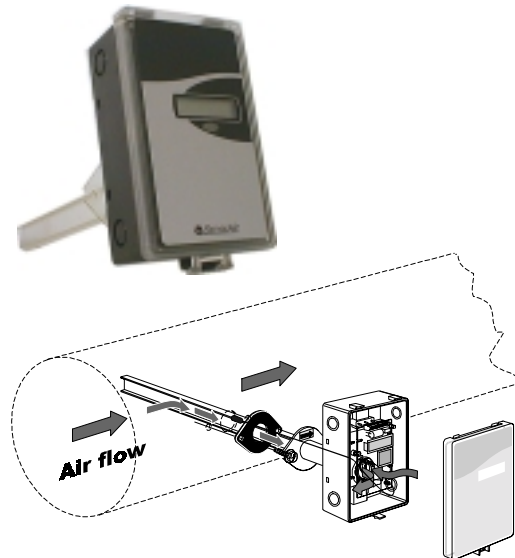


Carbon dioxide & Temperature Transmitter for duct mounting

PRODUCT DESCRIPTION

aSENSE-K is an all-digital low-cost transmitter for installation in ventilation ducts. *aSENSE-K* measures temperature and CO₂ concentration in the ambient air and transforms the data into digital output signals and sends these values to a comprehensive system. The *aSENSE-K* is a key component for climate control of buildings and different processes.



MODELL *aSENSE-K*

- uses state-of-the-art Non-Dispersive InfraRed (NDIR) technology to measure the carbon dioxide (CO₂) concentration
- cost-optimised for connection to DDC:s
- contributes to lower energy costs when it is applied in a *Demand Control Ventilation (DCV)* strategy
- is available in 6 different carbon dioxide measurement ranges
- has internal automatic self diagnostics. Maintenance interval > 5 years
- has serial communication port for connection to a PC or a GSM module
- has cost-efficient RS485 network communication as an option

APPLICATIONS

According to European building regulations, the fresh air flow should, in rooms where people stay more than occasionally, be at least 7 l/s and person. If the room occupants are adults with a light work-load and the outdoor CO₂ concentration is 350 ppm, this airflow answers directly to an indoor CO₂ concentration of 1 040 ppm. According to the National boards of occupational safety and health, the CO₂ concentration can therefore be used as an indicator of the Indoor Air Quality (IAQ). A CO₂ concentration below 1 000 ppm should then always be the aim.

One of many different applications for *aSENSE* is to regulate the ventilation by controlling a fan, damper etc. based on the detected CO₂ concentration in the duct. The sensor is designed to suit several different ventilation strategies, e.g. climate regulation based on CO₂ / temperatur / timer / occupancy and/or manual control.

CONNECTIONS

Screw terminal:

1	G+	24 V AC/DC
2	G0	system ground
3	OUT1	linear output (+) CO ₂ 0...2000 ppm
4	OUT2	linear output (+) temperature 0...50 °C
5	M	signal ground (-)

