

# ECOCELL®

Laboratory Ovens with Natural Air Convection



MMM Group

NEW



The line of economic ovens with wide temperature range, exact and reliable course of simple processes of material heating and drying. The ECOCELL® line is characterised by noiseless operation and slow air flow in usable space.

Internal volume: 22, 55, 111, 222, 404, 707 litres  
Temperature range: from 5°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

On sale from 2020



- 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	111	222	404	707
	width	mm	240	400	540	540	540	940
	depth	mm	350	370	370	520	520	520
	height	mm	300	350	530	760	1415	1415
External dimensions (including door, handle, legs N or casters K)	width	max. mm	406	620	760	760	760	1160
	depth	max. mm	560	640	640	790	790	790
	height	max. mm	610N	680N	860N	1095N	1910K	1910K
	ventilation neck diameter - internal / external	mm	52/49	52/49	52/49	52/49	52/49	52/49
Package – basic package	width	approx mm	500	700	830	860	830	1230
	depth	approx mm	720	730	730	860	860	860
	height (including palette)	approx mm	810	875	1060	1260	2085	2085
Package - case	width	approx mm	720	780	810	920	910	1335
	depth	approx mm	780	800	910	960	970	1060
	height (including palette)	approx mm	835	900	1085	1310	2123	2163
Package – wooden crate	width	approx mm	-	780	900	900	910	1310
	depth	approx mm	-	800	800	940	940	940
	height (including palette)	approx mm	-	870	1090	1270	2120	2120
Trays / shelves	maximal number	pc	4	4	7	10	19	19
	standard equipment	pc	2	2	2	2	2	2
	minimal distance between trays/shelves	mm	60	70	70	70	70	70
	usable area	mm	185x265	380x335	520x335	520x485	520x485	920x485
Maximal allowed loading of trays *)	per 1 tray	kg	10	20	20	30	30	50
	per 1 shelf	kg	10	20	20	30	30	20
	inside the device - in total	kg	25	50	50	70	100	130
Number of external metal door		pc	1	1	1	1	1	2
Weight	net	approx kg	31	55	75	100	150	215
	brut (cartoon)	approx kg	36	66	87	116	175	240
Electric data - mains 50/60 Hz	max. input	kW	0,9	1,2	1,8	1,8	3,6	5,4
	stand by input	W	5	5	5	5	5	5
	current for voltage **)	A	4	5,2	7,8	7,8	7,8	7,8
		V	230	230	230	230	400/3NPE	400/3NPE
	current for voltage **)	A	8	10,4	15,6	15,6	20,8	27,1
		V	115	115	115	115	115/3PE	115/3PE
IP Code			IP20	IP20	IP20	IP20	IP20	IP20
Temperature data								
Operation temperature	from 5°C above ambient temperature	to°C	250	250	250	250	250	250
Variations from operation temperature with closed flap and door (DIN 12 880 part 2)	space	% temperature	2,7	2	2	2	2,5	3,5
	time	±°C	1	0,3	0,8	0,8	1	1
Time to reach temperature of 250°C with closed flap and voltage 230 V		min	54	59	60	99	85	95
Number of air exchanges at 250°C		per hour	6	8	12	5	4	3
Heat losses		W	300	590	760	990	1940	2550

Note:

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

\*) 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.



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