

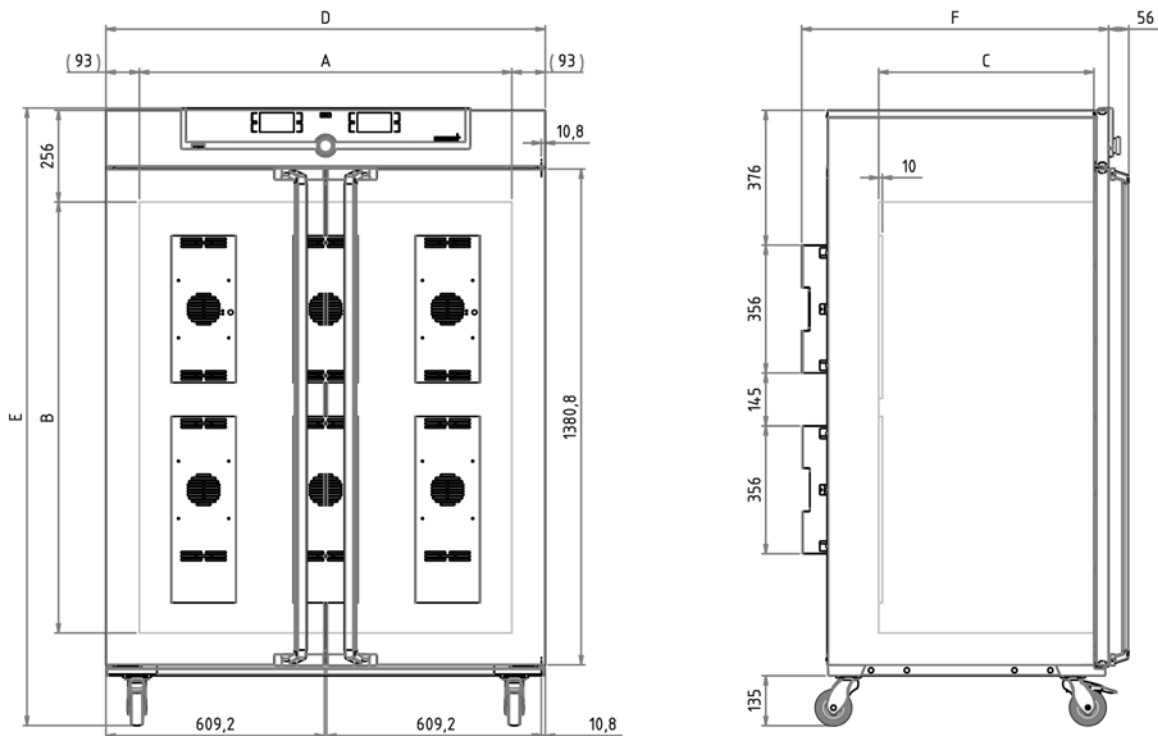


Constant climate chamber HPP1400

Our constant climate chamber is tailored to environmental simulation, material testing and stability testing in accordance with the ICH guidelines.



On this page, you can find all the essential technical data on the Memmert stability chamber HPP. Our customer relations team will be pleased to help if you want further information. If you should require a customized special solution, please contact our technical specialists.



Temperature

Working-temperature range	+15 °C (at least 10 below ambient) up to +60 °C
Setting accuracy temperature	0.1°C
Temperature	2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value

Humidity

Setting range humidity	10 - 80 % rh
Setting accuracy humidity	0.5 %
Humidity	humidity supply with distilled water from external tank by self-priming pump
Humidification	humidification by hot steam generator
Dehumidification	dehumidification by cold trap using the Peltier technology

Control technology

ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-color displays.
Language setting	German, English, Spanish, French, Polish, Czech, Hungarian
adjustable parameters	temperature (Celsius or Fahrenheit), relative humidity, program time, time zones, daylight savings time
Timer	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
Function HeatBALANCE	adapting the distribution of the heating performance of the upper and lower heating circuit from -50 % to +50 %
Function SetpointWAIT	the process time does not start until the set temperature is reached
Calibration	three freely selectable temperature values, 2-point calibration for humidity: 20 and 90 % rh

Communication

Interface	Ethernet LAN, USB
Documentation	program stored in case of power failure
Programming	AtmoCONTROL software on a USB stick for programming, managing and transferring programs via Ethernet interface or USB port

Safety

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 function is switched off in case of overtemperature, cooling function in case of undertemperature
Autodiagnostic system	integral fault diagnostics for temperature and humidity control
Alarm	visual and acoustic

Heating concept

Peltier energy-saving Peltier heating-/cooling system integrated in the rear (heat pump principle)

Standard equipment

Door	Fully heated inner glass panes integrated in the full-sight glass door with 2-point locking (compression door lock)
Standard accessories	Water tank including connection hose
Internals	4 stainless steel grids
Works calibration certificate	standard values +10°C and +37°C, 60 % rh at +30°C

Stainless steel interior

Volume	1360 l
Dimensions W x H x D in inches	$w_{(A)} \times h_{(B)} \times d_{(C)}$: 49.2 x 57.1 x 29.5
Max. number of internals	28
Max. loading of chamber	551 lbs
Max. loading per internal	66 lbs

Textured stainless steel casing

Installation	on lockable castors
Dimensions in inches	$w_{(D)} \times h_{(E)} \times d_{(F)}$: 56.5 x 77.5 x 41.5
Housing	rear zinc-plated steel

Electrical data

Voltage	230 V, 50/60 Hz
Electrical load	approx. 13.5 amps
Voltage	115 V, 50/60 Hz
Electrical load	approx. 27 amps

Packing/shipping data

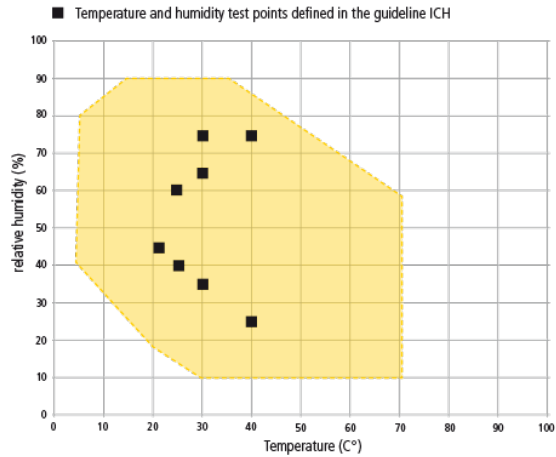
the appliances must be transported upright

Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-Reg.-No.	DE 66812464
Dimensions approx incl. carton in inches	B x H x T: 61.4 x 86.6 x 46.9
Net weight	approx. 992 lbs
Gross weight carton	approx. 1,409 lbs

Temperature-humidity working range HPP

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 constant climate chamber HPP.

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 HPP

Standard units are safety-approved and bear the test marks

