

DUROCELL

Laboratory Ovens with Natural Air Convection



MMM Group

NEW



The special line DUROCELL with highly resistant layer of EPOLON, protecting the inner stainless steel from aggressive substances like acids and lyes. It allows optimal tempering of materials. Ideal for acid and alkali hydrolysis, extraction with non-flammables and decomposition of substances in solid phase.

Internal volume: 22, 55, 111, 222 litres
Temperature range: from 5°C above the ambient temperature up to 125°C
Internal chamber: stainless steel DIN 1.4301 (AISI 304) covered with chemically-resistant layer
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 2018



- 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
	width	mm	240	400	540	540
	depth	mm	350	370	390	520
	height	mm	300	350	530	760
External dimensions (including door, handle, legs)	width	max. mm	406	620	760	760
	depth	max. mm	560	640	640	790
	height	max. mm	610	680	860	1095
	ventilation neck diameter - internal / external	mm	52/49	52/49	52/49	52/49
Package – basic package	width	approx mm	500	700	830	860
	depth	approx mm	720	730	730	860
	height (including palette)	approx mm	810	875	1060	1260
Package - case	width	approx mm	720	780	810	920
	depth	approx mm	780	800	910	960
	height (including palette)	approx mm	835	900	1085	1310
Package – wooden crate	width	approx mm	-	780	900	900
	depth	approx mm	-	800	800	940
	height (including palette)	approx mm	-	870	1090	1270
Trays / shelves	maximal number	pc	4	4	7	10
	standard equipment	pc	2	2	2	2
	minimal distance between trays/shelves	mm	60	70	70	70
	usable area	mm	185x265	380x335	520x335	520x485
Maximal allowed loading of trays *)	per 1 tray	kg	10	20	20	30
	per 1 shelf	kg	10	20	20	30
	inside the device - in total	kg	25	50	50	70
Number of external metal door		pc	1	1	1	1
Weight	net	approx kg	31	55	75	100
	brut (cartoon)	approx kg	36	66	87	116
Electric data – mains 50/60 Hz	max. input	kW	0,9	1,2	1,8	1,8
	stand by input	W	5	5	5	5
	current for voltage **)	A	4	5,2	7,8	7,8
		V	230	230	230	230
	current for voltage **)	A	8	10,4	15,6	15,6
		V	115	115	115	115
IP Code			IP20	IP20	IP20	IP20
Temperature data						
Operation temperature	from 5°C above ambient temperature	to°C	125	125	125	125
Variations from operation temperature with closed flap and door (DIN 12 880 part 2)	space	% temperature	2,7	2	2	2
	time	±°C	1	0,3	0,8	0,8
Time to reach temperature of 100°C with closed flap and voltage 230 V		min	34	41	48	50
Number of air exchanges at 100°C		per hour	6	8	12	5
Heat losses	at 100°C	W	140	380	490	630

Note:

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



MMM Medcenter Einrichtungen GmbH,
Sammelweisstrasse 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