rycobel

Climacell - Laboratory incubator

The CLIMACELL® series was specially developed for applications, in which as far as possible exact and reproducible simulation of various environmental conditions is important, e.g. stability testing of components, packaging materials, food or chemicals, drugs, germination studies, plant cell or tissue cultures, insect cultures. This devices offers an interesting alternative to expensive testing chambers and testing rooms.

Microprocessor/controlled humidity assembly with powerful lighting system are warranty of excellent homogene parameters for tests and grow conditions.

- Volume: 111, 222, 404, 707 litres
- Working temperature: without humidity
- 0.0˚C up to 99.9˚C, with humidity: 10˚C up to 90.0˚C
- Refrigerant: R 134a
- Cooling medium for generating the humidity: distilled water
- Controlled humidity: 10% - 90% RH
- Microprocessor controlled humidifying / dehumidifying system
- Inner glass door
- Interior: stainless steel, mat. No. 1.4301 (AISI 304)

Options

- access ports 25, 50, 100 mm (50, 100 mm is not available for 22 liters volume)
- door lock
- left door versions (excluded volume 22, 404 and 707 liters)
- timer programmable water protected inner socket
- exposure lighting with digitally adjuctable light 0–100%
- exposure illumination in shelves, especially for photo-stability tests (according to ICH Guidline)
- interior lighting – a wide offer of various luminary sources (excluded volumen 22 l)
- illumination measuring VIS, UV
- enlarge the cooling of -9.9˚C
- BMS relay alarm contact
- special software WarmComm 4.0
- separate PT 100 sensor
- stainless steel casing of the device

The high-tech comfort line with multifunctional microprocessor control unit

- 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
- Adjustable ventilation rate 10 to 100%
- Manual control of the air exhaust flap
- Keyboard blocking
- Door opening control

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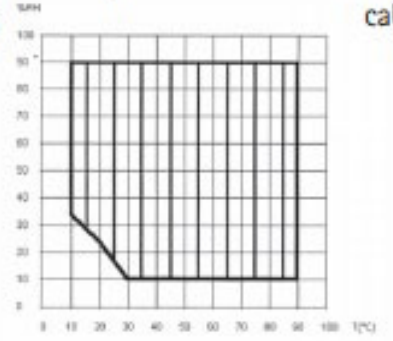
Technical data							
Inner space	volume	l	111	222	404	707	1212
	width	mm	540	540	540	940	3x540 (1905)
	depth	mm	370/380	520/530	520/530	520/530	520/530
	height	mm	530/535	760/765	1415	1415	1415
External dimensions (including door, handle, legs N or casters K)	width	max. mm	760/780	760/780	1060/1100	1460/1500	2435/2530
	depth	max. mm	750/755	900/885	860/885	860/885	870/898
	height	max. mm	1140K/1215K	1370K/1450K	1905K/1890K	1905K/1890K	1905/1921K
Package – basic package - case ECO (except 1212) - wooden crate EVO + ECO 1212	width	approx mm	830/992	830/1120	1130/1332	1530/1682	2742
	depth	approx mm	830/954	970/952	900/1062	900/1064	1137
	height (including palette)	approx mm	1320/1650	1550/1746	2090/2200	2090/2190	2240
Volume of the steam space		cca l	163/167	299/305	524/530	876/878	1753
Trays / shelves	maximal number	pc	7	10	19	19	3x19
	standard equipment	pc	2	2	2	2	6
	minimal distance between trays/shelves	mm	70	70	70	70	70
	usable area	mm	520x335	520x485	520x485	920x485	520x485
Maximal allowed loading of trays *)	per 1 tray	kg	20	30	30	50	30
	per 1 shelf	kg	20	30	30	20	30
	inside the device - in total	kg	50	70	100	130	300
Number of external metal door		pc	1	1	1	2	3
Number of inner glass doors		pc	1	1	1	2	3
Weight	net	approx kg	104/110	135/147	236/240	272/280	541/567
	brut (cartoon)	approx kg	146/220	184/263	285/390	331/500	861/887
Electric data – mains 50/60 Hz	max. input **)	kW	1,7/2	1,85/2,2	2,7	3	3,5
	stand by input	W	5/11	5/11	5/11	5/11	5/11
	current for voltage ***)	A	7,4/8,7	8,1/9,5	12	13,8	15,7
	current for voltage ***)	A	15,8/18,4	16,8/19,6	23,9	25,9	31,2
IP Code			IP20	IP20	IP20	IP20	IP20
Temperature data							
Operation temperature	from 0°C (-10°C) / 0°C(-20°C)	to°C	100	100	100	100	70
Temperature accuracy	in space at 10°C	±°C	<0,5	<0,5	<1	<1	<0,9
	in space at 37°C	±°C	<0,5	<0,5	<1	<1	<0,5
	in time	±°C	<0,2	<0,2	<0,3	<0,4	<0,2
Heating up time to 37°C from the ambient temperature		min	<11	<11	<22	<13	<30
Cooling down time from 22°C to 10°C		min	<21	<17	<19	<21	<21
Recovery time after door opened for 30 s according to DIN 12880	at 37°C	min	<4	<3	<3	<6	<10
	at 50°C	min	<5	<6	<7	<6	<10
Relative humidity	range	%	10–98	10–98	10–98	10–98	10–98
Accuracy RH ($T_{CHAMBER}$ ≥ 21°C)	in time	%	< 2	< 2	< 2	< 2	<2
Heat emission	at 37°C	W	70	63	123	148	200
Noise level of complete device		db	46	50	56	58	60

Note:
CLIMACELL® ECO Line/CLIMACELL® EVO Line
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.
**) Automatics + compressor + condenser + electromagnetic valves + ventilator (s) + 1/2 heating of the chamber + steam generator heating.
***) 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.

Setting operating conditions of temperature and relative humidity and their limitations

cabinet without door lighting



cabinet with door lighting