



Product Overview

The AX-GS-CD-VI is a wall mounted CO₂ transmitter for ventilation control in enclosed spaces. “Automatic Background Calibration” software reduces measurement drift to better than ± 20 ppm/year. The unit provides jumper selectable analogue outputs in either 0-5/0-10V or 4-20mA.

A separate mounting plate with 2-piece terminal blocks provides for easy wiring.

Features

- Monitors CO₂ over range 0-2,000 ppm
- 0-5/0-10V or 4-20mA output, selectable via jumpers
- 15 year calibration interval
- Wide range of optional thermistor temperature sensors
- Wall mounting

Product Specifications

Power Supply:	24Vac/dc $\pm 15\%$
Output:	0-5/0-10V or 4-20mA, jumper selectable
Output Switch Level:	0-2000 ppm
Sensor Type:	Non-dispersive Infra-red, gold plated optics
Calibration Interval:	Calibration not required (see ABC software)
Stability:	Self calibrating <2% Full Scale over life of sensor (typical 15yrs)
Temperature Dependence:	0.2% Full Scale per °C
Signal Update:	Every 4 seconds
Warm Up Time:	10 minutes for maximum accuracy
Anti-recycle Time:	Minimum on/off period of 10 minutes in Auto mode
Housing:	AX-GS-CD-VI Flame retardant ABS AX-GS-CD-VI-SS Stainless Steel
Ambient Temperature:	0 to +50°C, 0-95% RH non-condensing
Dimensions and Weight:	87 x 82 x 27mm, 75g
Protection:	IP30
Country of Origin:	Made in the UK

Order Codes

AX-GS-CD-VI	CO ₂ Switch and Indicator, wall mounted, current or voltage output
AX-GS-CD-VI-SS	CO ₂ Switch and Indicator, wall mounted, current or voltage output, Stainless Steel Enclosure

Please contact sales for optional thermistors

Installation

The unit should be installed by a suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. This will entail connection to a switched, fused spur as a minimum requirement. Field wiring should be installed to satisfy the requirements set out by the manufacturer of the equipment that the module is being connected to. Isolate elsewhere before removing the front plate.

Mounting instructions

The unit has mounting provisions to install directly to a wall and should be mounted at a height about 1.5 metres from the floor of the area to be controlled. For best operation, do not mount the switch near doors, opening windows, supply air diffusers or other known air disturbances.

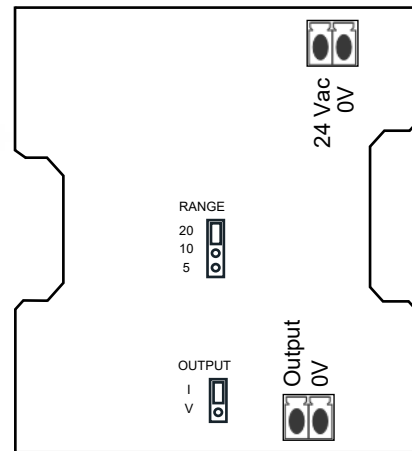
1. Separate the front of the case by carefully inserting a slotted screwdriver into the slot on the side of the plate. Remove the screws retaining the clear plate.
2. Fix the rear of the case to the wall or junction box and make the required connections.
3. Change jumper selection to select desired output type and range. Replace the clear plate with the two screws.
4. Re-attach the front of the case to the rear by aligning the clips on one side then push the plate towards the opposite side and push front to clip onto clear plate.

ABC Software

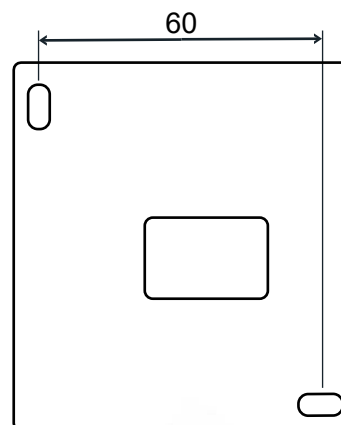
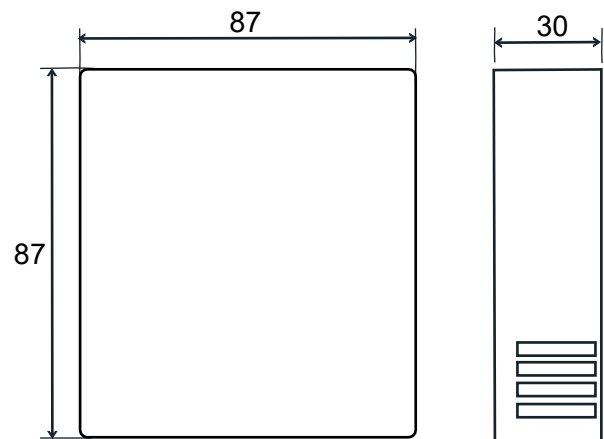
ABC (Automatic Background Calibration) program utilises the computing power in the sensors onboard microprocessor to remember the lowest CO₂ concentration that takes place every 24 hours. The sensor assumes this low point is at outside levels. The sensor is also smart enough to discount periodic elevated readings that might occur if for example a space was used 24 hours a day over a few days. Once the sensor has collected 14 days worth of low concentration points, it performs a statistical analysis to see if there has been any small changes in the sensor reading over background levels that could be attributable to sensor drift. If the analysis concludes there is drift, a small correction factor is made to the sensor calibration to adjust this change.

For this reason, the AX-GS-CD-VI should NOT be used in a space that does not experience a periodic drop to outside levels (i.e. where occupancy is 24 Hrs/7 days/week).

Connections



Dimensions



Datasheet Contents

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