additional perforated stainless steel shelf | E35160 | | E37418 | E35158 |
| Additional water dish | B38737 | | B38000 | |
| Subframe (622 mm high) adjustable in height (sizes 150/240: should not be used for 2 stacked units) | B33504 | | B33505 | B33506 |
| Subframe (130 mm high); sizes 150/240: should not be used for 2 stacked units | B33507 | | B33508 | B33509 |
| HEPA-filter for chamber (filter class E11) according to EN 1822, packed in sterile condition, incl. fixing unit | | | B38739 | |
| CO ₂ pressure reducing valve to DIN 8546, incl. gas cylinder monitor | | | E02087 | |
| N ₂ pressure reducing valve to DIN EN ISO 2503, incl. gas cylinder monitor (requires option T6) | | | E06162 | |
| CO ₂ connection set, hose with coupling and clamp | | | B03881 | |
| Central water supply, with filter cartridges for connection to the domestic water supply, only in combination with option K7. Product information on demand | | | ZWVR6 | |
| Central water supply, without filter cartridges for connection to the domestic water supply (only for demineralised water in accordance with VDE 0510/DIN EN 50272), only in combination with option K7. Product information on demand | | | ZWVR7 | |
| Guarantee extension by 1 year | | | GA3Q5 | |
| Celltron benchtop shaker (accessories upon request) | – | | E06724 | |

SOFTWARE AtmoCONTROL

AtmoCONTROL – The innovative control and logging software

Parameters such as temperature and humidity as well as the process time can be set directly at the ControlCOCKPIT.

Ramp programming is done via the control and logging software AtmoCONTROL, which features a completely new software design.

Drag, drop & go!

Numerical and graphic programming of complex processes is a thing of the past. Today, programming is done via AtmoCONTROL by means of the mouse or touchpad on your notebook. Even the most complex ramp programmes are created within minutes. Simply drag & drop the graphical symbols for the desired parameters to the input field and change the values according to your wishes with a mouse click.



Programme functions

SingleDISPLAY and TwinDISPLAY

- Reading out, managing and organising the data logger
- Saving the log memory in various formats
- Online monitoring of up to 32 connected appliances
- Optical alarms when the alarm limits individually set at the ControlCOCKPIT are exceeded
- Automatic alarm to one or several e-mail addresses

Additional functions

TwinDISPLAY

- Intuitive programming and archiving of ramps and programme sequences
- Synchronous visualisation of the created programme sequence during programming
- Application-specific repeat functions (loops) can be inserted within a temperature control programme in any place
- Simple creation of repeating weekly programmes
- Programming, managing and transferring programmes via Ethernet interface or USB port

SPECIAL EQUIPMENT FOR MODELS U, UF TS, UNpa, S, I, ICP, IPP, IPS, HPP, ICH

ICOmed

| Options for models U, UF TS, UNpa, S, I, ICP, IPP, IPS, HPP, ICH | 30 | 55 | 75 | 110 | 160 | 260 | 400 | 450 | 750 | 1060 | 1400 | 50 / 105 / 150 / 240 | |
|--|----|----|----|-----|-----|-----|--------------------------|-----|-----|------|------|----------------------|----|
| Door with lock (safety lock); for models UF TS per side; standard with SN/SF and SNplus/SFplus 450 and 750 (not for models ICOmed) | | | | | | B6 | | | | | | – | |
| Door hinged on the left; for models UF TS per side | | | | B8 | | | | | – | | | B8 | |
| Potential-free contact (24 V/2 A) with socket to NAMUR NE 28 for external monitoring (indicates when setpoint is reached); models ICOmed: when set points of temperature and CO ₂ are reached | | | | | | | | H5 | | | | | |
| Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse) | | | | | | | | H6 | | | | | |
| Potential-free contact (24 V/2 A) with socket to NAMUR NE 28, for signal generation, controlled by programme segment, for free-selectable functions to be activated (e.g. activation of audible and visual signals, exhaust motors, fans, stirrers, etc.). Only for units with TwinDISPLAY; max. 2 contacts on 1-phase appliances; max. 4 contacts on 3-phase appliances (not for models ICOmed) | | | | | | | 2 contacts 4 contacts | | | H72 | H74 | | – |
| Process-dependent door lock (only for units with TwinDISPLAY); for models UF TS see page 11 of oven brochure; not for models ICOmed | | | | | | D4 | | | | | | | – |
| Door-open-recognition, incl. alarm, shuts down fan and after 30 sec. also heating (only for units with TwinDISPLAY); for models UF TS per side; standard with ICOmed, ICH C, ICH L | | | | | | V5 | | | | | | | – |
| Flexible Pt100 for positioning in chamber or in load with socket, 4-pin, according to NAMUR NE 28, for external temperature recording (load temperature) max. 3 sensors; not for models ICOmed | | | | | | | | H4 | | | | | – |
| Flexible Pt100 temperature sensor, positioned flexibly in chamber or load, for local temperature measurement (up to 3 additional sensors are possible). The measured temperature can, if required, be indicated on the display, recorded in the integral data store, and can be documented via the AtmoCONTROL software. Not for models ICOmed | | | | | | | | H8 | | | | | – |
| MobileALERT, notification by SMS in case of any error or alarm of the device. Requires option H6 "floating contact for alarm" | | | | | | | | | | C3 | | | |
| MobileALERT for up to 4 alarm notifications; standard: temperature and CO ₂ alarm, additionally humidity alarm (when equipped with option K7) and O ₂ alarm (when equipped with option T6) | | | | | | | | | | | | | C4 |
| Temperature restriction (for UN/UF/UNplus/UFplus/UNm/UFm/UNmplus/UFmplus and models UF TS); Temperatures: +60, +70, +80, +95, +100, +120, +160, +180, +200, +220 or +250 °C (Please, indicate upon ordering) | | | | A8 | | | – | | A8 | | | | – |
| Castor frame (2-part), height 140 mm (not for models UF TS, ICP, ICH, ICH L, ICH C, ICOmed) | | | | | R9 | | | | | | | – | |

