

VENTICELL®

Laboratory Ovens with Forced Air Convection



Thanks to patented system of forced air convection, the VENTICELL® line guarantees homogenous temperature distribution in all the drying and heating processes. Higher speed and precision of all the tempering procedures guarantees economical operation. Suitable mainly for high-humidity materials.

Internal volume: 22, 55, 111, 222, 404, 707, 1212 litres (pass-through version except for the volume 22, 1212 l)
Temperature range: from 10°C above the ambient temperature up to 250/300°C
Internal chamber: stainless steel DIN 1.4301 (AISI 304)
Clean premises version – on request.

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 (eg. temperature, humidity for CLIMACELL®, pressure for VACUCELL®) during the device operation are enlarged for easy readability
- Resistant foil keyboard with SoftTouch surface (pleasant to touch)
- Mechanic response of keys
- 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)

Evo line



- 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
- 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
- Data export in online and offline mode
- 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)

Technical data														
Inner space	volume	l	22	55	55-2	111	111-2	222	222-2	404	404-2	707	707-2	1212
	width	mm	240	400	400	540	540	540	540	540	540	940	940	3x540
	depth	mm	320	370	370	370	370	520	520	520	520	520	540	520
	height	mm	300	350	350	530	530	760	760	1410	1410	1410	1410	1410
External dimensions (including door, handle, legs N or casters K)	width	max. mm	406	620	620	760	760	760	760	760	760	1160	1160	2175
	depth	max. mm	560	640	660	640	660	790	806	790	806	790	806	845
	height	max. mm	610N	680N	680N	860N	860N	1095N	1110N	1910K	1910K	1910K	1910K	1910
	ventilation neck diameter - internal / external	mm	52/49	52/49	52/49	52/49	52/49	52/49	52/49	52/49	52/49	52/49	52/49	52/49
Package – basic package	width	approx mm	500	700	700	830	830	860	860	830	830	1230	1230	2360
	depth	approx mm	720	730	730	730	730	860	860	860	860	860	860	1020
	height (including palette)	approx mm	810	875	875	1060	1060	1260	1260	2085	2085	2085	2085	2100
Package – case	width	approx mm	720	780	780	810	810	920	920	910	910	1335	1335	2360
	depth	approx mm	780	800	800	910	910	960	960	970	970	1060	1060	1020
	height (including palette)	approx mm	835	900	900	1085	1085	1310	1310	2123	2123	2163	2163	2240
Package – wooden crate	width	approx mm	-	780	780	900	900	900	900	910	910	1310	1310	-
	depth	approx mm	-	800	800	800	800	940	940	940	940	940	940	-
	height (including palette)	approx mm	-	870	870	1090	1090	1270	1270	2120	2120	2120	2120	-
Trays / shelves	maximal number	pc	4	4	4	7	7	10	10	19	19	19	19	3x19
	standard equipment	pc	2	2	2	2	2	2	2	2	2	2	2	6
	minimal distance between trays/shelves	mm	60	70	70	70	70	70	70	70	70	70	70	70
	usable area	mm	185x265	380x335	380x335	520x335	520x335	520x485	520x485	520x485	520x485	920x485	920x485	520x485
Maximal allowed loading of trays *)	per 1 tray	kg	10	20	20	20	20	30	30	30	30	50	50	30
	per 1 shelf	kg	10	20	20	20	20	30	30	30	30	20	20	30
	inside the device - in total	kg	25	50	50	50	50	70	70	100	100	130	130	300
Number of external metal door	pc	1	1	2	1	2	1	2	1	2	2	2	4	3
Weight	net	approx kg	31	55	60	75	80	100	105	150	160	215	230	475
	brut (cartoon)	approx kg	36	66	71	87	92	116	121	175	185	240	255	525
Electric data - mains 50/60 Hz	max. input	kW	0,96	1,3	1,9	1,9	2,5	1,9	3,7	3,7	5,5	4,9	7,3	11,3
		stand by input	W	5	5	5	5	5	5	5	5	5	5	5
	current for voltage **)	A	4,2	5,6	8,3	8,3	10,6	8,3	5,6	5,6	8,3	7,8	15,6	2*15,7/17,7
		V	230	230	230	230	230	230	400/3NPE	400/3NPE	400/3NPE	400/3NPE	400/3NPE	400/3NPE
	current for voltage **)	A	8,4	11,3	16,6	16,6	21,2	16,6	19	19	28	28	42	-
		V	115	115	115	115	115	115	115/3PE	115/3PE	115/3PE	115/3PE	115/3PE	115/3PE
IP Code		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Temperature data														
Operation temperature	from 10°C above ambient temperature	to°C	250/300	250/300	250/300	250/300	250/300	250/300	250/300	250/300	250/300	250/300	250/300	250/300
Variations from operation temperature with closed flap and door (DIN 12 880 part 2)	space	± % temp.	1,1	1	2	1	1	1	1,2	1,5	1,8	2,5	2,5	4
	time	±°C	0,3	0,3	1,2	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,74	1,3
Time to reach temperature of 250°C with closed flap and voltage 230 V		min	28	49	-	53	-	70	33	58	43	64	50	68
Number of air exchanges at 250°C		per hour	45	45	45	49	49	24	24	18	18	12	12	16
Heat losses	at 250°C	W	420	590	590	760	760	990	990	1940	1940	2550	2550	5920
Hladina hluku komplet. přístroje		dB	<55	<55	<55	<55	<55	<55	<55	<58	<58	<58	<58	<58

Note:

All the technical data apply to 22°C of ambient temperature and ± 10%.

Standard version up to 250°C, optional version up to 300°C.

*) The trays may be covered to approximately 50% of their surface and if possibly in such a way so as the air may evenly flow inside the chamber space.

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

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

Changes in the design and make reserved.

MMM Medcenter Einrichtungen GmbH,

Semmelweisstrasse 6, D-82152 Planegg / München

Tel.: +49 89 8992 2620,

Fax.: +49 89 8992 2630,

E-mail: medcenter@mmm-medcenter.de,

www.mmm-medcenter.de

