DUCT BACNET SENSOR RANGE
CO2, TEMP & RH (24V AC/DC)

BACnet (ASHRAE)

Dimensions

Height 152mm | Width 110mm | Depth 50mm | Probe Length 200mm

Technical Specification

Power Supply	24V AC/DC ±10%
Power Consumption	50Ma Max
BACnet	MS/TP over RS485
	Baud: 9k6, 19k2, 38k4 or 76k8
	127 Address (1/10th Load)
	Full specification available on request
Analogue Outputs	3x 0-10V
VFC Output	SPST - 100mA @ 24V Max
CO2 Range	0 - 10,000 ppm
CO2 Output Scaling	0 - 2,000 / 5,000 ppm
CO2 Accuracy	±40 ppm +3% @ NTP
CO2 Sensing Method	Non Dispersive Infra-red (NDIR)
CO2 Typical Sensor Life	10+ Years
Temp Range	0 - 50°C
Temp Accuracy	±0.3°C @ 25°C
RH Range	0 - 100%
RH Accuracy	±2% @ 20 - 80%
Operating Conditions	Temp 0 - 50°C
	Humidity 0 - 95% (NC)
Sampling Method	Diffusion
Warm-up Time	30 seconds
IP Rating	IP66 (external to duct)
Housing Material	Flame Retardant ABS/PC
Approval	CE

| OVERVIEW |

The Flamefast BACnet sensor range can be supplied with any combination of Carbon Dioxide (CO_2), Temperature & Relative Humidity, and the BACnet MS/TP interface allows for the sensors to be integrated with much larger systems over a simple two wire network.

As default the three 0-10V outputs will provide a full scale linear output for the CO2, Temp & RH levels, however these analogue outputs can be rescaled or configured to be controlled over the network, negating the requirement for separate local controllers.

There is also the option to assign each of the analogue outputs to any of the sensor values, and the on board relay can be configured to activate based on CO2, Temperature or RH levels, or all can also be controlled over the network.

This cost effective and versatile sensor is ideal for any application, including natural and demand controlled ventilation systems.

Installer Selectable Options

- CO2 Analogue output (2,000 / 5,000 ppm)
- Relay set point (see below)

The unit has two user selectable programmes to control the volt free contact set point depending on the application. These are as follows:

Programme	Ventilation	Gas Safety
Relay Position	Normally Open	Normally Closed
Relay Set Point	1,000 ppm	4,500 ppm

| KEY FEATURES |

- 24V AC/DC Power Supply
- Pluggable terminal block
- Automatic object configuration
- 3x 0-10V outputs (Network writeable)
- Volt free contact output (Network writeable)
- Typical 10+ year life expectancy
- Self-calibrating CO2 sensor
- Flanged enclosure with hinged lid for ease of installation
- **UK MANUFACTURED**

Part Numbers & Options/Accessories

Part No	Description
DBAC-CO2	Duct BACnet Sensor - CO2
DBAC-CO2TH	Duct BACnet Sensor - CO2, Temp & RH
DBAC-TH	Duct BACnet Sensor - Temp & RH