

# Environmental and Humidity Chambers



# Environmental Chambers

## LEC-100 Series

LEC-100 A & B ▶



LEC-100 C ▲

### Features :

#### ◆ Precision Temperature Control :

- Forced air circulation of chilled air by durable coaxial blower to achieve homogeneous heating and cooling dissipation throughout the chamber.
- From 0°C~10°C,  $\pm 0.1^\circ\text{C}$  accuracy &  $\pm 2.0^\circ\text{C}$  uniformity maximum.
- Digital controller enables  $\pm 0.1^\circ\text{C}$  resolution and control.
- Equipped with wait-off timer, alarm, auto-tuning and in built temperature calibration function.

#### ◆ Modern Design :

- Aero-dynamic design of air circulation from heating chamber located in back wall by vertical air flow achieve superior temperature uniformity.
- Stainless steel chamber prevents corrosion for life-time use.

#### ◆ Convenience & Safety :

- Transparent tempered safety inner glass window.
- Height adjustable shelves by 25mm increment.
- Casters for easy movement.
- Over-temperature protection safety.
- Electrical leakage cut-off.

### Technical Specification & Ordering Information :

Model No.	LEC - 100 A	LEC - 100 B	LEC - 100 C
Chamber Volume (Capacity) (L)	250	700	1176
Temperature	Heating Type		
	Forced convection by Co-axial fan		
	Range ( $^\circ\text{C}$ )		
	0~10 (normal using temperature is $+4^\circ\text{C} \pm 2^\circ\text{C}$ )		
Control	Accuracy		
	$\pm 0.1^\circ\text{C}$ at $+4^\circ\text{C}$		
	Uniformity		
	$\pm 2.0^\circ\text{C}$ at $+4^\circ\text{C}$		
Safety Device	Main Controller		
	Digital controller		
	Wait off Timer		
mm:ss / hh:mm / Continuous selectable			
Dimension	Sensor ( $\Omega$ )		
	Pt 100		
(W x D x H) mm	Temperature		
	Hydraulic over temperature protection safety device		
Material	Electrical		
	Electrical leakage breaker		
Catalog No.	Inner	500 x 500 x 1000	700 x 700 x 1400
	Outer	680 x 790 x 1600	880 x 990 x 1980
	Inner	Stainless steel 0.8 T polished (SUS304)	
	Outer	Steel 1 T with epoxy powder coating	
	Inner Door	Tempered Safety glass 5.0 mm thick with foamed silicon packing	
	Outer Door	Magnetic packing door	
	27150101	27150102	27150103

# Climatic Chambers

## LCC-100 Series

### Features :

- ◆ **Digital PID Programmable Control :**
  - With programmable controller provides precise temperature and humidity control.
- ◆ **Tempered Safety Glass Window :**
  - Double larger glass window for sample observations.
- ◆ **Safety Feature :**
  - Over temperature, low water cut off & electrical leakage breaker.



LCC-100 A (CP/CPL), LCC-100 B (CP/CPL),  
LCC-100 C (CP/CPL), LCC-100 D (CP/CPL)

### Technical Specification & Ordering Information :

Model No.		LCC-100 A (CP) LCC-100 A (CPL)	LCC-100 B (CP) LCC-100 B (CPL)	LCC-100 C (CP) LCC-100 C (CPL)	LCC-100 D (CP) LCC-100 D (CPL)
Chamber Capacity (L)		150	250	500	800
Temperature	Heating Type	Forced convection by silent blower fan			
	Range (°C) for CP Model	-20 ~ 120			
	Range (°C) for CPL Model	-40 to 150			
	Accuracy	±0.3°C at 20°C			
	Uniformity	±0.8°C at 20°C			
Humidity	Humidifier Type	Water boiler with immersed incolony sheath heater			
	Range (%) RH	35 - 98 (depends on temperature range)			
	Accuracy	±3.0% at 60%			
	Uniformity	±6.0% at 60%			
Control	Main Controller	Digital programmable microprocessor PID controller			
	Program	10 segments, 999 cycle or continuous			
	Sensor (Ω)	Pt 100 for temperature / Electronic sensor for humidity			
Safety Device	Temperature	Hydraulic over temperature protection / Low water level warning and cut-off			
	Electrical	Electrical leakage breaker			
Dimension (WxDxH) mm	Inner	500 x 500 x 600	600 x 600 x 700	800 x 700 x 800	1000 x 800 x 1000
	Outer	1000 x 900 x 1300	1100 x 1000 x 1500	1300 x 1000 x 1700	1500 x 1200 x 1900
Material	Chamber	1.0 Gauge stainless steel polished (SUS304)			
	Outer	Steel 1 T with epoxy powder coating			
	Door	Tempered safety glass window			
	Utility	Water inlet / Water outlet / Over flow / Drain			
Catalog No. for CP Model		27150201	27150202	27150203	27150204
Catalog No. for CPL Model		27150205	27150206	27150207	27150208

# Humidity Chambers

## LHC-100 Series

### Features :

- ◆ **Combo-Microprocessor Control :**
  - MPU Inside controller is available, complex task with memorising LED & LCD displayer shows fine and easy view of status.
- ◆ **Ceramic Humidity Sensor :**
  - Ceramic Humidity Sensor controls humidity in the condition of temperature range -20°C to 150°C.
- ◆ **Self Diagnostics :**
  - Diagnostic system indicates an error code on the display when it detects a problem.
- ◆ **10 Step Programmable :**
  - Store 10 programs in different conditions (Separate a day by 10 steps).
- ◆ **Ideal Construction :**
  - Maintain the humidity by streaming water along the wall. Stainless steel wall protect the equipment from erosion.
- ◆ **Safety Device :**
  - Over/under temperature protector, level monitor, power breaker.



LHC-100 A, B & C

### Technical Specification & Ordering Information :

Model No.		LHC-100 A	LHC-100 B	LHC-100 C
Capacity (L)		800	350	150
Main Control		Full microprocessor controller		
Display		LCD & LED		
Temperature	Range (°C)	-20 to 100 / -30 to 150 (Option)		
	Accuracy	±0.3°C at 37°C		
	Controller	Digital PID Controller		
	Program	10 Step Program		
Humidity	Range (%) RH	30 to 98		
	Accuracy	±1% at 70%		
	Controller	Digital PID Controller		
	Program	10 Step program		
Sensor		Ceramic electronic device		
Humidifier		Evaporation by motor with SUS316 pipe heater		
Dimension	Inner	1000 x 800 x 1000	600 x 700 x 800	500 x 500 x 600
	Outer	1490 x 1200 x 1850	1090 x 1100 x 1650	990 x 900 x 1450
Material	Inner	Stainless steel, SUS 304		
	Outer	Steel plate with powder coating		
	Door	Silicon packing magnet door		
	Shelf	3EA / adjustable type		
Cooling Device		Hermetically sealed compressor, auto exchange dual chamber		
Safety Device		Over/Under temperature protector, level monitor, power breaker		
Catalog No.		27110101	27110102	27110103