| SPECIAL EQUIPMENT FOR MODELS U, UF TS, UNpa, S, I, ICP, IPP, IPS, HPP, ICH | | | | | | | | | | | | | ICOMed | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|----------------------|--------|------------------------------|---|
| Accessories for models U, UF TS, UNpa, S, I, ICP, IPP, IPS, HPP, ICH | 30 | 55 | 75 | 110 | 160 | 260 | 400 | 450 | 750 | 1060 | 1400 | 50 / 105 / 150 / 240 | | | |
| USB-Ethernet adapter | | | | | | | | | | | | | E06192 | | |
| Ethernet connection cable 5 m for computer interface | | | | | | | | | | | | | E06189 | | |
| USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number (only for units with TwinDISPLAY) | | | | | | | | | | | | | B33170 | | |
| USB stick with documentation software AtmoCONTROL and operation manual for products with SingleDISPLAY (the standard equipment of appliances with TwinDISPLAY includes one USB stick with AtmoCONTROL) | | | | | | | | | | | | | B33171 | | |
| Set of height adjustable feet (4 pcs) not available for ICP, ICH, ICH L, ICH C – standard on models ICOMed | | | | B29768 | | | | | | | | | – | | |
| Stacking set (4 pcs) for stacking of appliances of same size (not for models 160, 260, 450, 750, 1060, 1400, ICH110, ICH110L, ICH110C, ICP55, ICP110) | | B29744 | | | | | | | | | | | B29744 | – | |
| Stacking set (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking two units ICO150med or ICO240med | | | | | | | | | | | | | | B42114 (150) B42115 (240) | |
| Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), straight, for exhaust air ducting (if necessary for connection by hose), only models U, I, S not for models UF TS | | | | | | | | | | | | | | B29718 | |
| Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), angled, for exhaust air ducting (if necessary for connection by hose), only models U, I, S not for models UF TS | | | | | | | | | | | | | | B29719 | |
| Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots | B29728 | B29730 | B29732 | B29734 | B29736 | B29738 | B42116 | B29740 | B29742 | B42118 | | | | – | |
| Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots for models UF TS see page 11 of oven brochure; not for models ICOMed | B29729 | B29731 | B29733 | B29735 | B29737 | B29739 | B42117 | B29741 | B29743 | B42119 | | | | – | |
| Subframe, adjustable in height (size 30 to 75: height 600 mm, size 110 to 450: height 500 mm); not for models ICOMed, UF TS and HPP400 | B29745 | B29747 | | B29749 | | B29751 | – | B29753 | | | | | | – | |
| Subframe, on castors (size 30 to 75: height 660 mm, size 110 to 160: height 560 mm); not for models ICOMed and UF TS | B29746 | B29748 | | B29750 | | | | | | | | | | – | |
| Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter; not for models ICOMed and UF TS | B33657 | B33659 | | B33661 | | B33664 | | | | | | | | – | |
| Software conforming to FDA AtmoCONTROL. Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit (only for units with TwinDISPLAY) | | | | | | | | | | | | | | FDAQ1 | |
| Integration of additional units (up to max. 15 units) into an already existent FDA-software licence (only for units with TwinDISPLAY) | | | | | | | | | | | | | | FDAQ2 | |
| IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer | | | | | | | | | | | | | | D00124 | |
| IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 9 measuring points (size 30), 27 measuring points (sizes 55 – 1060) to DIN 12880:2007-05, PQ check list as support for validation by customer. Further temperature values and validation at customer site on demand | D00125 | | | | | | D00127 | | | | | | | – | |
| IQ/OQ document with device-specific works test data for one free-selectable temperature and humidity value, incl. temperature distribution survey at Memmert for 27 measuring points (26 measuring points on model HPP1400) to DIN 12880:2007-05, PQ check list as support for validation by customer (models HPP and ICH). Validation at customer site on demand | | | – | D00136 | | – | D00136 | | – | D00136 | | – | D00136 | | – |
| IQ/OQ document with device-specific works test data for one free-selectable temperature, humidity and light value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05, PQ check list as support for validation by customer (models HPP with light and ICH L). Validation at customer site on demand | | | – | D00137 | | – | D00137 | | – | D00137 | | | | – | |
| IQ/OQ document with device-specific works test data for one free-selectable CO ₂ , humidity and temp. value, incl. temp. distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05, PQ check list as support for validation by customer (models ICH C and ICOMed, on models ICOMed a free-selectable humidity value is only possible with option K7). Validation at customer site on demand | | | – | D38897 | | – | D38897 | | – | D38897 | | – | D38897 | | |
| IQ/OQ document with device-specific works test data for one free-selectable CO ₂ and temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05, PQ check list as support for validation by customer (model ICOMed). Validation at customer site on demand | | | | | | | | | | | | | | D38898 | |
| External measuring instrument with sensors for daylight and UV-light. Product information on demand (models HPP, ICH L, IPPplus) | | | | | B04713 | | | | | | – | B04713 | | – | |
| Ditto with additional measuring head for temperature and humidity measurement. Product information on demand (models HPP, ICH L, IPPplus) | | | | | B04714 | | | | | | – | B04714 | | – | |

