



HUMIDITY CHAMBER

AN ISO 9001 : 2015 CERTIFIED CO. & CE MARK PRODUCT

Model No : SRL / HC-09



Construction :

These chamber are triple wall PUF insulated modular panel.

Interiors executed in Stainless Steel S.S.304 with Rib.

Exterior executed in CRCA with non-contaminant epoxy powder coated.

The door shall be made of 80mm thick PUF insulated panel clad with SS 304 inner & CRCA epoxy powder coated on outer, flash type fitted with glass viewing window, cam hinges, lock, and door closer. The door is sealed with the silicon gasket to prevent the leakage.

Humidification :

Air Heaters are provided for heating above ambient temperatures. Humidity is controlled by steam injection method. The boiler tank is used for steam generation, Electro-magnetic switch is used for sensing the Water Level. Thus eliminating the humidity interruption.

De-Humidification :

De-humidification coils are installed below the cooling coils for lower humidity.

Application :

These equipments are used for climatic & durability tests of electrical & electronic components, corrosion test on mechanical assemblies, tests on packages, paints & varnishes, cement plants, apparatus & materials for simulated tropical & extreme tropical conditions & for botanical & zoological investigations, testing of chemicals, drugs, pharmaceutical, cosmetics, medicine, capsules etc.

Heating System :

Custom built stainless steel tubular heaters are used as heating element. The stainless steel fins ensure better heat transfer.

Temp. Range :

+ 10°C to 60°C

Accuracy : 0.2°C, **Uniformity :** $\pm 1^\circ\text{C}$

Humidity Range : 40% to 95% RH, **Accuracy :** $\pm 3\%$ R.H.

Air Circulation :

Suitable capacity blower, circulating and distributing uniform air velocity throughout the chamber maintains uniformity of Temperature and Humidity.

Optional :

To be provided with air flow regulator adjustable from 50% to 100% depending up the Stability.

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Refrigeration system :

A hermetically sealed compressor with CFC free refrigerant provides temperature below ambient conditions.

Controls : [Touch Screen]

Microprocessor based temp. & RH Controls with LCD display & PT-100 class 'A' for temp. & hygroclip sensor for RH (Non-condensing type). Histogram format temp. & RH recording (24 hours). Strip chart recorder, Microprocessor based PID temp. Control with printer interface (Centronic Port). PC interface with RS232CPC / RS-485 interface for multiple networking of controller. Data loggers, uP Profile Controller for Ramp / soak for cyclic applications, chamber illumination.

Certification :

ISO 9001:2015 Certified Co. D&B registered & CE mark product.

ISO 14001:2015 & WHO-GMP

Calibration & validation certificates traceable to NABL / ERTL accredited labs.

Special Care :

Suitable K.V.A. Servo Controlled Voltage Stabilizer is recommended in case of voltage fluctuations.

Safety Features :

Supervisory Safety Monitoring System has been introduced for additional Safety measures. Individual additional micro - controlled is used for this supervisory system. If the temperature & humidity value crosses set Hi & Low limits for either or both parameters, safety control action will be taken over by this controller. If the parameters sets within the limit value, main control action will resume automatically.

- ELCB, MCB for Compressor, Boiler heater, Air heater & Mains.
- 2 Min. Compressor ON delay time for safety of compressor.
- Float switch to cutoff the main supply & audio visual alarms in case of low water level.

Documentation :

To comply with the documentation requirements, we provide IQ, OQ & PQ protocols to be executed before taking the chamber in to for regular use, and support the supply with the following documents with the detail operational and service manual.

Standard Operating Procedure (SOP)
Operational Manual for Controller
IQ,PQ,OQ protocols certificate.
Calibration certificate of all controlling modules with traceability.
Certificate of MOC.
Test Report of chamber prior to supply with mapping certificate.
wiring diagram for ease of service maintenance.

TECHNICAL SPECIFICATIONS

Model SRL-HC-09	Internal Dimension (W X D X H)(cms)	Capacity Ltrs
HC-A	45 x 45 x 50	100
HC-B	50 x 50 x 80	200
HC-C	55 x 55 x 100	300
HC-D	60 x 60 x 110	400
HC-E	60 x 60 x 140	500
HC-F	70 x 60 x 145	600
HC-G	70 x 70 x 145	700
HC-H	75 x 75 x 145	800
HC-I	80 x 75 x 150	900
HC-J	80 x 80 x 155	1000
HC-K	90 x 83 x 160	1200
HC-L	130 x 83 x 140	1500
HC-M	140 x 92 x 140	1800
HC-N	150 x 95 x 140	2000

Due to continuous development & improvements in design, we reserve the right to change the specification without notice.