



Laboratory drying ovens

Temperature sensitive, easy decomposable or oxidative materials can be dried very tenderly in VACUCELL® vacuum drying ovens, where there is the opportunity of extrusion of air by inert gas. Also complicated components with hardly accessible hollow spaces are drying quick and effectively in VACUCELL® ovens. Ideal for drying of samples to constant weight. Special application of the device is possible mainly in the fields of plastics processing, pharmaceutical, chemical, electro technical and other industries.

- Volume: 22, 55, 111 litres
- Working temperature: 5°C above ambient temperature up to 200°C
- Door window
- Integrated duct for sensors etc. (Ø 40 mm)
- Inert gas connection
- Needle valve for fine dosing
- Pressure resistant inner chamber
- Safety valve-door VENTIFLEX
- Interior: stainless steel, mat. No. 1.4571 (AISI 316Ti)

### The Versatile Standard Line with Microprocessor Control Unit

#### Options

- 3 adjustable programs
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm in error state
- time range 99 hours 59 minutes
- digital safety thermostat
- manual control of the air exhaust flap
- programme cycles



- base box Vacustation
- chemically resistant vacuum pump
- chemically resistant vacuum pump with inlet separator and exhaust condenser
- built-in vacuum control system
- Electronic pressure measuring and indication on the display
- special software WarmComm 4.0
- separate PT 100 sensor
- stainless steel casing of the devices

... standard line

### The High-Tech Comfort Line with Multi-Functional Microprocessor Control Unit

#### Options

- 6 adjustable programs
- chip card system for individual program storage
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm in error state
- time range 0–40 years with 1 min intervals
- digital safety thermostat
- real time
- selectable rate of temperature increase or decrease – "RAMPS"
- programming of program time segments – "SEGMENTS"
- programme cycles
- manual control of the air exhaust flap
- keyboard blocking
- door opening control



- base box Vacustation
- chemically resistant vacuum pump
- chemically resistant vacuum with inlet separator and exhaust condenser
- built-in vacuum control system
- Electronic pressure measuring and indication on the display
- BMS relay alarm contact
- special software WarmComm 4.0
- separate PT 100 sensor
- stainless steel casing of the devices

... comfort line

Technical data					
Inter dimensions – chamber, stainless steel DIN 1.4571	volume	l	22	55	111
	width	mm	340	400	540
	depth	mm	260	320	410
	height	mm	300	430	480
External dimensions (including door and handle, feet)	width	max. mm	560	620	760
	depth	max. mm	490	550	640
	height	max. mm	700	830	880
Package – dimensions (three-layer carton)	width	cca mm	740	830	830
	depth	cca mm	615	635	730
	height (incl. palette)	cca mm	915	1010	1070
Screens/shelves	standard equipment	psc.	2	2	2
	min. distance between screens	mm	40	47	47
	storage area	mm	280 × 236	340 × 296	480 × 386
Maximal load	for a shelf	kg/shelf	20	25	25
	total inside of device	kg/case	35	45	65
Weight	nett	cca kg	65	98	130
	brutt (carton)	cca kg	76	110,5	144,5
Electrical data – mains 50/60 Hz	max. power	kW	0,8	1,2	1,8
	power input [stand by]	W	5	5	5
	current voltage *)	A	3,5	5,2	7,8
		V	230	230	230
	current voltage *)	A	7	10,5	15,7
		V	115	115	115
Protective system			IP20	IP20	IP20
Temperature data					
Working temperature	from 5°C above ambient	to °C	200	200	200
Temp. deviations acc. to DIN 12 880 from working temperature (Al racks, pressure 5-10 mbar) **)	in space at 100°C	± °C	2	2	3
	in space at 200°C	± °C	5	6	7
	in time	± °C	0,4	0,4	0,4
Temp. deviations acc. to DIN 12 880 from working temperature (stainless racks, pressure 5-10 mbar) **)	in space at 100°C	± °C	10	10	11
	in space at 200°C	± °C	18	23	•
	in time	± °C	0,5	1	1
Time of rise onto 98% voltage 230 V – Al racks, pressure 5-10 mbar	onto temp. 100°C	min	60	65	110
	onto temp. 200°C	min	80	85	130
Time of rise onto 98% voltage 230 V – stainless racks, press 5-10 mbar	onto temp. 100°C	min	130	140	170
	onto temp. 200°C	min	170	180	220
Heat emission	at 100°C	W	150	260	370
	at 200°C	W	300	520	750
Vacuum connection	vacuum connection	DN mm	16	16	16
	measuring feedthrough	DN mm	40	40	40
	needle valve for inert gas or air	Ø mm	8	8	8
	max. attainable vacuum	mbar	< 5.10-4	< 5.10-4	< 5.10-4
	chamber untightness	mbar.l.s <sup>-1</sup>	< 5.10-3	< 5.10-3	< 5.10-3

Note:

All technical data are related to 22°C ambient temperature and ± 10% voltage swing (if not specified).

• not measured

\*) The mains voltage is shown on the unit type label.

\*\*) The heat in vacuum is transferred to the goods on the shelves by conduction in the shelves, therefore the mentioned temperature deviations are valid for temperatures on the surface of the shelves, there must be a perfect heat-conducting contact between the temperature sensors and the shelf surface. Goods placed on the shelves must also be in a perfect contact with the shelves, the goods temperature depends especially on their physical properties and on the contact with the shelf.

The values may differ depending on specific charge and media parameters.

Changes in the design and make reserved.