tSENSE VAV

CO_2, Temperature and RH sensor

tSENSE VAV is an advanced and versatile three-in-one controller designed for installation in the air-conditioned zone. The unit measures CO_2 concentration, temperature and humidity in the ambient air accurately without need for additional compensation - true read.

tSENSE VAV combines all the necessary elements for effective climate control in commercial office buildings, hospitals, hotels, schools and other facilities. Using CO_2-monitoring for demand control ventilation (DCV) allows healthy, comfortable and cost-effective environment for the occupants. It is flexible in design with temperature control and combination of humidity control optional. Though suitable for use in many different energy-efficient ventilation strategies, Senseair® welcomes any discussions for specific needs.

Standard specification

Measured gas	Carbon dioxide (CO_2)
Operating principle	Non-dispersive infrared (NDIR)
Measurement range	0–2000ppm
OUT1 VAV Output	0–10VDC
CO_2	600–900ppm
Temperature	22–23 °C
Relative Humidity	75–85%
OUT2 CO_2	0–10VDC, 0–2000ppm
OUT3 Temperature	0–10VDC, 0–50 °C
Relay CO_2	On ≥ 1000ppm$_{vol}$ Off ≤ 900ppm$_{vol}$
Accuracy (CO_2)	±30ppm ±3% of reading
Dimensions	12 x 85 x 22mm
Life expectancy	> 15 years
Operation temperature range	0–50 °C
Power supply	12VDC, 24VAC/VDC
Communication	Modbus (MB) or BACnet (BAC) protocol over RS485

Key benefits

- Maintenance-free
- Compliant with ANSI/ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard® (WELL v2™)
- Three sensors in one housing: CO_2, temp and RH
- Simplified control function
- PIN codes for access to meter settings
- Flexibility: shows CO_2 and Temperature / Humidity
- Improved housing design for effective measurement

Senseair

an Asahi Kasei company