



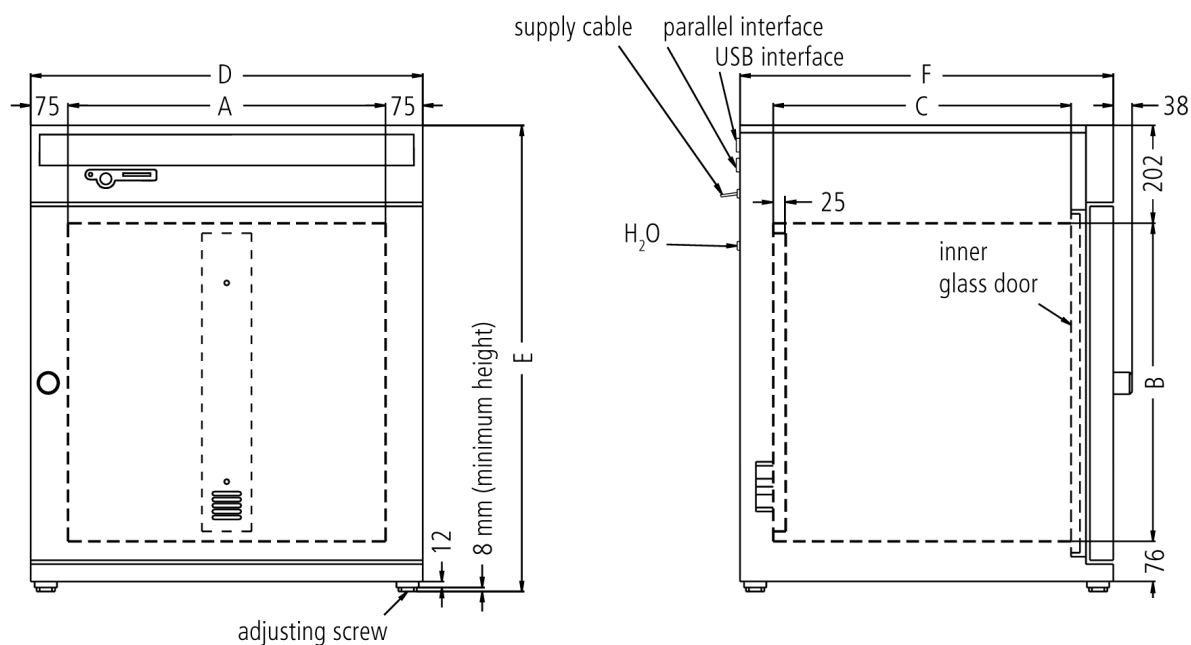
## Humidity chamber

### HCP246

High-precision control technology creates controlled and physiologically ideal surroundings for the perfect environment simulation in building physics, electronics, biology, zoology and botany.



On this page, you can find all the essential technical data on the Memmert humidity chamber HCP. 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](mailto:myAtmoSAFE@memmert.com).



## Temperature

|                                  |                                                                                                                              |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Working temperature range</b> | with humidity min. 8°C above ambient up to +90°C                                                                             |
| <b>Working temperature range</b> | without humidity min. 8°C above ambient up to +160°C                                                                         |
| <b>Temperature</b>               | 2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value |
| <b>Display</b>                   | resolution of display for setpoint values 0.1°C up to 99.9°C, 0.5°C from 100°C and for actual values 0.1°C (LED)             |

## Humidity

|                       |                                                                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Humidity</b>       | active humidifying and de-humidifying control (20-95 %) with digital display of relative humidity - resolution of display 0.5 %, setting accuracy 1 % |
| <b>Humidity</b>       | humidity supply with distilled water from external tank by self-priming pump                                                                          |
| <b>Humidification</b> | humidification by hot steam generator                                                                                                                 |

## Control technology

|                    |                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Display</b>     | digital display of all set parameters, such a temperature, weekdays, time, CO2, humidity and set-up values - language to be chosen via set-up |
| <b>Controller</b>  | Electronic microprocessor temperature controller with auto-diagnostic system                                                                  |
| <b>Timer</b>       | integrated timer for tempering profiles of up to 40 ramps each, each segment adjustable from 1 min. to 999 hrs.                               |
| <b>Calibration</b> | three freely selectable temperature values                                                                                                    |

