



## Walk-in Temperature and Climate Test Chambers WEISS M.C.S.

### Industry line:

- test institutes
- automotive industry
- automotive industry suppliers
- food industry
- pharmaceutical industry
- electronic industry
- chemical industry

### Applications:

WEISS M.C.S.-Test Chambers are used for reproducible temperature and climate tests. Test and measuring equipment can be integrated inside the test chamber.

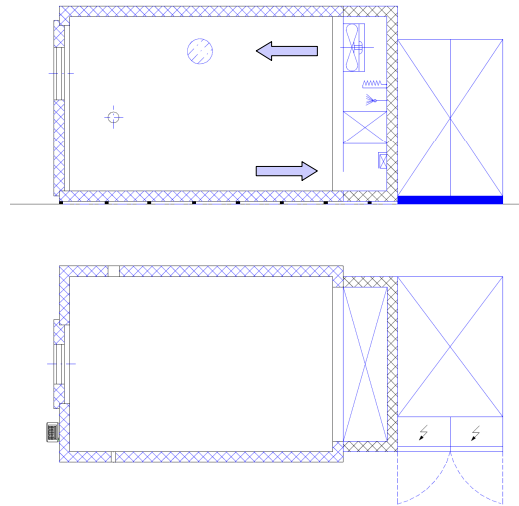
Independent of design and quality of the test objects highest temperature and humidity constancies are reached due to powerful and uniform conditioning of the test space.

Due to the new modular construction of the WEISS M.C.S. chambers the production expenses for this high-quality product were considerably reduced.

## Functioning:

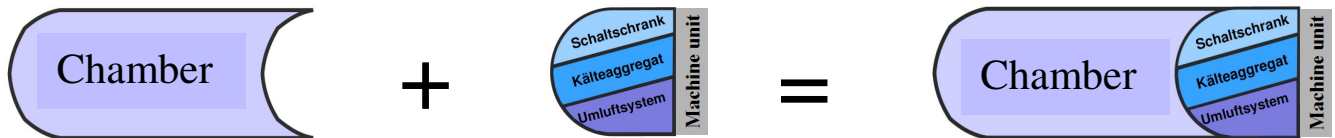
An air flow which is temperature or air conditioned to achieve exactly the requested set values flows continuously through the test chamber. The air duct fitted to the chamber rear comprises all components required for air make-up. The chamber air is taken out of the test space by means of the recirculating air system, then it is passed via the fin-type heat exchanger where the chamber air is cooled down if necessary. An electrical heater installed in air flow direction behind the heat exchanger heats the recirculated air if required.

For climate operation the chamber air is sterilely humidified by means of a steam humidifier. An additional dehumidification heat exchanger increases the dehumidification capacity and is furthermore used as specimen protection against condensation.



## Modular construction:

The total test system consists of the following components: cell, machine unit incl. switch cabinet with integrated SIMCON/32\*-NET control system with colour touch panel



- sizes: 8, 12, 16, 21, 28 m<sup>3</sup>
- insulation 120 mm PU foam
- will be pre-assembled on site

Machine unit, incl. switch cabinet

- recirculating air system, 4 power levels
- refrigeration unit, 3 power levels
- installation at WEISS, transport to the customer

WEISS M.C.S.

- final installation and commissioning on site

## Standard design:

- door (H1900xW900mm), incl. observation window
- lighting equipment (IP65), stainless steel floor
- 2 access ports in the side walls (50 and 125 mm)
- control system SIMCON/32\*-NET, incl. colour touch panel
- specimen protection, water-cooled refrigeration unit

Climate chamber contains additionally:

- steam generation system
- capacitive humidity measuring system, condensation protection

## Options:

- air-cooled condenser
- software package SIMPATI\*, LAN/Ethernet connection
- demineralisation system
- additional access port and temperature sensors
- emergency call device, operating hour meter
- extended door, additional observation window
- datalogger

### Further options upon request

## Technical Data:

Test space volume 8, 12, 16, 21, 28 m<sup>3</sup>  
 Temperature range -40 ... +80 °C  
 Temperature constancy (in time) ± 1 K

Climate range +10 ... +60 °C  
 Dewpoint range +4 ... +59 °C  
 Humidity range 10 ... 95 % r.h.  
 Humidity constancy ± 3-5 %

WT/WK	Unit	8'	12'	16'	21'	28'
Interior Dimensions						
Height	mm	2000	2000	2250	2250	2250
Width	mm	2000	2000	2500	2500	2500
Depth	mm	2000	3000	3000	4000	5000
Exterior Dimensions incl. Machine Unit						
Height	mm	2270	2270	2520	2520	2520
Width	mm	2240	2240	2740	2740	2740
Depth	mm	4060	5060	5060	6060	7060
Temperature changing between -40°C and +80°C, without specimen, without thermal load						
Cooling down rate <small>(nach IEC 60068-3-5) (depends on module composition, measured in supply air)</small>	K/min	2,2 / 2,8 / 3,8	1,7 / 2,3 / 3,0	1,9 / 2,4	1,5 / 2,0	1,3 / 1,7
Heating up rate <small>(nach IEC 60068-3-5) (depends on module composition, measured in supply air)</small>	K/min	1,0 / 2,5	0,8 / 2,0	1,7 / 3,4	1,4 / 2,9	1,2 / 2,5



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