

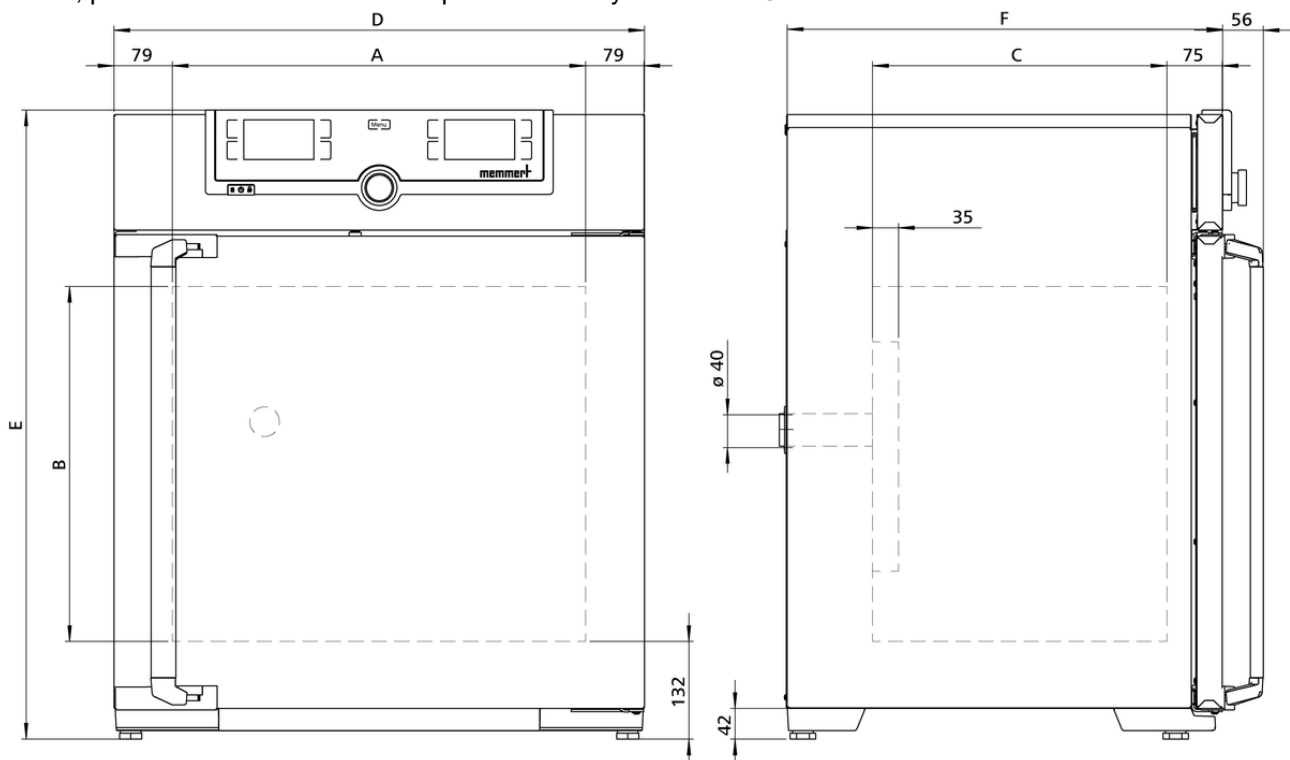
## Humidity chamber

### HCP105

Active humidity control creates a controlled environment for accelerated life tests and 85/85 tests.



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>    | +7 above ambient temperature up to +90 °C  |
| <b>Setting temperature range</b>    | +18 to +90 °C  |
| <b>Setting accuracy temperature</b> | 0.1 °C   |
| <b>Temperature sensor</b>           | 2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error |

## Humidity

### Humidity Control

|  |                          |
|--|--------------------------|
| <b>Setting range active humidity control</b> | 20 to 95 % rh and rh-Off |
| <b>Setting accuracy humidity</b>             | 0.5 % rh                 |

## Control technology

|                              |   |
|------------------------------|---|
| <b>ControlCOCKPIT</b>        | TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays. |
| <b>Language setting</b>      | German, English, Spanish, French, Polish, Czech, Hungarian  |
| <b>adjustable parameters</b> | temperature (Celsius or Fahrenheit), relative humidity, programme time, time zones, summertime/wintertime               |
| <b>Timer</b>                 | Digital backwards counter with target time setting, adjustable from 1 minute to 99 days                                 |
| <b>Function SetpointWAIT</b> | the process time does not start until the set temperature is reached  |
| <b>Calibration</b>           | three freely selectable values each, temperature and humidity   |

