



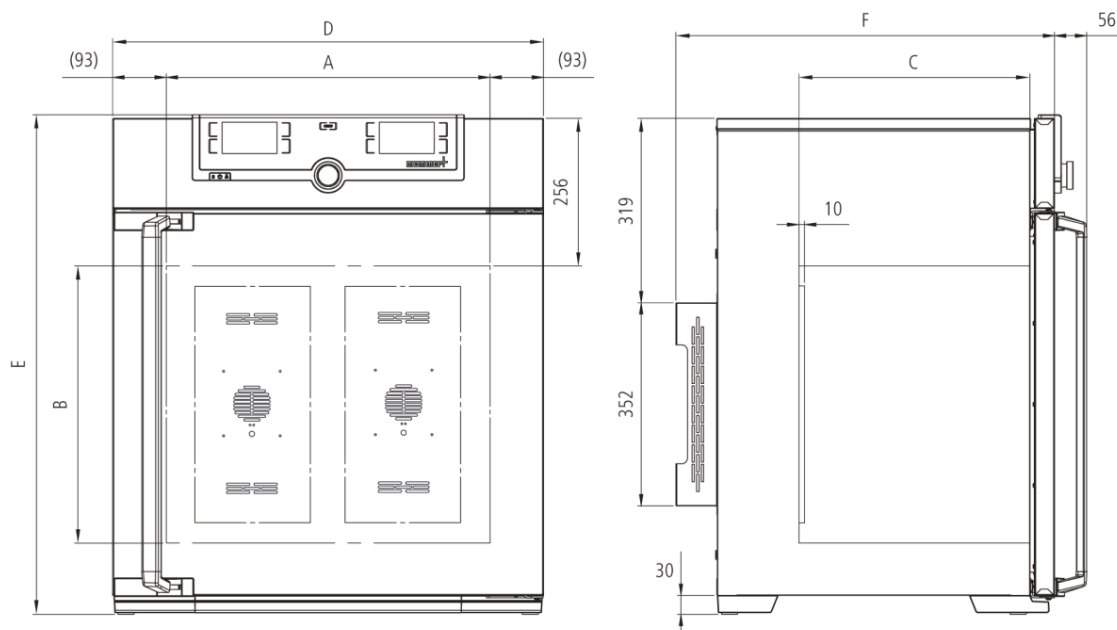
Constant climate chamber

HPP110

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.



Control of standard components

ControlCOCKPIT	adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-color displays
Temperature	2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
Timer	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
Humidity	humidity supply with distilled water from external tank by self-priming pump
Humidity	active humidifying and de-humidifying adjustable from 10 - 90 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %
Humidity	humidity supply with distilled water from external tank by self-priming pump
Humidity	humidification by hot steam generator
Humidity	dehumidification by cold trap using the Peltier technology

Temperature

	without humidity: from 0°C to +70°C
	with humidity: from +5°C to +70°C

Control technology

adjustable parameters	temperature (Celsius or Fahrenheit), relative humidity, program time, time zones, daylight savings time
Function SetpointWAIT	the process time does not start until the set temperature is reached
Language setting	German/English/Spanish/French
Calibration	three freely selectable temperature values, 2-point calibration for humidity: 20 and 90 % rh

Ventilation

forced ventilation by Peltier fan

Communication

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

Safety

Autodiagnostic system	integral fault diagnostics for temperature and humidity control
Alarm	audible and visual
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

Heating concept

Heating and cooling performance distribution by individual control of the Peltier elements in the upper and lower row
 energy-saving Peltier heating-/cooling system integrated in the rear (heat pump principle)

Standard equipment

Door	fully insulated stainless steel door with 2-point locking (compression door lock)
Door	inner glass door
Housing	rear zinc-plated steel
Internals	2 stainless steel grids

Stainless steel interior

$w_{(A)} \times h_{(B)} \times d_{(C)}$: 22" x 18.9" x 15.8"

Volume 108 l

Max. loading of chamber: 330 lbs

Textured stainless steel casing

$w_{(D)} \times h_{(E)} \times d_{(F)}$: 29.3" x 34" x 26.5"

Electrical data

115 V (+ / - 10%), 50/60 Hz / 5.6 amps

230 V (+ / - 10%), 50/60 Hz / 2.8 amps

Packing/shipping data

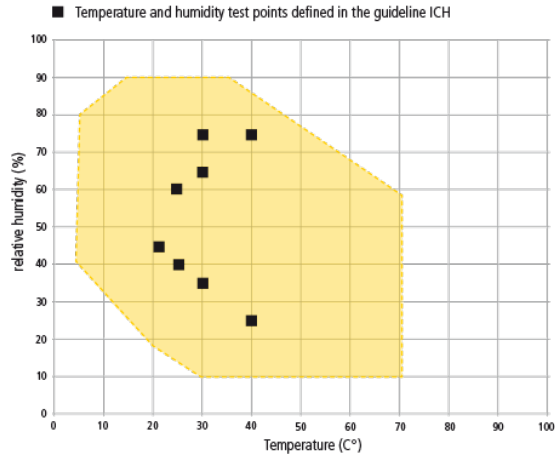
the appliances must be transported upright

Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-Reg.-No.	DE 66812464
	Dimensions approx. incl. carton W x H x D: 32.7" x 41.3" x 31.5"
	Net weight approx. 170 lbs
	Gross weight carton approx. 225 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

