

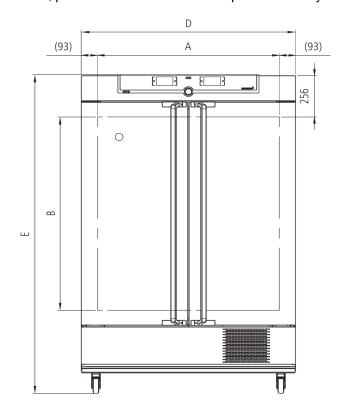
# Climate chamber

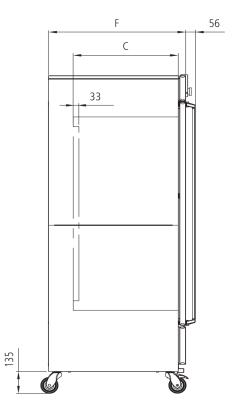
# **ICH750**

Unparalleled homogeneity of temperature and humidity! For stability testing according to ICH - WHO - EMA - ASEAN - GMP - GLP – GCCP.



On this page, you can find all the essential technical data on the Memmert climate chamber ICH. 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.





| Working temperature range from -10°C up to +60°C without humidity(not suitable for long-term storing at sub-zero temperatures. During permanent operation, the glass door may ioo over)  Working temperature range Setting accuracy temperature  2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error  Humidity Humidity Humidity Humidity Humidity Humidity Audification Humidity Humidity Active humiditying and de-humiditying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology ControlCOCKPIT TwinDISPLAY, Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting German, English, Spanish, French, Polish, Czech, Hungarian Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT the process time does not star until the set temperature is reached  Communication  Documentation  programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx, 10°C above nominal temperature  additionally integrated over and undertemperature protection "ASF", automatically following the set/point value at a prose of tower of undertemperature, heating is switched off in case of overtemperature, heating is  | Temperature                  |  |
|--|------------------------------|--|
| Setting accuracy  1.1 °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  Humidity  Humidity  Humidity  Humidity  Authority  Humidity  Active humidification by hot steam generator  Humidity  Active humidify and de-humidifying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology  ControlCOCKPIT  TwinDISPLAY, Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  Emperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting  Garman, English, Spanish, French, Polish, Czech, Hungarian  Timer  Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT  the process time does not start until the set temperature is reached  Communication  programme stored in case of power failure  Programming  AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature:  Temperature control  ver- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  Temperature control  ver- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  Temperature control  ver- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  Temperature control  ver- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  Temperature control  respective for the protection class 2, selectable on display  AutoSAFETY  additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset telectable on | Working temperature range    |  |
| Temperature  2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error  Humidity  Humidity  Humidity  humidification  humidity  active humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology  Control CoCKPIT  TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition  TFT-colour displays.  adjustable parameters  temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  German, English, Spanish, French, Polish, Czech, Hungarian  Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT  the process time does not start until the set temperature is reached  Calibration  three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation  forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation  programme stored in case of power failure  Programming  AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  TWB, protection class 2, selectable on display  AutoSAFETY  additionally integrated over- and undertemperature protection "asse", automatically following the setpoint value at a present tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of over- or undertemperature.   | Working temperature range    | from +10°C up to +60°C with humidity   |
| Humidity Active humidity-ing and de-humiditying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology ControlCOCKPIT TwinDISPLAY, Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime Language setting German, English, Spanish, French, Polish, Czech, Hungarian Digital backwards counter with target time setting, adjustable from 1 minute to 99 days Function SetpointWAIT the process time does not start until the set temperature is reached Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication Documentation programme stored in case of power failure  Programming AlmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature over- and undertemperature monitor TWW, protection class 3, 3 or adjustable temperature limiter TWB, protection class 2, selectable on display  AutoSAFETY additionally integrated over- and undertemperature protection class 1 oudertemperature, heating is switched off in case of over- or undertemperature, heating is switched off in case of over- or undertemperature. Autodiagnostic system integral fault diagnostics for temperature and humidity control   | Setting accuracy temperature | 0.1 °C   |
| Humidity humidity supply with distilled water from external tank by self-priming pump  Humidification humidification by hot steam generator  Humidity active humidifying and de-humidifying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology  ControlCOCKPIT TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting German, English, Spanish, French, Polish, Czech, Hungarian  Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT the process time does not start until the set temperature is reached  Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation  Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming ArmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature, heating is switched off in case of over- or undertemperature, heating is switched off in case of over- or undertemperature, heating is switched off in case of over- or undertemperature.  Autodiagnostic system integral fault diagnostics for temperature and humidity control   | Temperature                  | 2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error |
| Humidification humidification by hot steam generator  Humidity active humiditying and de-humidifying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology  ControlCOCKPIT TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting German, English, Spanish, French, Polish, Czech, Hungarian  Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT the process time does not start until the set temperature is reached  Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation  Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature  Temperature control over- and undertemperature protection "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 and humidity control  | Humidity                     |  |
| AutoSAFETY  active humidity active humidifying and de-humidifying adjustable from 10-80 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %  Control technology  Control technology  TwinDISPLAY, Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters  temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting  German, English, Spanish, French, Polish, Czech, Hungarian  Timer  Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT  the process time does not start until the set temperature is reached  Calibration  three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation  Fan  forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation  programme stored in case of power failure  Programming  AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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. Autodiagnostic system  integral fault diagnostics for temperature and humidity control  | Humidity                     | humidity supply with distilled water from external tank by self-priming pump                                   |
| Control technology ControlCOCKPIT TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  Language setting German, English, Spanish, French, Polish, Czech, Hungarian  Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT the process time does not start until the set temperature is reached  Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation  Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter  TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature.  Autodiagnostic system integral fault diagnostics for temperature and humidity control  | Humidification               | humidification by hot steam generator  |
| ControlCOCKPIT TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  adjustable parameters temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime  German, English, Spanish, French, Polish, Czech, Hungarian Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days  Function SetpointWAIT the process time does not start until the set temperature is reached Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature Temperature control over- and undetremperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display.  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 is switched off in case of overtemperature, compressor in case of undertemperature.   | Humidity                     |  |
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| Language setting German, English, Spanish, French, Polish, Czech, Hungarian Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days Function SetpointWAIT the process time does not start until the set temperature is reached Calibration three freely selectable values each, temperature/humidity, for two freely selectable values CO2  Ventilation Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | ControlCOCKPIT               |  |
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| Ventilation  Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | Timer                        | Digital backwards counter with target time setting, adjustable from 1 minute to 99 days                        |
| Ventilation  Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature Imiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system integral fault diagnostics for temperature and humidity control   | Function SetpointWAIT        | the process time does not start until the set temperature is reached   |
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| Fan forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps  Communication  Documentation programme stored in case of power failure  Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system integral fault diagnostics for temperature and humidity control   |                              |  |
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| Programming  AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | Fan                          | forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps                            |
| Programming  AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  Temperature control  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | Communication                |  |
| AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port  Safety  Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system integral fault diagnostics for temperature and humidity control  |                              | programme stored in case of power failure  |
| Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | Programming                  | AtmoCONTROL software on a USB stick for programming, managing and transferring programmes                      |
| Temperature control  mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control   | Safaty                       |  |
| Temperature control  over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system  integral fault diagnostics for temperature and humidity control  | _                            | machanical temporature limiter TD protection close 4 according to DIN 1999 to quitely off the heating          |
| 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 is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system  TWB, protection class 2, selectable on display  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 is switched off in case of overtemperature, compressor in case of undertemperature integral fault diagnostics for temperature and humidity control  | remperature control          |  |
| setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of overtemperature, compressor in case of undertemperature  Autodiagnostic system integral fault diagnostics for temperature and humidity control  | Temperature control          |  |
|  | AutoSAFETY                   | setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is             |
| Alarm visual and acoustic  | Autodiagnostic system        | integral fault diagnostics for temperature and humidity control  |
|  | Alarm                        | visual and acoustic  |

