# CLIMATE CHAMBER



#### Product description

- Environmental Test Chambers designed for pharmaceutical stability drug testing. Other applications include: shelf life studies, stability and package testing, temperature elevation studies.
- Great value per footprint
- Precise temperature and humidity control
- Low water and power consumption
- Designed to fit the most exigent pharmaceutical requirements
- Exterior: and epoxy powder coated
- Interior chamber: AISI 304 stainless steel
- High durability and easy-to-clean
- Easy installation, low investment to adjust the climatic chamber installing area
- Low noise level.

#### **Technical Characteristics**

- Ecological refrigeration system, no CFC
- Thermal isolation with low temperature dissipation, silicon sealed door
- Temperature control and reading through sensor PT100 with 0,1°C resolution
- Exclusive humidity system that does not damage the outside of the tested product
- Temperature elevation protection system, assuring product's integrity in stability tests
- Humidity display equipped with a 0,1% RH resolution probe
- Inner door in tempered glass for better inner visualization, no test interruption and easy recovery of the controlled ambience
- External door with key locking system
- Easy access for humidity system cleaning and maintenance
- Size flexibility from 150 to 1.200 liters (check technical specification chart)
- Reverse osmosis water treatment system included.

#### ethik EXCLUSIVE SOFTVVARE



Better user touch screen interaction software, for easy and clear operation.



Easy and simple control programming of temperature on a colorful and graphic interface on a  $6^{\prime\prime}$  screen.



Exclusive security system which allows access control (LOGIN) for every user



- Programmable software to activate audio-visual alarm in case of exceeded temperature or humidity rate.
- Software that shows on screen lack of water or out of programmed range humidity level.

#### INCLUDED ACCESSORIES AND COMPONENTS



- Stainless steel wire tray
- Audio and visual alarm system in case of temperature, humidity and lack of water flaws
- Mechanical adjustable security thermostat
- Reverse osmosis water treatment
- Side access to inner chamber for cables and tubes
- Operational manual
- RBC Calibration Certificate, for temperature controller
- Connection for Data Logger (4 to 20mA)

#### **OPTIONAL**



- IQ, OQ, PQ protocols
- Software for RDC 301 and GAMP5 requirements

## **Technical Specifications**

Temperature range	20°C to 60°C
Humidity range	20 to 90%RH
Temperature control	PID
Temperature control resolution	± 0,1°C
Humidity control resolution	± 0,1%Ura
Display Resolution	colored 4 digit TouchScreen
Temperature sensor	PT 100
Humidity sensor	Capacitive probe 0,1% resolution
Output	4 to 20mA
Inner capacity	150 to 1200 L
Water flow entrance	Automatic with level control
Water connection entrance	1/2"Bsp
Drain connection	3/4"Bsp
Flow pressure	0,5 to 4 kgf/cm2
Temperature uniformity	± 2°C
Humidity uniformity	± 5%
Refrigeration system	Hermetic compressor
Refrigeration gas	R134a
Heating system	Stainless steel tubular resistance
Protection grade	IP 20
Electrical specs	110V or 220V 50Hz/60Hz
Output Plug	3 pins, NBR IEC 60309-1

### Climatic Chamber 420 CLDTS Information

CIZE	INTERIOR			EXTERIOR				
SIZE	WIDTH mm	DEPTH mm	HEIGHT mm	intern volume l	WIDTH mm	DEPTH mm	HEIGHT mm	extern volume l
150	500	500	550	138	660	820	1370	741
300	500	500	1180	295	660	780	1780	916
600	670	680	1280	583	830	970	1880	1514
900	1011	685	1335	925	1160	975	1909	2160
1200	1250	750	1300	1219	1430	1100	1900	2989
SIZE	WEIGHT Kg	ELETRICAL SPECS W	TRAY AMOUNT SUPPORT	tray amount	MAXIMUM WEIGHT PER TRAY Kg		DOOR AMOUNT	
150	82	4200	5	3	20		1	
300	101	4500	11	5	20		1	
600	167	4500	12	5	30		1	
900	245	9600	12	5	30		2	
1200	329	9600	12	5	30		2	