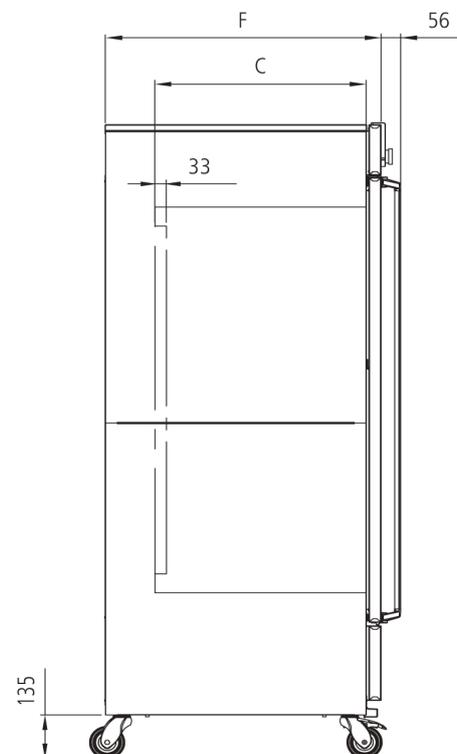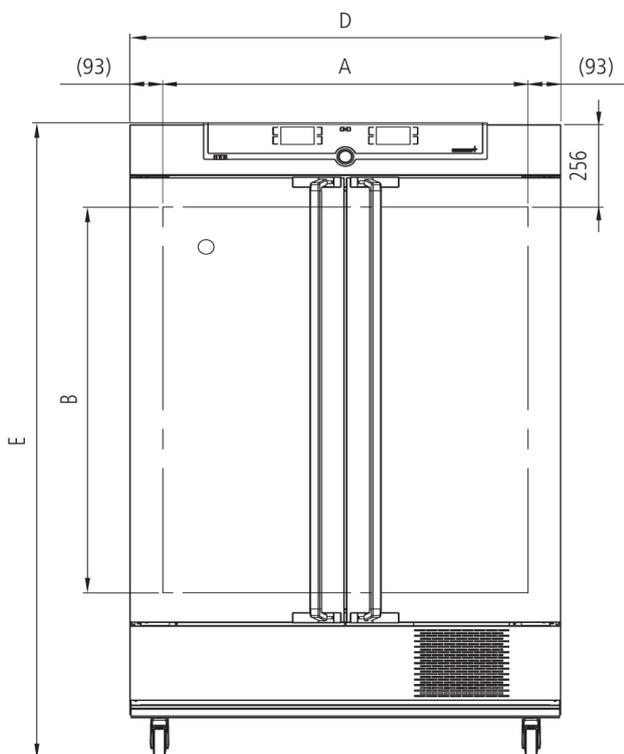**memmert**
Experts in Thermostatics

AtmoSAFE

Climate chamber

ICH110C

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 +50°C
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 %

CO2

CO2	digital electronic CO2-control with automatic zeroing (infrared measuring system) - adjustment range 0-20 % - resolution 0.1 %
CO2	CO2-supply via sterile filter
CO2	intrinsic adjustment of altitude above sea level
CO2	CO2-supply interruption upon door opening

Control technology

ControlCOCKPIT	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.
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
adjustable parameters	temperature (Celsius or Fahrenheit), fan speed, CO2, programme time, time zones, summertime/wintertime

Ventilation

Fan	forced air circulation in working chamber adjustable from 10 to 100 % in 10 % steps, fixed value 50 % when working with CO2

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, CO2 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

Works calibration certificate	standard values +10°C u. +37°C, 60 % rh bei +30°C
Door	fully insulated stainless steel door with2-point locking (compression door lock)
Door	inner glass door
Internals	2 stainless steel grids

Stainless steel interior

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

Textured stainless steel casing

Installation	on lockable castors
Dimensions	$w_{(D)}$ x $h_{(E)}$ x $d_{(F)}$: 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

the appliances must be transported upright

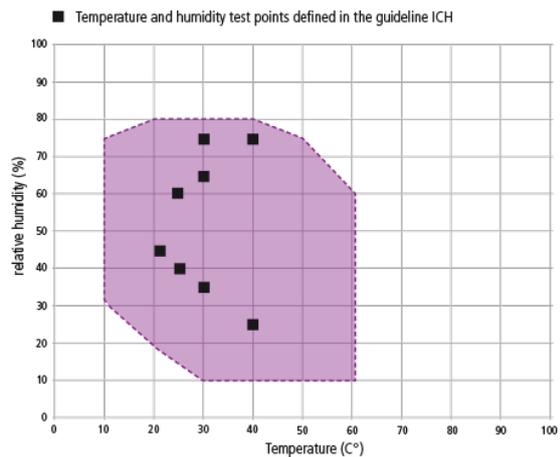| Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-Reg.-No.	DE 66812464
Dimensions approx incl. carton	B x H x T: 880 x 1410 x 810 mm
Net weight	approx. 109 kg
Gross weight carton	approx. 137 kg

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.

Temperature-humidity working range ICH

Standard units are safety-approved and bear the test marks

Memmert GmbH + Co. KG | Tel. +49 (0) 9122/925-0 | Fax +49 (0) 9122/145 85 | E-Mail info@memmert.com