

Life Science Business Unit _ AS Division

Stability test and plant growth chambers EKOCT - EKOCTL - EKOCH - EKOCHL Series



ALS
SERVING
LIFE SCIENTISTS

- **Maximum reliability.**
- **High precision in regulation and control by PLC and P.I.D.**
- **Maximum accuracy in testing.**
- **Low energy consumption.**
- **Low noise.**
- **Easy to use.**

AS

EG

STERIL



Angelantoni Life Science (ALS), a sub-holding fully owned by Angelantoni Industrie, is one of the leading international companies in the supply of refrigerating equipment and the design of technological solutions in the biomedical industry, with a constant commitment to biological and environmental innovation and safety.

Research centers, hospitals, laboratories, universities and industrial companies in the pharmaceutical and chemical industry are the recipients of ALS production, which covers all the needs for refrigeration, infection control and microbiological safety with a wide range of standard and special products. With its agents and distributors in over 40 countries, Angelantoni Life Science is the ideal partner in the healthcare sector and scientific research.

Our strength comes from the skills of our engineers and the experience they have gained in design, from the professionalism of our technicians in production and service and the coordination of experienced managers supporting our staff. Each team member contributes their enthusiasm and scientific and industrial knowledge to a work environment that stimulates innovation and development. Angelantoni Life Science invests more than 10% of its turnover in Research and Development, involving a multidisciplinary team of technicians and researchers.

Founded in 1932, Angelantoni Industrie is an industrial group with 4 plants and over 500 employees. It is one of the world's leading companies in the production of environmental and space simulation chambers (ATT Angelantoni Test Technologies), cold technology applications in pharmaceutical and hospital research (ALS Angelantoni Life Science), Energy Efficiency (Turboalgor) and Solar Thermodynamic Energy (Archimede Solar Energy receiver tubes).



Angelantoni Plants



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Life Science Business Unit
AS - Biomedical Equipment Division

Stability test and plant growth chambers
EKOCT - EKOCTL - EKOCH - EKOCHL Series

Angelantoni
TECHNOLOGY FOR LIFE

ALS
SERVING
LIFE SCIENTISTS

Life Science Business Unit _ AS Division
Stability test and plant growth chambers
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→ The small external dimensions, easy use, reduced consumption of energy and high reliability are the main reasons of success of this line of climatic chambers for performing stability tests in the chemical-pharmaceutical sector and temperature, humidity and controlled lighting cycles for growing plants, insect incubation and food industry.

PRO → Professional Line
Technical features



01
02

Structure / Zinc plated steel to ensure durability. Internal chamber with rounded corners for easy cleaning and a bottom section able to contain liquids that are accidentally spilt. EKOCHL and EKOCTL models are provided with high density fluorescent lamps mounted on the side walls. The available light is 20.000 lux, at a distance of 150 mm. from inner glass walls. Mounted on castors for easy moving and adjustable feet for proper positioning.

Door / Made with the same features of the frame, equipped with a magnetic lock, odorless rubber gaskets and anti-moisture resistor on the door. Mechanical door lock at 90°, to facilitate the loading and unloading of samples. Key lock to preclude access by unauthorized personnel. Inner door in tempered glass, to guarantee the preservation of the content during door opening.

Port hole / Diameter 23 mm, with rubber cap for the insertion of additional probes.

Shelves / Stainless steel internal shelves adjustable in height.

Internal lamp / Door open courtesy light.

Insulation / Injected CFC-free foamed polyurethane. The 75 mm thickness offers a significant energy saving.

Cooling system / Fully sealed, placed on the top side of the cabinet, achieved by the use of a low noise hermetic compressor and air condenser. Copper pipes evaporator. Inner ventilation.

Humidification system (EKOCH and EKOCHL) / By a low-pressure steam generator equipped with demineralised water boiler.

Adjustment and control system / All models are equipped with a digital P.I.D. regulator for **temperature** adjustment and control through a PT100 probe in Class A. EKOCH and EKOCHL models have an additional P.I.D. regulator to control **relative humidity** through a capacitive probe.

03



EKOCHL and EKOCTL features weekly mechanical timer located on the control board of the chamber to control **lamps on/off** (intensity: OFF 0 Lux; ON 20.000 Lux)).

On request / Regulators and timer can be replaced by an **electronic programmable controller** (PLC) that allows the execution of humidity, temperature and lighting cycles (daylight/sunrise/sunset simulation).

Optional

- Chart recorder
- Shelf
- 23-50 mm port hole
- Software
- External stainless steel execution
- PT 100 probe
- Alarm system



Technical data

Model	EKOCH				EKOCT	
	700	1500	900P	1500P	700	1500
Comercial code	12880	12881	13379	13383	12871	12873
Capacity (l)	700	1500	900	1500	700	1500
Temperature range (°C)	-10°C / +60°C		-20°C / +60°C		+10°C / +50°C	
Dewpoint (°C)	+5°C				/	
Relative humidity (%)	20/90				/	
Humidity precision (%)	-/+4				/	
Supply voltage (V)	230v (+6 / -10%) 50-60 Hz 1+T(G)					
Maximum absorbed current (A)	11				8	9
Cooling gas	R134A		R452A		R134A	
External dimensions (mm)	740(L)x940(P)x2020(H)	1480(L)x940(P)x2020(H)	810(L)x1135(P)x2020(H)	1480(L)x940(P)x2020(H)	740(L)x815(P)x2020(H)	1480(L)x815(P)x2020(H)
Internal dimensions (mm)	590(L)x600(P)x1500(H)	1330(L)x600(P)x1500(H)	660(L)x800(P)x1500(H)	1330(L)x600(P)x1500(H)	590(L)x600(P)x1500(H)	1330(L)x600(P)x1500(H)
Overall weight with standard packaging (Kg)	180	270	210	270	180	270
Noise level (dbA)	< 65					

Model	EKOCHL			
	700	1500	900P	1500P
Comercial code	12884	12885	13413	13302
Capacity (l)	700	1500	900	1500
Temperature range (°C) with lights on	+10°C / +50°C			
Temperature range (°C) with lights off	+10°C / +50°C		-10°C / +60°C	
Dewpoint (°C)	+5°C			
Relative humidity (%)	20/90			
Intensity light (lux)	0 / 20.000			
Humidity precision (%)	+ 5			
Supply voltage (V)	230v (+6 / -10%) 50-60 Hz 1+T(G)			
Maximum absorbed current (A)	20			
Cooling gas	R134A		R452A	
External dimensions (mm)	840(L)x940(P)x2100(H)	1580(L)x940(P)x2100(H)	910(L)x1135(P)x2100(H)	1580(L)x940(P)x2100(H)
Internal dimensions (mm)	590(L)x600(P)x1500(H)	1330(L)x600(P)x1500(H)	660(L)x800(P)x1500(H)	1330(L)x600(P)x1500(H)
Overall weight with standard packaging (Kg)	190	280	220	280
Noise level (dbA)	< 65			

- 01. Control board with PLC.
- 02. Control board with P.I.D regulator.
- 03. EKOCHL 700 open.
- 04. EKOCHL 1500 open.
- 05. EKOCH 1500 inner door detail.



04
05

→ Illustration, description and technical data may be changed without notice.