### PREMIER ELECTROSYSTEMS

# **STABILITY CHAMBER**

## **GMP MODEL**

**OPERATING/ INSTRUCTION MANUAL** 



#### **SPECIFICATIONS:**

Outer body	Stainless Steel 304
Inner chamber	Stainless Steel 304
Insulation	PUF Insulation
Door system	PUF Insulated outer door with heavy duty lock And attractive
	handle for pull out with Magnetic gaskets, & full size inner glass door with proper handle system with lock
Air circulation	Forced air circulation 1/8 HP motor and Impeller blower assembly
Trays	Stainless Steel wire mesh tray with border Rod Wire mesh Trays
Power source	230V A/C, 50HZ, 7.5KVA, Recommended to operate on Servo Controlled Voltage stabilizer
Cooling system	Cooling assembly fitted at bottom SS Tray fitted with Screw fitting for easy serviceability
Compressor	Emerson Copeland (Kirloskar make)
Condenser motor	25 W
Air cold condenser	Fin type
Cooling coil	Fin type
Heater	<ul><li>a) S.S. U shaped heater (750W) for temperature</li><li>b) Kettle heater in boiler tank (2KW) for humidity</li></ul>
Water inlet	Arranged at bottom with PVC float valve.
Humidity	Steam injected type
Controller	Humidity and temperature controlled by Premier's PID controller
Resolution	0.1 ° C
Control action	PID
Temperature range	10 <sup>°</sup> to 60 <sup>°</sup> C
Temperature accuracy	+/- 1 deg C
R.H. range	35% to 96%
Accuracy	+/- 3% RH

Contact: Premier Electrosystems, 3, Planet Ind. Est., Subhash Road, Vile Parle E, Mumbai- 400 057, MHEmail: <a href="mailto:feedback@premierin.com">feedback@premierin.com</a>Tel: 022-26169923/24All Products: <a href="https://www.indiamart.com/premier-electrosystems-mumbai/">https://www.indiamart.com/premier-electrosystems-mumbai/</a>

#### **INSTALLATION FOR THE HUMIDITY CHAMBER**

- Install the unit at least 1 foot away from the walls on the rear side so as to have easy circulation of air for the cooling unit.
- Install the machine on proper flooring. Machine must be well balanced. Care should be taken that the instrument is not inclined due to improper flooring or wheel alignment. Ensure the wheels are locked after the machine is installed.
- Connect the water source to the water inlet of the unit permanently. Water supply should be available for the water tank provided at the bottom of the unit. The float valve inside the water tank, in the water inlet section, will automatically cut the water supply when the required amount of the water is filled in the tank.
- Strictly use de-mineralized or distilled water in the tank so as to increase the life of the environment test chamber. It is recommended to install a RO purifier at the water inlet.
- Ensure that power supply is between 22OV to 27OV. Also ensure proper earth connection is available. In areas of high power fluctuations, it is recommended to use a stabilizer. Damages caused due to faulty power supply will not be covered under warranty terms.
- Wherever the unit is switched on the temperature indicator should indicate the ambient temperature & the RH indicator should read the ambient relative humidity.

#### **Common Error Messages**

Display Message	Description
OPEN	Temp/ humidity sensor breakdown
НННН	Temperature/ RH greater than higher limit
LLLL	Temperature/ RH lower than lower limit
L.BRK	Sensor breakdown
CERR	Calibration due. Send to factory for re-
	calibration.

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#### **USAGE INSTRUCTIONS**

1. After taking the necessary precautions, switch on the unit, water supply and other make the other necessary arrangements.

2. Once the chamber displays the temperature and humidity, press the **SET** button once.

3. The lower display will indicate **t.SP** (meaning Temperature Set Point)

Set the desired temperature, as per the range, with the up and down buttons

Press SET to save the values.

4. After that the lower display will indicate rH.SP (meaning Humidity Set Point)

Set the desired humidity, as per the range, with the up and down buttons

Press SET to save the values.

5. The lower display will now indicate **t.AL** (meaning Temperature Alarm)

Set the value above & below which the indicator will enter switch on alarm mode.

Press SET to save the values.

6. The lower display will now indicate **rH.AL** (meaning Humidity Alarm)

Set the value above & below which the indicator will enter switch on alarm mode.

Press SET to save the values.

7. When the contents of the stability chamber are changed, it is recommended to Auto tune the system.

8. To Auto tune, Press the TUNE key for 3 sec. Press TUNE key once to edit the parameter

9. The lower display will indicate **t.tun** (meaning Temperature Tune). Select **YES** using the up/ down key and press the **SET** key to save.

10. The lower display will indicate **H.tun** (meaning Humidity Tune). Select **YES** using the up/ down key and press the **SET** key to save.

11. The t.Tun and H.tune LED glows indicates auto tuning is in progress.

12. Once tuned, both LEDs are off indicating successful tuning.

13. To cancel the tuning in process, follow step 9 onwards and select **NO** in the t.tun or H.tun section.