

DIN302 Temperature Humidity Controller



Technical Specifications:

Power consumption < 3W

Accuracy: $\pm 1^{\circ}\text{C}$ 0.1%RH

Temperature measuring range: 32-230°F (0-110°C)

Humidity measuring range: 00%RH~+100%RH

Sensors: Temperature and Humidity sensor with 1m wire length

Power supply: DC 12V, DC 24V, AC 100-240V (check the model no.)

Output: 2 outputs with 10 Amp load (check the model no.)



Features:

2 relay with one sensor with 2 independent Outputs.

High and Low buzzer Alarm for temperature and humidity.

2 color display (red for temperature and blue for humidity).

Controls temperature by setting start & stop temp values.

Controls humidity by setting the start & stop humidity values

Temperature and humidity calibration.

Record Maximum and Minimum temperature and humidity.

Timer delay for each temperature and humidity outputs

Parameter Setting summary :

- A** Press Δ button for 3 seconds \rightarrow Set Start Temperature
 Press Δ button for 3 seconds \rightarrow Set Start Humidity
 Press ∇ button for 3 seconds \rightarrow Set Stop Temperature
 Press ∇ button for 3 seconds \rightarrow Set Stop Humidity

- B** Press Δ button for 3 second \rightarrow Calibration of Temp
 Press ∇ button for 3 second \rightarrow Calibration of Humidity

- C** Press Δ button for 3 second \rightarrow factory default setting

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D For setup the Parameters, Press Δ button for 3 second :

Parameters	Default
P0: Select between Fahrenheit or Celsius F/C	C
P1: High temperature Alarm limit 1	110
P2: Low temperature Alarm limit 1	0
P3: High humidity Alarm	100
P4: Low humidity Alarm	0
P5: Delay temperature Output	0
P6: Delay humidity Output	0
P7: Record Maximum temperature	
P8: Record Minimum temperature	
P9: Record Maximum humidity	
P10: Record Minimum humidity	

Parameter setting description:

After setting each parameter mode, wait 5 seconds and controller will exit the parameter setting.

A Setting start, stop temperature and humidity mode:

You can set the start and stop temperature and humidity values when the controller is in this mode. The controller automatically recognizes the heating or cooling mode and also humidifying or dehumidifying mode.

Heating mode: When the start temp value is less than stop temp.

Cooling mode: When the start temp value is higher than stop temp.

Humidifying mode: When the start humidity value is less than stop humidity.

Dehumidifying mode: When the start humidity value is higher than stop humidity.

By quick pressing of keys, you can check, start and stop temperature and humidity values.

B Temperature and Humidity Calibration:

You can calibrate both temperature and humidity reading with this function. The value can be positive, negative or 0 from -10 to 10.

C Factory default setting:

All of your parameter settings will remain on your controller memory even you turn off the controller, but you can always set the parameters back to factory default setting with this function.

D Setup the programs from P0 to P10:

P0: You can change temperature measuring unit to $^{\circ}\text{C}$ or $^{\circ}\text{F}$

P1, P2, P3, P4 High & Low Temperature & Alarm Setting:

You can set higher and lower alarm limits for temperature and humidity. If the temperature or humidity passes the higher or lower limits values, the controller makes a beeping sound and flash. The default setting for temperature are P1=110, P2=0, P3=100, P4=0.

P5, P6 Delay protection:

Delay output protection is a feature that helps prevent damage to connected devices by avoiding rapid on/off cycles. P5 is delay for temperature output, and P6 for humidity. The default setting for both is 0, but users have the option to set a delay time between 0 and 60 minutes for the device to start operating.

P7, P8, P9, P10 Record Maximum and Minimum of temperature and humidity:

To track and manage temperature and humidity effectively, the controller records the maximum and minimum values as follows:

Max temperature: P7

Min temperature: P8

Max humidity: P9

Min humidity: P10

When turning the controller on/off, the values will update in P7-P10. These records aid in monitoring, controlling, and setting efficient parameters for temperature and humidity.

Error messages and troubleshooting:

1) When the controller displays "EEE" it shows that the sensor is disconnected. The controller will make a beeping sound and the output relay will be closed for safety.

2) When the controller displays "LLL" or "HHH" it shows that the measured temperature or humidity by sensor is out of range.

Caution:

- ◆ The maximum current load of the heating or cooling source must not exceed the output relay contact capacity. It will damage the unit and may cause fire.
- ◆ Check the wiring diagram before wiring the unit. Wrong wiring will damage the controller and may cause fire.
- ◆ Applying extra force on the screws of controller terminals will break the base. Please tighten the screws gently.
- ◆ For your safety, turn the power supply off when you are wiring the controller.

Wiring Diagram:

