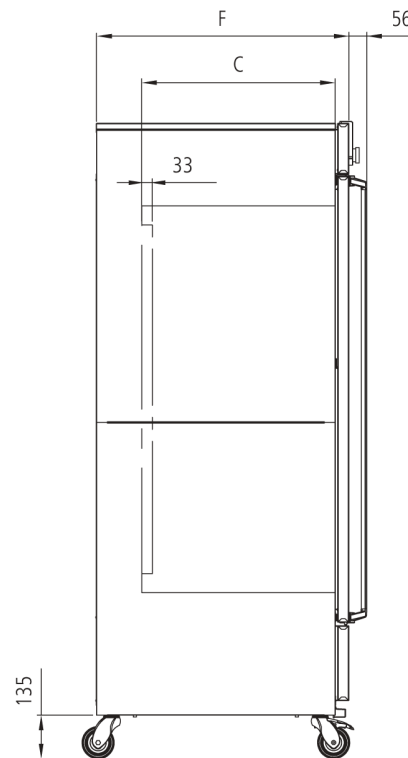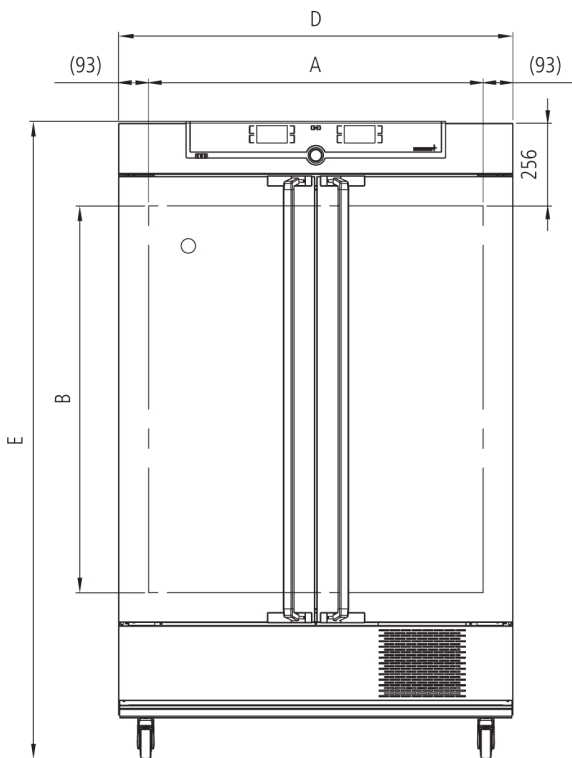# Climate chamber

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.

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 10-80 % 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

Temperature

	from -10°C up to +60°C without humidity
	from +10°C up to +60°C with humidity
resolution of display for setpoint and actual temperature values	0.1°C

Control technology

adjustable parameters	temperature (Celsius or Fahrenheit), fan speed, relative humidity, programme time, time zones, summertime/wintertime
Calibration	three freely selectable values each, temperature/humidity/CO2
Function SetpointWAIT	the process time does not start until the set temperature is reached
Language setting	German/English/Spanish/French

Ventilation

Fan	forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps

Communication

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

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 is switched off in case of overtemperature, compressor in case of undertemperature
Temperature control	mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature

Heating concept

no drying-up of the load caused by the cooling device due to separation of thermal jacket from interior

energy-saving use of CFC-free cooling/heating system (refrigerant R134a)

highly efficient automatic defrosting system

air jacket heating system for gentle all-around heating

Standard equipment

Door	fully insulated stainless steel door with2-point locking (compression door lock)
Door	inner glass door
Housing	rear zinc-plated steel
Installation	on lockable castors
Internals	2 stainless steel grids

Stainless steel interior

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

Textured stainless steel casing

	$w_{(D)}$ x $h_{(E)}$ x $d_{(F)}$: 745 x 1233 x 634 mm

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

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

Standard units are safety-approved and bear the test marks