

CLIMACELL®

With Forced Air Convection, Cooling
and Controlled Humidity



Laboratory incubators

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 device offers an interesting alternative to expensive testing chambers and testing rooms. Microprocessor/controlled humidity assembly with powerful lighting system are warranty of excellent homogeneous 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)

The High-Tech Comfort Line with Multi-Functional Microprocessor Control Unit Options

- 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



- access ports Ø 25, 50, 100 mm
- automatic door lock
- left door versions (excluded volume 404 and 707 liters)
- timer programmable water protected inner socket
- exposure lighting with digitally adjustable light 0–100%
- exposure illumination in shelves, especially for photo-stability tests (according to ICH Guideline)
- interior lighting – a wide offer of various luminary sources
- 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

... comfort line

Technical data		Model	111	222	404	707
Inter dimensions Chamber, stainless steel	volume	l	111	222	404	707
	width	mm	540	540	540	940
	depth	mm	370	520	520	520
	height	mm	530	760	1410	1410
Outer dimensions (incl. door and handle, and Rollers)	width	max. mm	760	760	1010	1460
	depth	max. mm	640	790	790	790
	height	max. mm	1100	1330	1910	1910
Package dimensions (three layers carton)	width	cca mm	830	860	1080	1540
	depth	cca mm	730	830	860	860
	height	cca mm	1280	1510	2100	2100
Volume of the steam space		cca l	163	299	524	876
Trays, shelves	max. number	pcs	7	10	19	19
	standard equipment	pcs	2	2	2	2
	Min. distance between trays	mm	70	70	70	70
	Storage area (w x d)	mm	520x335	520x485	520x485	920x485
Admissible weight of trays *)	per 1 tray	kg	20	30	30	50
	for a rack	kg	20	30	30	20
	together inside the oven	kg	50	70	100	130
Number of outer metal doors			1	1	1	2
Number of inner glass doors			1	1	1	2
Weight	netto	cca kg	101	132	230	270
	brutto	cca kg	131	169	270	316
Electricity data	max. power consumption	W	2050	2100	3150	3400
	mains 50/60 Hz Protective system	V IP 20	230 IP 20	230 IP 20	230 IP 20	230 IP 20
Temperature data						
Working temperature without humidity	from (-9,9°C)** 0°C	°C	99,9	99,9	99,9	99,9
with humidity***	from 10°C		90,0	90,0	90,0	90,0
Temperature accuracy						
in space	at 10°C	± °C	< 0,5	< 0,5	< 1	< 1
	at 37°C	± °C	< 0,5	< 0,5	< 1	< 1
in time		± °C	< 0,2	< 0,2	< 0,3	< 0,4
Heating/up time to 37°C from the ambient temperature		min	20	25	26	27
Cooling/down time from 22°C to 10°C		min	< 21	< 21	< 21	< 21
Recovery time after 30 sec. door open according DIN 12 880	at 37°C	min	4	4	4	4
	at 50°C	min	4	4	4	4
Relative humidity	range	%	10–95	10–95	10–95	10–95
Heat emission	at 37°C	W	70	97	123	148
Noise level – complete incubator		db	46	50	56	58

*) Approx. 50% of the tray area can be filled in a way a uniform air circulation is enabled inside the chamber.

**) on request

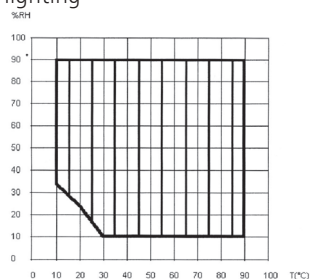
***) Operating temperature range is limited according to equipment – see Instructions for use

Note: All technical data are related to 22°C of ambient temperature and ±10% voltage swing rate ventilator 100%, defrost off, lighting off.

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

