



µC Based PID Auto tune Humidity Controller & Temperature Indicator

MODEL NO: (PID-H-96, PID-H-702) ' '

Features:-

- Microcontroller based, Double display
- Lower display for rH set value & Temperature Indication
- Supply 220 V Ac
- Input RTD for Temperature & 3.3V DC for Humidity
- Output: 1. rH Heater 2. Cooling 3. Alarm (Buzzer)
- PID,ON/OFF Control for Humidity Heater
- On/Off Control for Cooling
- Set. c (-50 to 50)
- Range: Temperature 0-60c
- Humidity 20 to 100% for 3.3V DC sensor
- Humidity 0-100% adjustable in set mode.
- Cooling -50 to +50 with respect to rH setting adjustable in set mode.
- Alarm -50 to +50 with respect to rH setting adjustable in set mode.
- Ct 1 to 60 for SSR output / HY-2 to 25%RH
- Auto tuning require for pb, It & dt value of humidity Heater
- Compressor Hysteresis adjustable
- Delay 0 to 250 second adjustable for cooling control
- Relay trip if sensor breaks or connection open
- Calibration Error correction by front key switch for rH & Temperature

Key Function

- You can go in set mode by set key
- You can change setting in set mode by Increment & Decrement key
- Press enter key to see Temperature
- Enter key to store all set value in memory

Setting

You can change **All value** by Increment & Decrement key

Press Enter key to exit & save from any step else go to next step

Alarm output is optional so consider this step of setting accordingly.

(A)

- Press **SET** key to Set Humidity
Display = **St. rH** & Last set value
- Press **SET** key to Set Alarm for Humidity
Display = **ALrM** & Last set value
- Repeat above from step(A) else press enter key to save & Exit

Setting of Ct, Tune, Hysteresis, Delay, Defrost & Calibration error

- **Press set key for 20 second**

(C)

- Set **Ct** for relay
Display = **Ct** & Last set value
- Press **SET** key to Select Hy function else go to next step
- Press **SET** key to Select tune function else go to next step
Display = **nO**
Note: if you want to do auto tune, then press Increment key (Display=**YES**) & Press enter key.
- Press **SET** key to Set Delay of compressors
Display = **dELY** & Last set value
- Press **SET** key to Set humidity Calibration error
Display = **C.Er.r** & **nO**
Note: if you want to do error correction then press Increment key (Display=**YES**) & Press Set key
- Press Enter key to save & exit else press Set key to Repeat above from step (C)



Setting of Cooling Temperature, Cooling HY, Temperature Error & Range High

- **Press Increment + Decrement + Enter key for 10 second (D)**
- Press **SET** key to Set Compressor
Display = **SET.C** & Last set value
- Press **SET** key to Set Hysteresis of compressor
Display = **C-HY** & Last set value
- Press **SET** key to Set Temperature Calibration error
Display = **C.Er.t** & **nO**
Note: if you want to do error correction then press Increment key (Display=**YES**) & Press Set key.
- Press **SET** key to Set Range High Value of Humidity
Display = **rnG.H** & Last set value
Press set key to set on off +
Display = **CNTR (on/off ,PID)**
- Press Enter key to save & exit else press Set key to Repeat above from step (D)

Note :

Do note switch off power if tuning is on
Tune message will be automatically out after completion of tuning.
To disable defrost cycle set Defrost on time =0000

CONNECTION DIAGRAM

