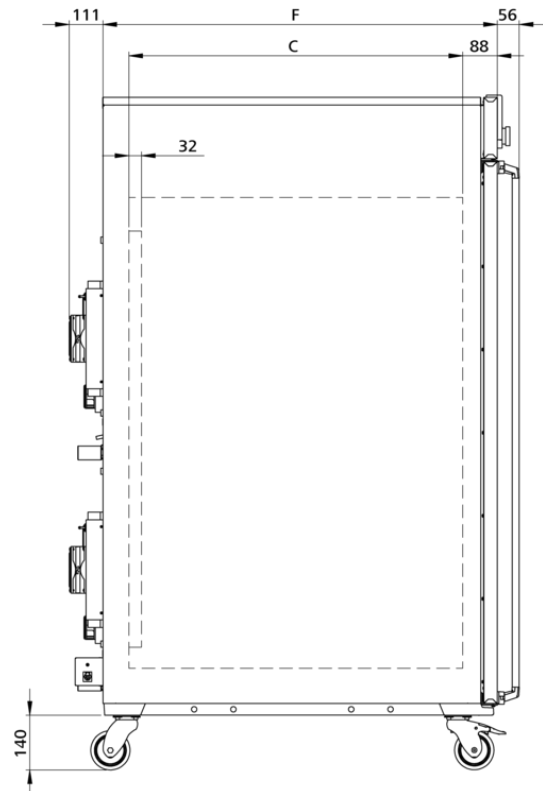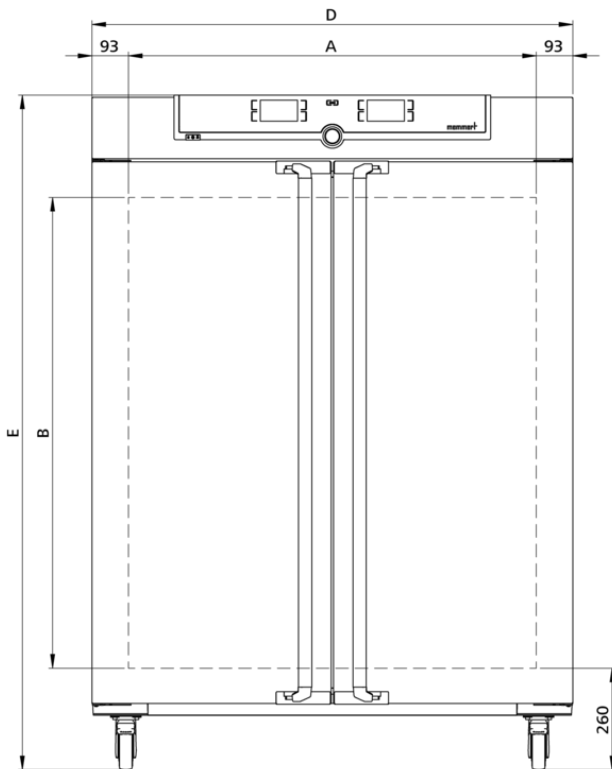# memmert

Constant climate chamber

HPP2200eco

Maximum energy efficiency in continuous operation - tailor-made for stability studies according to ICH guidelines, stability tests for cosmetics and foods as well as environmental testing and material testing

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 at info@memmertusa.com.

Temperature

Setting temperature range	with humidity: +5 to +70 °C
Setting temperature range	without humidity: +0 to +70 °C
Working temperature range	with humidity: +15 (at least 10 below ambient temperature) to +60 °C
Working temperature range	without humidity: 15 (at least 10 below ambient temperature) to +60 °C
Setting resolution temperature	0.1 °C
Temperature sensor	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error

Humidity

Setting range humidity	10 - 80 % rh
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
Setting accuracy humidity	0.5 % rh

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, timer
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 values each, temperature and humidity

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

Works calibration certificate	for +25 °C/40 % rh and +40 °C/75 % rh
Shelving	6 stainless steel grids, electropolished
Door	Stainless steel doors with glass sectors, 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 (110-750: 2.5 liter, 1060-2200: 10 liter)

Stainless steel interior

Dimensions	$w_{(A)}$ x $h_{(B)}$ x $d_{(C)}$: 77.6 x 57.1 x 29.5 inches (d less 1.3" for fan - Peltier)
Volume	2140 l / 75.6 cu. Ft.
Max. number of shelves	42
Max. loading of chamber	727 lbs
Max. loading per shelf	66 lbs

Textured stainless steel casing

Dimensions	$w_{(D)}$ x $h_{(E)}$ x $d_{(F)}$: 84.9 x 75.3 x 35.6 inches (d +2.2" door handle)
Installation	on lockable castors, adjustable in height
Housing	rear zinc-plated steel

Electrical data

Voltage	230 V (± 10%), 50/60 Hz
Electrical load	approx. 2000 W / 8.7 A

Ambient conditions
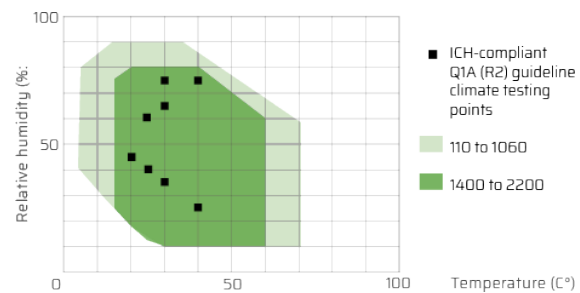
Set Up	The distance between the wall and the rear of the appliance must be at least 6 inches. The clearance from the ceiling must not be less than 8 inches and the side clearance from walls or nearby appliances must not be less than 2 inches.
Ambient temperature	16 ºC to 40 ºC
Humidity rh	max. 70 %, non-condensing
Altitude of installation	max. 2,000 m above sea level
Overvoltage category	II
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-Reg.-No.	DE 66812464
Dimensions approx. incl. wooden box	w x h x d: 91 x 87 x 47 inches
Net weight	approx. 1,087 lbs
Gross weight wooden box	approx. 1,610 lbs

The Peltier-cooled climate chamber HPPeco is specifically designed for stability studies according to ICH guidelines (Q1A) as well as stability tests for cosmetics and food. Thanks to the large working range ascending from the freezing point, the climate chamber is also ideal for working materials testing and environmental tests in industry.

Standard units are safety-approved and bear the test marks

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