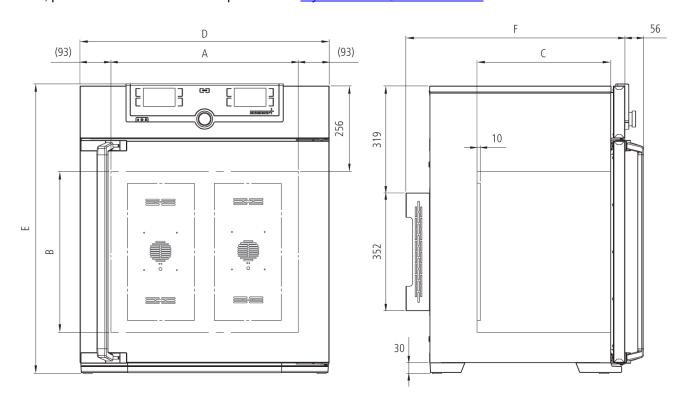


# Constant climate chamber HPP110

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. If you should require a customised special solution, please contact our technical specialists at <a href="mayAtmoSAFE@memmert.com">myAtmoSAFE@memmert.com</a>.



# **Control of standard components**

ControlCOCKPIT	adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour 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 light: from 0°C to +70°C
	with light: from +15°C to +40°C
resolution of display for setpoint and actual temperature values	0.1°C

# **Control technology**

adjustable parameters	temperature (Celsius or Fahrenheit), relative humidity, programme time, time zones, summertime/wintertime
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

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

Autodiagnostic system	integral fault diagnostics for temperature and humidity control
Alarm	visual and acoustic
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 with2-point locking (compression door lock)
Door	inner glass door
Housing	rear zinc-plated steel
Internals	2 stainless steel grids

#### Stainless steel interior

Dimensions W $x$ H $x$ D in mm	w <sub>(A)</sub> x h <sub>(B)</sub> x d <sub>(C)</sub> : 560 x 480 x 400 mm
Volume	108 l
Max. loading of chamber:	150 kg

#### Textured stainless steel casing

$w_{(D)} \times h_{(C)} \times d_{(C)}$ :	745 x 864 x 674 mm
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#### **Electrical data**

Voltage	115 V, 50/60 Hz	
Electrical load	approx. 650 W	
Voltage	230 V, 50/60 Hz	
Electrical load	approx. 650 W	

# Packing/shipping data

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	B x H x T: 830 x 1050 x 800 mm
Net weight	approx. 77 kg
Gross weight carton	approx. 102 kg

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

