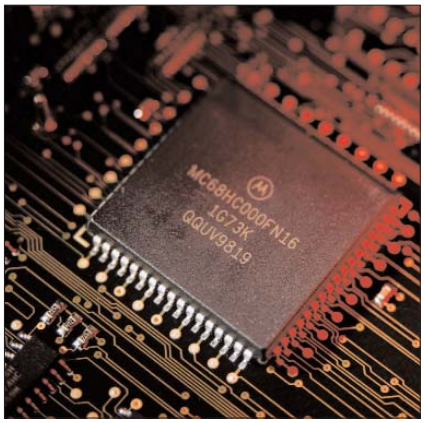
Laboratory Scope ...

Vötsch Industrietechnik

Temperature test chambers

with the ideal performance range for constant and cyclic temperature tests

Compact class for laboratory ...



The temperature test chambers VT 4011 to VTS 7021-5 are especially designed for use in laboratories.

The relation of external dimensions, test space volumes, efficiency and operating costs are excellent.

All of these extremely compact systems offer a remarkable test space volume. Even the 110 l system is capable of accommodating three 19" racks.

The system is equipped with an entry port NW 80 mm for connecting supply/measuring lines to electronic components.

Rapid temperature cycles, high heat compensation and a low noise level make these systems highly favourable for use in laboratories.

Castors, provided as a standard feature, make these chambers highly mobile.

Performance for constant and changing temperature ranges from -40/-70 °C to +180 °C.

The chambers of series VT are ideal for laboratories, they are of a 1-phase design (230 V AC).

In addition we offer the high performance VTS-series with temperature change rates to 10 K/min.

The control and communication system provides the highest level of operating convenience, with the removable, menue-controlled colour touchpanel with graphics-capable display.

A powerful 32-bit control system forms the basis for monitoring and controlling of the test equipment. The series VT and VTS are equipped with the control system S!MPAC*.

Extensive test programs can be easily and reliably created, safeguarded and reactivated.

... the levels of performance are remarkable

Technical Data		Type	VT 4011	VT 7011	VT 4021	VT 7021	VTS 7011-5	VTS 7021-5
Test space volume approx.		Litre	110	110	200	200	110	200
Temperature range		°C	-40 to +180	-70 to +180	-40 to +180	-70 to +180	-70 to +180	-70 to +180
Temperature deviation in time [1]		K	±0.1 to ±0.5				±0.3 to ±1.0	
Temperature homogeneity in space [2]		K	±0.5 to ±1.0		±0.5 to ±1.5		±0.5 to ±2.0	
Temperature rate	Cooling	K/min	3.5	3.2	3.1	2.5	6.0	5.0
of change [3]	Heating	K/min	3.5	3.5	2.5	2.5	10.0	8.0
Heat compensation max.		W	1000	800	1000	800	1600	1600
Temperature calibration values			+23 °C and +80 °C				+23 °C and +80 °C	
Test space dimensions	Width [4]	mm	560	560	560	560	560	560
	Depth	mm	350	350	570	570	350	570
	Height	mm	630	630	630	630	630	630
External dimensions	Width	mm	850	850	850	850	850	850
	Depth [5]	mm	1030	1030	1250	1250	1075	1250
	Height	mm	1640	1640	1640	1640	1640	1640
Weight approx.		kg	285	325	325	355	360	380
Noise level approx. [6]		dB(A)	<53	<56	<53	<56	65	65
Rated power approx.		kW	1.5	1.8	1.5	1.8	7.5	7.5
Electrical connection			1/N/PE AC 230 V ±10 %, 50 Hz				3/N/PE AC 400 V ±10 %, 50 Hz	

The performance values refer to +25 °C ambient temperature. [1] in centre of test space, [2] relative to the set value in temperature range from t_{min} to +150 °C, [3] in accordance with IEC 60068-3-5, [4] useable width 530 mm, [5] dimensions with external fan-motor, [6] measured in 1 m distance from the front and in 1.6 m height at free field measurement according to EN ISO 11201. **We reserve the right of changes in construction resulting from technical progress. Some of the illustrated systems contain optional extras.**

Main advantages ...

- Light-weight with high performance
- Small installation area
- Low power input/operating costs
- Easy operation with colour touchpanel
- Reliable also at high ambient temperatures
- Mains connection 230 V (VT-series)
- Silent operation
- USB interface with recording function
- Remote control and remote monitoring via intranet or internet

Standard equipment

- Colour touchpanel for comfortable input
- Microprocessor monitoring and control unit SIMPAC*
- USB and ethernet interface
- Smooth test space walls
- Independent, adjustable temperature limiter t_{min}/t_{max}
- Adjustable software temperature limiter min./max.
- Air-cooled refrigeration unit, chloride-free
- Potential-free contact for switching-off of test specimens
- Calibration of 2 temperature values
- Entry port NW 80 mm
- Mobile design

Compact class for laboratory ...

Special designs ...

We plan and manufacture tailor-made solutions to meet all requirements.

We are your competent partner in environmental test technology.

The most important options ...

- Software S!MPATI*
- Digital I/O
- Analogue transducer card I/O
- Adjustable circulating air quantity
- Temperature measuring on test specimen
- Interface RS 232
- Interface converter RS 232 ↳ RS 422/485 or IEEE 488
- Interface RS 422/485 (Network card for test cabinet)
- Dehumidification during heating cycle (only VT-series)
- Compressed air dryer for dew point -30 °C unregulated
- GN_2/compressed air connection
- Water-cooled refrigeration unit
- Lead-through pad
- Notch
- Additional insert shelves
- Additional entry ports
- Door with window & light
- Door with window & light and 2 handholes
- Low noise suppression
- Spatial WKD or DKD calibration
- Special voltages

The nice software ...

The S!MPATI* control software (optional) enables you to use your systems even more effectively.

Operation of test systems becomes simple and time-saving. Evaluation and documenting of test cycles and the integration of special measuring data guarantees an improved standard.

S!MPATI* is network-integrated offering remote operation from other PCs in your network. No special software is required - a standard Internet browser will be sufficient.

It's obvious that our system for controlling S!MPAC* and the software S!MPATI* fulfil the requirements of **"21 CFR Part 11 Compliance".**

Further information is available in the S!MPATI* brochure.

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