Laboratory Ovens with Vacuum

ACUCELL®													MM	
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Drying in vacuum with the possibility of air displacement using inert gas is offered by the VACUCELL® line, usable for temperature-unstable and oxidation-sensitive substances (powders, granulates, ...) as well as for shape-complicated parts with hardly accessible holes and threads. It is ideal for drying of samples so as to reach constant weight. Special application of the device is possible mainly in the field of plastics processing, in pharmaceutical, chemical, electro-technical and other industries.



Internal volume: 22, 55,111 litres Temperature range: from 5°C above the ambient temperature and up to 200°C on ECO, 250°C on EVO (300°C as option for EVO) Door window Port \varnothing 40 mm with opening in the extension Inert gas connection Needle valve for fine dosing / automatic vacuum regulation Pressure-resistant internal chamber Large-area door overpressure valve "Ventiflex" Internal chamber: stainless steel DIN 1.4571 (AISI 316 Ti)

Eco line



- Intuitive control
- Microprocessor process control Fuzzy logic
- Multi-lingual communication
- Acoustic and visual alarm LED indicator of device functionality
- LCD display 3 inches (7,6 cm)
- Transflective brilliant FSTN display, using COG technology (it is backlit and it uses external lighting reflection - higher intensity of external light increases the display readability)
- Adjustable display contrast depending on device placement •
- Exceptionally wide vision angle
- Large signs on the display visible from afar
- Current values (eq. temperature, humidity for CLIMACELL®, pressure for VACUCELL®) during the device operation are enlarged for easy readibility Resistant foil keyboard with SoftTouch surface (pleasant to touch) Mechanic response of keys
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- Lit symbols integrated directly in the foil keyboard Keyboard lock to block unauthorised access adjustable by multiple pressing Real time programming and cycling (ramps as optional equipment)

- Up to 9 programs, 2 segments for each program and up to 99 cycles. USB Host port for flash disc connection for easy export of the relevant data (optional equipment)



- Intuitive control
- Microprocessor process control Fuzzy logic
- Multi-lingual communication
- Acoustic and visual alarm •
- . LED indicator of device functionality
- LCD display 5,7 inches (14,5 cm) • Graphic displaying of a new program
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- Control through colour icons
- Touch display lock protection from unauthorised access by a password •
- Multi-level administration of users (corresponding to FDA 21 Part 11) •
 - Data coding and no-manipulability (according to FDA 21 Part 11) Up to 100 programs and up to 100 segments for each program Programming of temperature ramps, real time and cycling Annual data recording in graphic and numeric form •
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 - Data export in online and offline mode
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 - Pre-set service programs for prompt diagnostics of failures Easy service diagnostics including remote access

 - SD memory card, USB Host and interface RS 232 included as a standard Connection: WiFi, USB Device or Ethernet interface with proper IP address for remote data • transfer, control and diagnostics (optional equipment)

VACUCELL®

Technical data						
Inner space	volume	1	22	55	111	
	width	mm	340	400	540	
	depth	mm	260	320	410	
	height	mm	300	430	480	
External dimensions ((including door, handle, legs)	width	max. mm	560	620	760	
	depth	max. mm	500	560	650	
	height	max. mm	780	910	960	
Package – basic package	width	approx mm	720	780	930	
	depth	approx mm	660	730	830	
only ECO	height (including palette)	approx mm	920	1050	1100	
Package – case	width	approx mm	720	780	930	
Tuckuge cuse	depth	approx mm	660	730	830	
	height (including palette)	approx mm	960	1095	1150	
Trays	maximal number	рс	5	7	8	
	standard equipment	pc	2	2	2	
	minimal distance between trays/shelves	mm	36	43	43	
	usable area	mm	280×236	340×296	480×386	
Maximal allowed loading of trays	per 1 tray	kg	2002200	25	25	
Maximal anowed loading of trays	inside the device – in total	kg	35	45	65	
Weight	net	approx kg	65/68	98/101	130/133	
Weight	brut (cartoon)	approx kg	76/91	111/186	145/218	
Electric data	max. input	kW	0,8	1,2	1,8	
– mains 50/60 Hz	stand by input	W	5/11	5/11	5/11	
	current for voltage *)	A	3,5	5,2	7,8	
	current for voltage *)	A	7	10,4	15,6	
IP Code		11	IP20	IP20	IP20	
Temperature data			11 20	1120	1120	
Operation temperature	from 5°C above ambient temperature	to°C	200/250	200/250	200/250	
Temp. deviations acc. to DIN 12 880 from working		± °C	2	2007200	3	
temperature (Al racks, pressure	in space at 200°C	±°C	5	6	7	
5-10 mbar) **)	in time	<u>+</u> °C	0,4	0,4	0,4	
Temp. deviations acc. to DIN 12 880 from working		±°C	10	10	11	
	in space at 200°C	±°C	18	23	26	
**)	in time	±°C	0,5	1	1	
Time of rise onto 98% voltage 230 V –	onto temp. 100°C	min	60	65	110	
Al racks, pressure 5–10 mbar	onto temp. 200°C	min	80	85	130	
Time of rise onto 98% voltage 230 V – stainless	onto temp. 100°C	min	130	140	170	
racks, press 5–10 mbar	onto temp. 200°C	min	170	180	220	
Heat emission	at 100°C	W	150	260	370	
	at 200°C	W	300	520	750	
Device noise level (without air pump)		db	0	0	0	
Inert gas or air connection	Needle valve ECO	Ømm	8	8	8	
incregas of all connection	Programmable filling EVO	Ømm	8	8	8	
Vacuum connection	vacuum connection	DN mm	16	16	16	
	measuring feedthrough	DN mm DN mm	40	40	40	
			40 5.10-4			
	max. attainable vacuum	mbar mbar		5.10-4	5.10-4	
	chamber untightness	mbar.l.s ⁻¹	<5.10-3	<5.10-3	<5.10-3	

Note:

VACUCELL® ECO Line/VACUCELL® EVO Line

All the technical data apply to 22°C of ambient temperature and \pm 10% voltage oscillation (unless stated otherwise).

*) Mains voltage is specified on type label of the device.

**) Transport of heat to materials on the shelves is – in vacuum – performed by leads in the shelves and that is why the specified temperature variations apply to temperatures on shelves surface. The measuring temperature sensors must have perfect conductive contact with the shelf surface. Objects placed on shelves must also be in perfect contact with shelves, the temperature of objects depends mainly on their physical characteristics and on contact with the shelf.

The values may differ depending on specific charge and media parameters. Changes in the design and make reserved.



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