

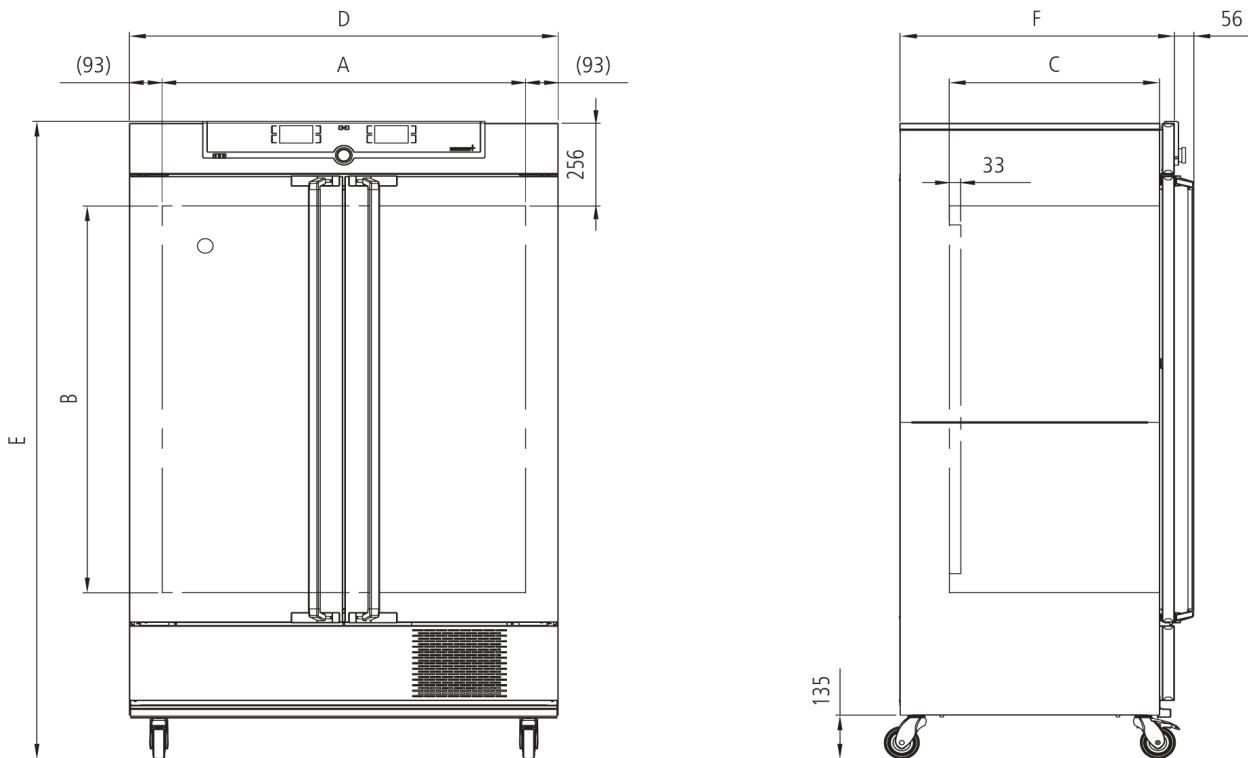


Climate chamber ICH110

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.



Temperature

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 ice over)

Working temperature range from +10°C up to +60°C with humidity

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

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/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

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

Internals	2 stainless steel grid(s), electropolished
Works calibration certificate	standard values +10 °C and +37 °C, 60 % rh at +30 °C
Door	fully insulated stainless steel door with 2-point locking (compression door lock)
Door	inner glass door

Stainless steel interior

Volume	108 l
Dimensions W x H x D in mm	$w_{(A)} \times h_{(B)} \times d_{(C)}$: 560 x 480 x 400 mm
Max. number of internals	5
Max. loading of chamber	150 kg
Max. loading per internal	20 kg

Textured stainless steel casing

Installation	on lockable castors
Dimensions	$w_{(D)} \times h_{(E)} \times d_{(F)}$: 745 x 1233 x 634 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

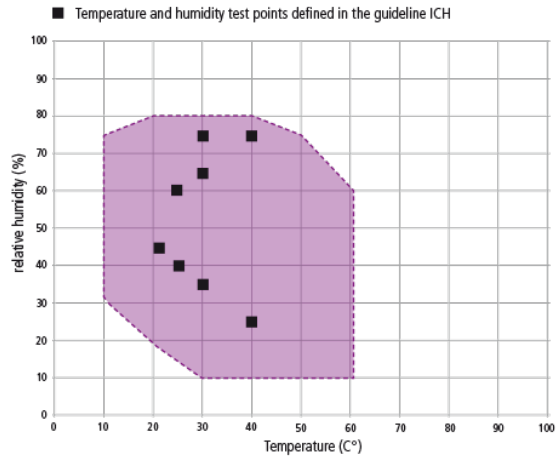
Packing/shipping data/Setting Up

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.
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. carton	B x H x T: 880 x 1410 x 810 mm
Net weight	approx. 109 kg
Gross weight carton	approx. 137 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

