ShockEvent D/210/a/V1

Air to air temperature shock test chamber with fixed test space

The ShockEvent D/210/a/V1 is a damper-type shock test chamber from weisstechnik with a test chamber volume of 210 l. The test specimen remains stationary while the test space is flooded with preconditioned air from the cold chamber (–70 °C to 0 °C) or hot chamber (+50 °C to +225 °C) in < 1 s through air flaps. This type allows for reproducible thermal shocks without any mechanical stress on the test specimen. Precise control (WEBSeason), low temperature deviation (±0.5 K) and a water-cooled design with a stainless steel interior enable reproducible, norm-compliant thermal shocks without exposing the test object to mechanical stress.

Our highlights:

¬ Ideal for vibration-sensitive and active test specimens

¬ 3-Zone Temperature Shock

¬ Efficient energy-saving mode

¬ Comprehensive product safety

¬ Easy access to the test material

Applications:

The ShockEvent D is designed to test the reliability of sensitive electronics, sensors, and interconnected assemblies by repeatedly exposing them to rapid temperature changes. In particular, it finds application in the automotive sector to meet the requirements of ISO 26262 and IEC 61508, but also in aerospace, defense and semiconductors. Common test norms here are IEC 60068-2-14 Na and MIL-STD-883L.

Technical Data.

ShockEvent D/210/a/V1	
TEMPERATURE SHOCK TEST PERFORMANCE DATA	
Temperature range test space [°C]	-65 ... 200
Temperature deviation in time [K]	-0.5 ... 0.5
Temperature homogeneity, spatially [K]	-1.5 ... 1.5
COLD CHAMBER PERFORMANCE DATA	
Temperature range cold chamber [°C]	-70 ... 0
Temperature Change rate, cooling (cold chamber) [K/min]	2
Temperature Change rate, heating (cold chamber) [K/min]	4
HOT CHAMBER PERFORMANCE DATA	
Temperature range hot chamber [°C]	50 ... 225
Temperature Change rate, heating (hot chamber) [K/min]	18
CONSUMPTION AND CONNECTION DATA	
Cooling (air-cooled/ water-cooled)	- / ✓
Refrigerant	R449A/R469A
Voltage Rating	3/N/PE AC 400 V ±10 % 50 Hz
Power Rating [kW]	31.9
Current Rating [A]	57
Electrical Connection	CEE-Connector, 63 A
TEST SPACE	
Testspace volume [l]	210
Test Space Dimensions (H x W x D) [mm]	500 x 700 x 600
Test Space Door Dimensions (H x W (mm)	500 x 700
EXTERNAL HOUSING	
External Dimensions (HxWxD) [mm]	1970 x 1485 x 1765
DIMENSIONS & WEIGHT	

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Total load [kg]	150
Total Weight [kg]	1350
OPERATING AND AMBIENT CONDITIONS	
Ambient Temperature Range [°C]	10 ... 35
Sound Pressure Level [dB(A)]	63
INTERNAL FITTINGS	
Total load per insert basket [kg]	8
Maximum number of insert baskets [pcs]	7