## Communication

|                          |                                                                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Interface USB</b>     | USB-interface incl. Memmert software "Celsius" for programming and documentation                                                                |
| <b>Interface Printer</b> | parallel printer interface (incl. real time clock with date function) for all PCL3-compatible ink jet printers for GLP-conforming documentation |
| <b>Documentation</b>     | integrated ring memory as data logger for GLP-conforming long-term documentation of all relevant parameters - 1024 kB                           |
| <b>Documentation</b>     | programme stored in case of power failure                                                                                                       |
| <b>Programming</b>       | chip-card control incl. 1 MEMoryCard XL with 32 kB storage capacity (max. 40 ramps)                                                             |

## Safety

|                              |                                                                                                                                                                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Temperature control</b>   | mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature                                                                                            |
| <b>Temperature control</b>   | overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection class 2, selectable on display                                                                                                       |
| <b>AutoSAFETY</b>            | additionally integrated over- and undertemperature monitor "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of overtemperature |
| <b>Autodiagnostic system</b> | integral fault diagnostics for temperature and humidity control                                                                                                                                                                          |
| <b>Alarm</b>                 | with visual and acoustic alarm in case of over-/under temperature and underhumidity, open door and empty water tank                                                                                                                      |

## Heating concept

|                    |                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>6 sides</b>     | large-area multi-function heating system on four sides with additional door and back heating to avoid condensation    |
| <b>Ventilation</b> | uniform atmosphere and temperature distribution owing to enclosed non-turbulent ventilation system in working chamber |

## Standard equipment

|                                      |                                                                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>STERICard</b>                     | 2nd chip-card (STERICard) for sterilisation of working chamber with fixed values (4 hours/160°C) without removal of sensors |
| <b>Works calibration certificate</b> | standard value at +60°C                                                                                                     |
| <b>Door</b>                          | fully insulated stainless steel door with 2-point locking (compression door lock), lockable                                 |
| <b>Door</b>                          | inner glass door                                                                                                            |
| <b>Internals</b>                     | 2 perforated stainless steel shelves                                                                                        |

## Stainless steel interior

|                                     |                                                                                                                                    |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Interior</b>                     | easy-to-clean interior, made of stainless steel, reinforced by deep drawn ribbing, material 1.4301 (ASTM 304), hermetically welded |
| <b>Volume</b>                       | 246 l                                                                                                                              |
| <b>Dimensions W x H x D in mm</b>   | $w_{(A)} \times h_{(B)} \times d_{(C)}$ : 640 x 640 x 600 mm                                                                       |
| <b>Max. number of grids/shelves</b> | 7                                                                                                                                  |
| <b>Max. loading per grid/shelf</b>  | 0 kg                                                                                                                               |

## Textured stainless steel casing

|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| <b>Dimensions</b> | $w_{(D)} \times h_{(E)} \times d_{(F)}$ : 790 x 938 x 750 mm |
| <b>Housing</b>    | rear zinc-plated steel                                       |

## Electrical data

|                        |                 |
|------------------------|-----------------|
| <b>Voltage</b>         | 230 V, 50/60 Hz |
| <b>Electrical load</b> | approx. 2000 W  |

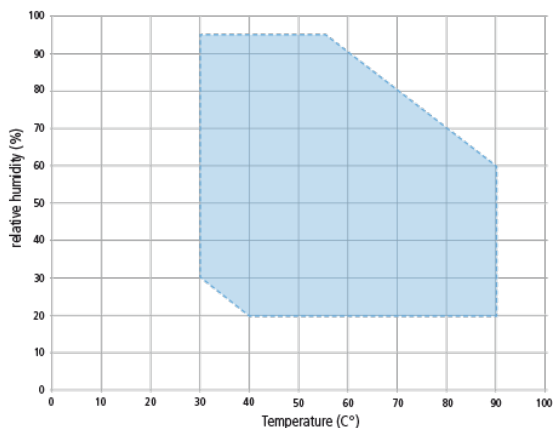
## Packing/shipping data

the appliances must be transported upright

|                                       |                                |
|---------------------------------------|--------------------------------|
| <b>Customs tariff number</b>          | 8419 8998                      |
| <b>Country of origin</b>              | Federal Republic of Germany    |
| <b>WEEE-Reg.-No.</b>                  | DE 66812464                    |
| <b>Dimensions approx incl. carton</b> | B x H x T: 930 x 1140 x 930 mm |
| <b>Net weight</b>                     | approx. 110 kg                 |
| <b>Gross weight carton</b>            | approx. 132 kg                 |

## Temperature-humidity working range HCP

Not all climate chambers are the same. The humidity content of the chamber load, the ambient conditions and the respective temperature-humidity working range are decisive factors in the selection of the right appliance. In the adjacent diagram, you can see the possible temperature/humidity combinations for our humidity chambers HCP.



Temperature-humidity working range HCP

Standard units are safety-approved and bear the test marks