Not all options/accessories are combinable with each other. Please contact us for individual combination requests.

MODEL VARIANTS

| SingleDISPLAY ControlCOCKPIT with one TFT display | TwinDISPLAY ControlCOCKPIT with two TFT displays |
|---|---|
| <p>AVAILABLE APPLIANCES</p> <p>UN/UNm / UF/UFm / IN/INm / IF/IFm / SN / SF / IPP / IPS</p> | <p>AVAILABLE APPLIANCES</p> <p>UNplus/UNmplus / UFplus/UFmplus / UF TS / UNpa INplus/INmplus / IFplus/IFmplus / SNplus / SFplus IComed / IPPplus / ICP / HPP / ICH</p> |
| <p>One high-resolution TFT colour display with touch-sensitive buttons for selection of functions</p> | <p>Two high-resolution TFT colour displays with touch-sensitive buttons for selection of functions</p> |
| <p>Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time</p> | <p>Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time, relative humidity, illumination, CO₂</p> |
| <p>One temperature sensor Pt100 DIN class A in a 4-wire circuit</p> | <p>Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error</p> |
| | <p>HeatBALANCE function for application specific adjustment of heat output distribution (balance) between the upper and lower heating groups in an adjustment range between -50 % and +50 % (not valid for models 30, HPP110, IPP110plus, ICP, ICH)</p> |
| <p>AtmoCONTROL software for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand)</p> | <p>AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port</p> |
| | <p>ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function</p> |
| | <p>Displaying of already logged protocol data on the ControlCOCKPIT (max 10,000 values correspond to approx. 1 week)</p> |
| <p>Ethernet interface on the rear of the appliance for reading out the protocol log and for online logging</p> | <p>Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging</p> |
| <p>Double overtemperature protection: Electronic temperature monitoring with freely adjustable monitoring temperature, for models U, I, S with option A6 TWW/TWB (protection class 3.1 or 2), mechanical temperature limiter TB acc. to DIN 12880</p> | <p>Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.1 or 2 resp. 3.3 for units with active cooling) and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN / MAX values for over/undertemperature alarm and also for all other parameters such as relative humidity, CO₂</p> |
| <p>PID microprocessor control with integrated auto-diagnostic system</p> | |
| <p>Structured stainless steel housing, scratch-resistant, robust and durable; rear of zinc-plated steel</p> | |
| <p>High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards</p> | |
| <p>Internal data logger with a storage capacity of at least 10 years</p> | |
| <p>German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT</p> | |
| <p>Digital backwards counter with target time setting, adjustable from 1 minute to 99 days</p> | |
| <p>The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points – optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber</p> | |
| <p>Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT</p> | |