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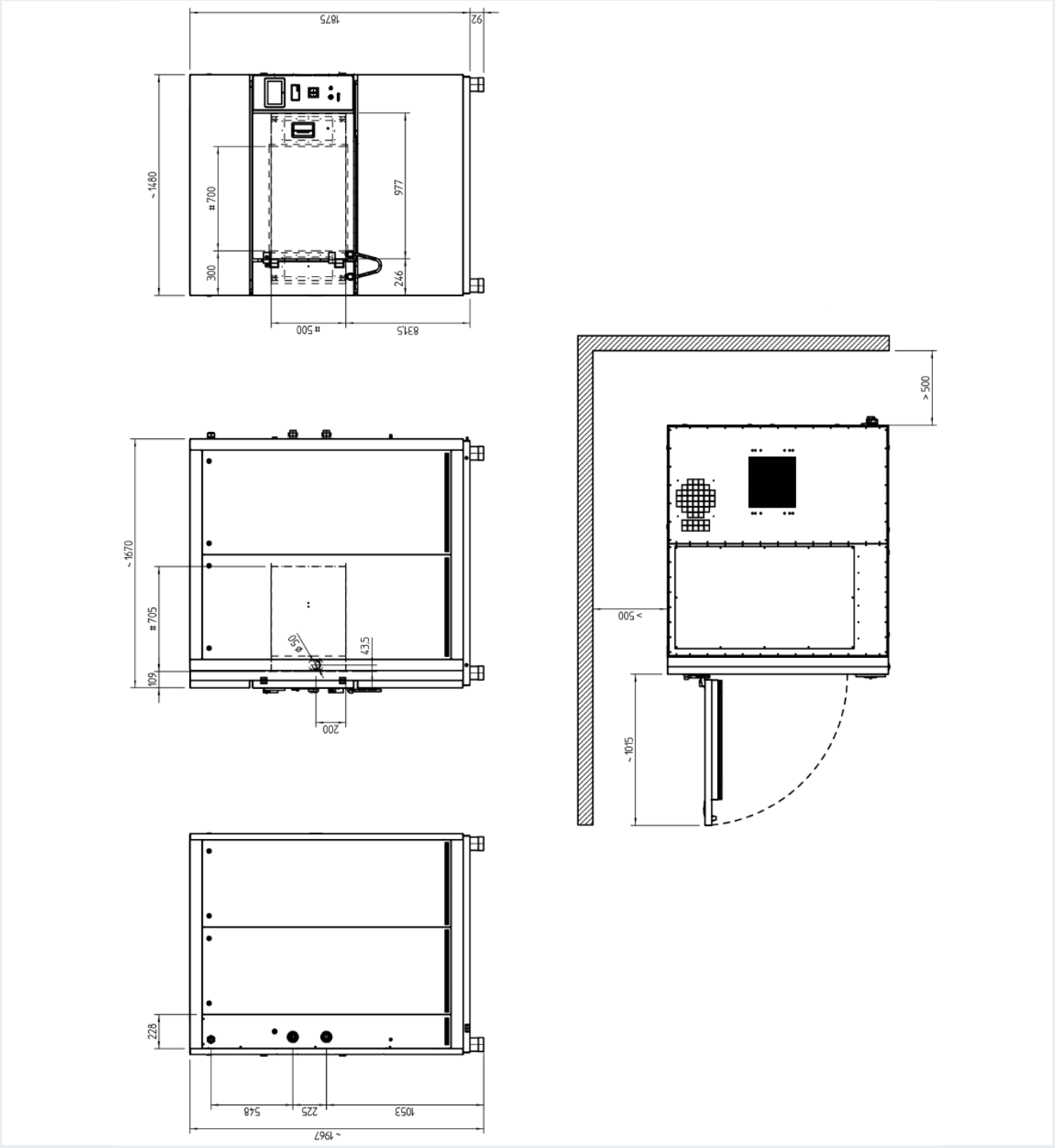
Selection of relevant options

Label	Description
Rectangular access port 160 x 50 mm to the left	The rectangular access port (160 x 50 mm) is installed in the left-hand wall. It allows the insertion of larger or several plugs and cables that do not fit through the standard access port.
Insertion basket	Additional wire mesh shelves can be inserted for the insertion of the test specimens (max. 7 shelves). Max. load per shelf 7.5 kg. A total load of 50 kg must not be exceeded.
Electric door tumbler, normally closed (NC)	The test space door is unlocked when a test ends, is stopped, is paused or in the event of a malfunction in a test, within a temperature range of +10 °C to +40 °C, and can then be opened. The test space heaters, the test space fan and the potential-free contact are then switched off.
Temperature measurement on the test specimen	Many norms, such as the new version of IEC 60068-2-14 Nb, require close observation and recording of the temperature of the test specimen during the test phases. Our test chamber can be equipped with additional temperature sensors, the values from which are displayed and recorded on the display (via USB or with S!MPATI®). One of the sensors can also be used as a control sensor if required.
Analog measured value card 4 Pt100 inputs and 5 outputs	For the processing and output of analog measurement signals, five outputs 0 to 10 V and four inputs for Pt 100 are available.
Insulation of water inlet at a water flow of <+12 °C	Cooling water hoses in the test chamber are additionally insulated.
Hose set for cooling water network 1", 2x2, 5m, flexible	For connection to a cooling water network, two flexible hoses with a G 1" connection and a length of 2.5 m are supplied.
Hose set for cooling water network 1", 2x5m, flexible	For connection to a cooling water network, two flexible hoses with a G 1" connection and a length of 5 m are supplied.

Further relevant information



Installation drawing ShockEvent D 210 litres

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