## Communication

|                      |  |
|----------------------|--|
| <b>Interface</b>     | Ethernet LAN, USB  |
| <b>Documentation</b> | programme stored in case of power failure  |
| <b>Programming</b>   | AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port |

## Safety

|                              |  |
|------------------------------|--|
| <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>                 | visual and acoustic  |

## Heating concept

|                |  |
|----------------|--|
| <b>6 sides</b> | large-area multi-function heating system on four sides with additional door and back heating to avoid condensation |
|----------------|--|

## Standard equipment

|                                      |   |
|--------------------------------------|---|
| <b>Works calibration certificate</b> | Works calibration certificate (measuring point chamber centre) at 60 °C with 75 % rh  |
| <b>Entry port</b>                    | Entry port (silicone), 40 mm clear diameter, for introducing connections, moisture tight, can be closed by silicone stopper, at the back, centre left |
| <b>Door</b>                          | Additional heated inner glass door  |
| <b>Door</b>                          | fully insulated stainless steel door with 2-point locking (compression door lock)   |
| <b>Internals</b>                     | 2 perforated stainless steel shelf/shelves  |

## Stainless steel interior

|                                  |   |
|----------------------------------|---|
| <b>Dimensions</b>                | $w_{(A)} \times h_{(B)} \times d_{(C)}$ : 560 x 480 x 400 mm (d less 35 mm for fan) |
| <b>Interior</b>                  | W.-St. 1.4301 (ASTM 304)  |
| <b>Volume</b>                    | 107 l   |
| <b>Max. number of internals</b>  | 6   |
| <b>Max. loading of chamber</b>   | 90 kg   |
| <b>Max. loading per internal</b> | 15 kg   |

## Textured stainless steel casing

|                   |  |
|-------------------|--|
| <b>Dimensions</b> | $w_{(D)} \times h_{(E)} \times d_{(F)}$ : 719 x 850 x 591 mm (d +56mm door handle) |
|-------------------|--|

## Electrical data

|                        |                 |
|------------------------|-----------------|
| <b>Voltage</b>         | 230 V, 50/60 Hz |
| <b>Electrical load</b> | approx. 1720 W  |
| <b>Voltage</b>         | 115 V, 50/60 Hz |
| <b>Electrical load</b> | approx. 1720 W  |

## Ambient conditions

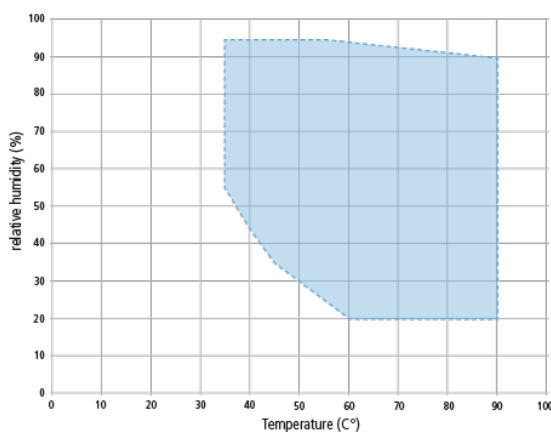
|                                 |   |
|---------------------------------|---|
| <b>Ambient temperature</b>      | 10 °C to 30 °C  |
| <b>Set Up</b>                   | The distance between the wall and the rear of the appliance must be at least 15 cm. The clearance from the ceiling must not be less than 20 cm and the side clearance from walls or nearby appliances must not be less than 5 cm. |
| <b>Humidity rh</b>              | max. 70 %, non-condensing   |
| <b>Altitude of installation</b> | max. 2,000 m above sea level  |
| <b>Overvoltage category</b>     | II  |
| <b>Pollution degree</b>         | 2   |

## Packing/shipping data

|                                       |  |
|---------------------------------------|--|
| <b>Transport information</b>          | 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> | w x h x d: 800 x 1030 x 800 mm             |
| <b>Net weight</b>                     | approx. 75 kg                              |
| <b>Gross weight carton</b>            | approx. 100 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. Within the respective temperature-humidity range, permanent operation is possible (at an ambient temperature of  $22\text{ °C} \pm 3\text{ K}$ , relative humidity  $< 50\%$ ). Condensation may occur in the threshold range. To which extent depends on the humidity content of the chamber load and the ambient conditions.



Temperature-humidity working range HCP

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