| Heating concept |
|-----------------|
|-----------------|

| Air jacket      | air jacket heating system for gentle all-around heating   |
|-----------------|---|
| Heating concept | no drying-up of the load caused by the cooling device due to separation of thermal jacket from interior |
| Cooling         | energy-saving use of CFC-free cooling/heating system (refrigerant R134a)                                |
| Defrosting      | highly efficient automatic defrosting system  |

## Standard equipment

| Entry port                    | Entry port (silicone), 40 mm clear diameter, moisture tight, can be closedby a silicone stopper, standard position at the back |
|-------------------------------|--|
| Internals                     | 2 stainless steel grid(s), electropolished   |
| Works calibration certificate | standard values +10 °C and +37 °C, 60 % rh at +30 °C   |
| Door                          | inner glass doors  |
| Door                          | fully insulated stainless steel doors with 2-point locking (compression door lock)   |

#### Stainless steel interior

| Volume                    | 749   |
|---------------------------|---|
| Dimensions                | w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 1040 x 1200 x 600 mm |
| Max. number of internals  | 14  |
| Max. loading of chamber   | 200 kg  |
| Max. loading per internal | 30 kg   |

## Textured stainless steel casing

| Installation | on lockable castors   |
|--------------|---|
| Dimensions   | w <sub>(D)</sub> x h <sub>(E)</sub> x d <sub>(F)</sub> : 1224 x 1950 x 785 mm |
| Housing      | rear zinc-plated steel  |

#### **Electrical data**

| Voltage         | 230 V, 50/60 Hz |
|-----------------|-----------------|
| Electrical load | approx. 1350 W  |
| Voltage         | 115 V, 50/60 Hz |
| Electrical load | approx. 1350 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      | 15 °C to 28 °C (up to 34 °C with limited temperaturerange)  |
| Humidity rh              | max. 70 %, non-condensing   |
| Altitude of installation | max. 2,000 m above sea level  |
| Overvoltage category     | Ш   |
| Pollution degree         | 2   |

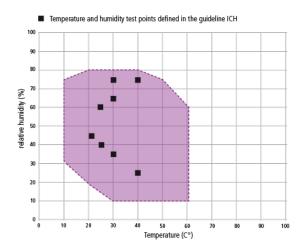
#### Packing/shipping data

| 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. carton | w x h x d: 1330 x 2150 x 1050 mm           |
| Net weight                     | approx. 249 kg                             |
| Gross weight carton            | approx. 319 kg                             |

#### Temperature-humidity working range ICH

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 climate chamber ICH.

Within the respective temperature-humidity range, condensation-free permanent operation is possible. To which extent condensation may occur in the threshold range depends on the humidity content of the chamber load and the ambient conditions.



Temperature-humidity working range ICH

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

