

ES-CO2

Carbon Dioxide Sensor

Installation and Maintenance

CE The EMC Directive
2014/30/EU
The Low Voltage
Directive
2014/35/EU



The ES-CO2 Carbon Dioxide Sensor is a duct mounted sensor to modulate fan speed based on CO2 levels.

Parts check list

- ES-CO2 Carbon Dioxide Sensor with pre-wired cable

ES-CO2 Carbon Dioxide Sensor

Designed to be compatible with the Ecosmart system this unit is pre-wired with a 2 metre length of cable and a connection plug.

Note: Do not extend cable length as this may impair the performance of the sensor.

Installation

This CO2 sensor should be installed in the extract ductwork adjacent to the fan. A Pre-filter (to G3 minimum) should be fitted upstream of the sensor to ensure the CO2 sensor is not fouled by airborne dust and contaminants.

Withdraw the fixing collar from the sensor by slackening the collar screw. Select a suitable location on the ductwork for the sensor.

Prepare a mounting hole 22-25mm dia. in the ductwork.

Offer the fixing collar up to the ductwork and mark through the four fixing holes. Drill suitably sized holes and attach the collar using self tapping screws. Insert the sensor into the collar and secure using the collar screw. Route the sensor cable away from all other cables and plug the connector into the Ecosmart controller using the location marked CO2.

Note the data cable installation requirements in the previous section.

Operation

The CO2 Sensor will take approximately 5 minutes to settle to the correct ambient conditions. During this period the fan speed may fluctuate slightly. The CO2 Sensor will adjust the fan speed in response to the CO2 concentration in the airflow.

The fan speed is divided into 10 steps from minimum (step 1) to maximum (step 10).

See table below for response details.

Maintenance

It is important that the sensor is checked approximately every 6 months. Any accumulated dust should be removed using a soft brush. No other maintenance is necessary.

Warranty

The 5 year warranty starts from the day of delivery and includes parts and labour for the first year. The remaining 4 years covers replacement parts only. The labour element of the warranty is subject to full, free and safe access to the equipment as recommended by CDM regulations.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuair International Sales office for further details.

Response details table.

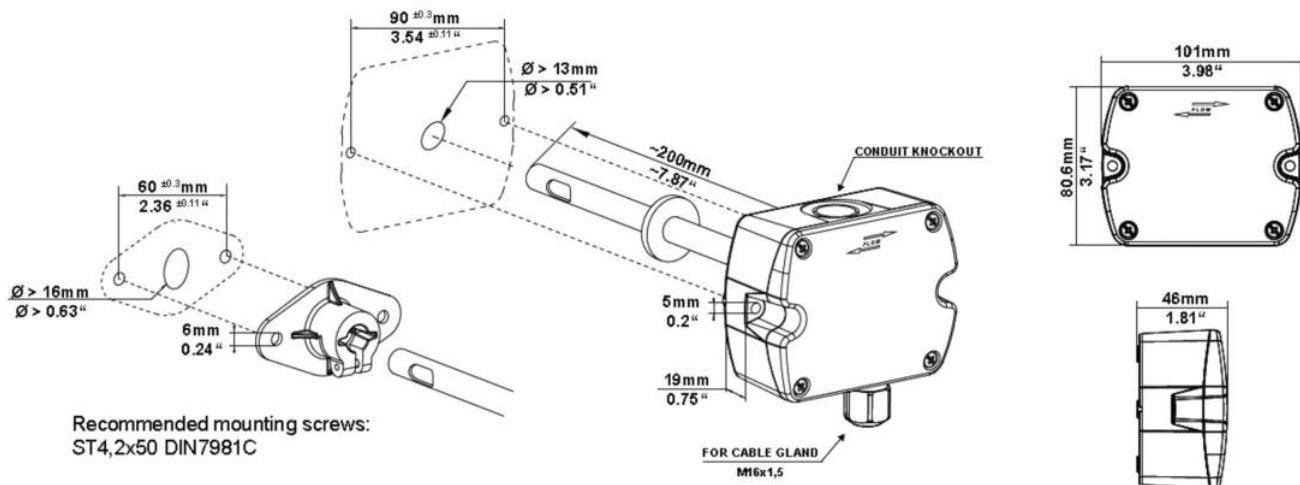
| Speed | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO ₂ ppm | 502 | 580 | 659 | 737 | 834 | 902 | 980 | 1059 | 1137 | 1215 |

After Sales Enquiries

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

Telephone 02920 858 400

Figure 1. Dimensions ES-CO2 Carbon Dioxide Sensor



Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.

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