

Precision Temperature bath Model H/L TB – 1



The constant temperature bath Model H/L TB-1 is specially designed Precision Temperature Bath that offer steady and uniform temperature in bath with the stability of ± 0.1 degree centigrade, with inbuilt Micro Controller based digital controller and sturdy energy controller. The heating element is 1500 Watt corrosion resistant SS heater and capillary type over temperature protection housed in sturdy enclosure with double bearing circulator guarantee long life trouble free operation and refrigeration systems with SS cooling coil.

The precision bath total manufacturing from stainless

steel and assembled through fiber angle to avoid heat loss to consume minimum energy. The sturdy compressor, Stainless steel cooling coil, high efficiency heat dissipater, and cooling fan give excellent cooling for fast settling at required temperature. Powerful stirrer helps achieving uniform temperature through out bath.

Lower compartment is fabricated with MS angle and enclosed with SS sheet. All MS parts are duly powder coated for corrosion resistance. Heat insulation between inner and outer case of water compartment and upper lid is done with PUF / Cerawool.

Micro controller based controller is user-friendly temperature controller. Temperature sensor PT100 (Sealed in SS well) is used for better, precise and reliable temperature indication and control. Controller has higher and lower limit set point facility to avoid out of range temperature shoot up incase of control system failure or un proper setting. A reliable capillary controller is also provided and thermally coupled with heating element to avoid heater failure in case of low water condition. Excellent PID control for heating system and precise ON / OFF for compressor along with 2 minute delay timer for gas stabilization ensures reliability with protection.



INSTRUMENTS UNIVERSAL

B /15, BEI Compound, Opp. Mona Tiles Chhani Jakat Naka, Vadodara-390002

E-mail :insuindia@gmail.com, insuindia@rediffmail.com Tele: 91-265-2771434, 3015783

Complete instruction manual is provided with connection diagram, controller settings, safety instruction, trouble-shooting flow chart for self-serviceability. The unit is completely warranted for one year from the date of sales for trouble free operation. Although it is not required, we ensure quick after sales service at reasonable rate after warranty period.

Technical Specification

Electrical:

Supply	: 230 Vac +/- 20 % 50 Hz
Power	: 1750 Watts maximum while Heater on.
Heater	: Stain less Steel body, 1500 Watt.
Cooling System	: Total 200 Watt with cooling fan.
Temperature range	: Above 5' centigrade to 90 ' centigrade.

Controller:

Controller	: Microcontroller base Temperature controller
Temperature Display	: 3 ½, digit double raw for set point and control temp.
Control Action	: Proportional for Heating and ON / Off for Cooling system.

Stability : + / - .1 degree

General:

Capacity	: 20 liters, with Standard 107mm Diameter x 6 one liter beaker application.
Material of Construction	: MS duly powder coated with SS wetted parts.
Sensor	: PT 100 in SS well.
Circulator	: Shaded pole motor with double ball bearing,SS shaft and Teflon impeller.
Weight	: 65 KG Approximate

Protection:

Electrical	: by 10 Amp Fuse.
High Temperature	: by controller High Temp. Cutout and Capillary Type cutout.
Heater	: by thermally coupled capillary controller.