

# TEMP / HUMIDITY CONTROLLER - 'TCRH'



## Features

- Microcontroller based Design
- Different Coloured Displays for easy Readability
- Large 1.0" Red display for Temperature
- Standard 0.56" Green display for Humidity[RH]
- Independent 3 control O/ps for T and %RH
- PID or On-Off control action for Air/Boiler Heater
- On-Off control Action for Compressor with programmable delay
- Compact 96\*96\*65 enclosure

Since these controllers are basically designed for the stability chambers, the accurate control of temperature and humidity is achieved by operating the air heater (for Dry heat) and the boiler heater (for Moisture) in the PID control action. And the compressor (for low temperature) is operated in ON/OFF action with time delay facility. Since the compressors are not required to be kept ON above certain level of temperature, the user selectable mode is provided to program the compressor operation in AUTO, Continuous ON or Continuous OFF mode. To de-humidify the system, an extra ON/OFF output can also be optionally provided. The control outputs are in the form of SSR drivers of (0 - 5) VDC pulse to control the Air heater, Boiler heater and Compressor and Dehumidifier.

## Application:

Stability / Environmental Test Chambers  
Walk In Chambers  
BOD Incubator etc

## Sensors for (T + Rh) Measurement:

GE controllers are designed to accept the T+RH probe or the Transmitter from various models of Rotronic - Swiss. User has the choice to select suitable probe or the transmitter based on the application and the range of measurement. Standard OEM products from Rotronic are available from us to be used with T+RH controller

Sensors can be separately purchased from us for Temperature - RTD Pt100 [2/3wire],  
RH - Capacitance % RH sensor our make  
RH - Hygro Clip CP make RH/Temperature sensor combined

## TECHNICAL SPECIFICATIONS

Supply voltage : 85~275VAC, 50Hz  $\pm$ 15%  
Display : 1.0" Red - Temperature  
          : 0.5" Green - Humidity  
No. Of Inputs : 2 (1 each for Temp & % Humidity(%RH))  
Range : -40or0.0 to 200.0°C & 0.0 to 99.9%RH  
Resolution : 0.1°C / %  
Size : 96\*96\*65mm[c/o 92\*92]

### OPTIONALS

\*\* Temperature / RH sensors

**Accuracy :  $\pm$ 0.1% for Temp and  $\pm$ 2%RH**

**Tuning : Manual / Auto Tuning**

**Control Action : On-Off or PID as required**

**Settings : Using Front panel soft keys**

**Memory Backup : Retention of PID /set values in memory**

**Outputs : 1 each for Air Heater/Boiler Heater/Compressor  
0-5VDC for each[other O/ps. on request]**



Manufactured by :

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