

CO2, TEMPERATURE AND HUMIDITY MONITOR

Introduction

A combination of poor ventilation and/or over population in an enclosed space can lead to a build up of carbon dioxide that, if left unchecked, can cause a variety of adverse health effects.

The CO2-TH offers an intelligent way to monitor and reduce CO2 levels in an interior space by being able to introduce fresh outside air at a controlled rate.

The CO2-TH requires very little user interaction. It can monitor the levels of carbon dioxide as well as humidity and temperature within the applied space and is capable of initiating alarms and corrective action if any of these exceed pre-set levels.

The CO2-TH can be configured to meet the requirements of most applications through the use of an Advanced Installer menu which allows the user to change how the monitor will respond to and report the levels of carbon dioxide, temperature, and humidity.

Other installer options include allowing the user to be able to press a "Force Fresh Air" button which will bring in fresh air. The "Force Fresh Air" button will flash when pressed to indicate that it is running.

When enabled, the LCD backlight can also change the background color of the display from green, amber, and red to provide a visual alert as to the CO2 level in the space.



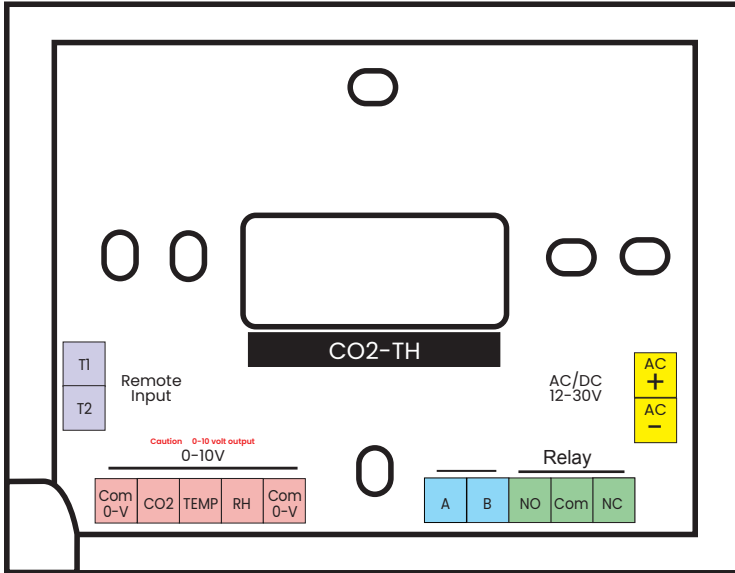
Features and Benefits

- Clear Indication of Current IAQ Conditions
- Multicolour Back Light - Optional Visual Alarm Warning
- Long Life NDIR CO2 Sensor (10+ Years)
- Clear, Audible Alarm Option
- Assisted Ventilation Function
- Programmable Volt Free Relay
- Three 0-10V Outputs (Fully Scalable)
 - CO2, Temperature & Humidity
- Powered from 12 - 30V AC or DC
- Universal Input with Programmable Functions
- CE & C-Tick Certified

Warranty

- 3 Years

Terminal Wiring



AC / DC

The CO2-TH is powered from 12 to 30V AC or DC. If powering with DC +ve is applied to the top terminal and -ve is applied to the bottom terminal.

Relay

A volt free relay is provided with a maximum switching capacity of up to 30V @1A. This relay can be assigned to any or all of the CO2-TH sensors (CO2, Temp or RH). Independent alarm thresholds can be assigned to this relay.

Input

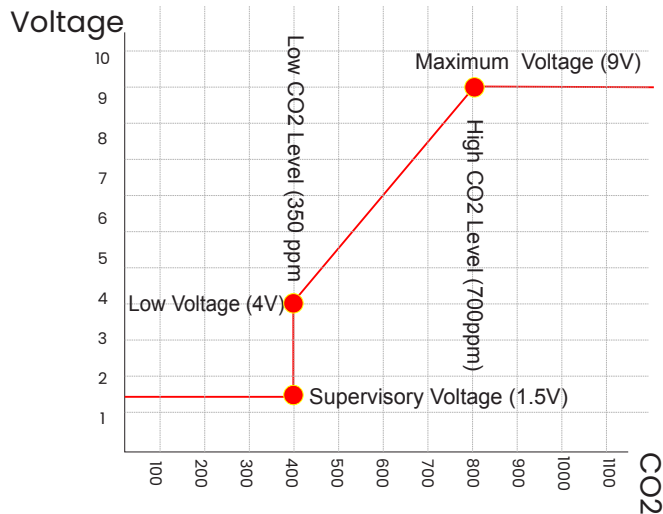
A digital / analogue input is provided with assignable functions to further increase the capability of the CO2-TH.

0-10V

Three separate 0-10V outputs are provided, one per sensor (CO2, Temp and RH). Each 0-10V can be individually spanned and hi / low limites can be set if required.

Advanced 0-10 volt output logic

The CO2-TH has advanced 0-10v output logic that will permit you to scale the individual 0-10v output for each of the three sensors, CO2, Temperature and Relative Humidity. In the given example you can define the minimum CO2 threshold and voltage as well as the maximum voltage and CO2 level. This will permit you to control and scale a damper or VSD directly from the CO2-TH.



Specifications

Power	12 to 30V AC or DC
Relay Output	30V AC/DC @ 1A Max
Touch Method	"XY" Resistive
Back Light	Multicolour LED
Back Light Life	40,000 Hours to Half Intensity
Operating Temperature	23°F to 122°F
Operating RH	0 to 95% (Non Condensing)
0-10V Outputs	5ma Max
Temperature Sensor Range	-4 - +122°F
Temp Sensor Accuracy	+/- 3% at 77°F
RH Sensor Range	0 to 95% RH
RH Sensor Accuracy	+/- 3% at 77°F (30% to 80% RH)
CO2 Sensor Range	0-2000ppm
CO2 Sensor Accuracy	+/- 40ppm at 77°F
Warranty	3 Years
Approvals	CE & C-Tick
Size	4.5" W X 4.125" H X 1" D



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