

ES-CO2

Carbon Dioxide Sensor

Installation and Maintenance

CE The EMC Directive 89/336/EEC With modification 92/31/EEC The Low Voltage directive 73/23/EEC



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 G3minimum) 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.

Service Enquiries

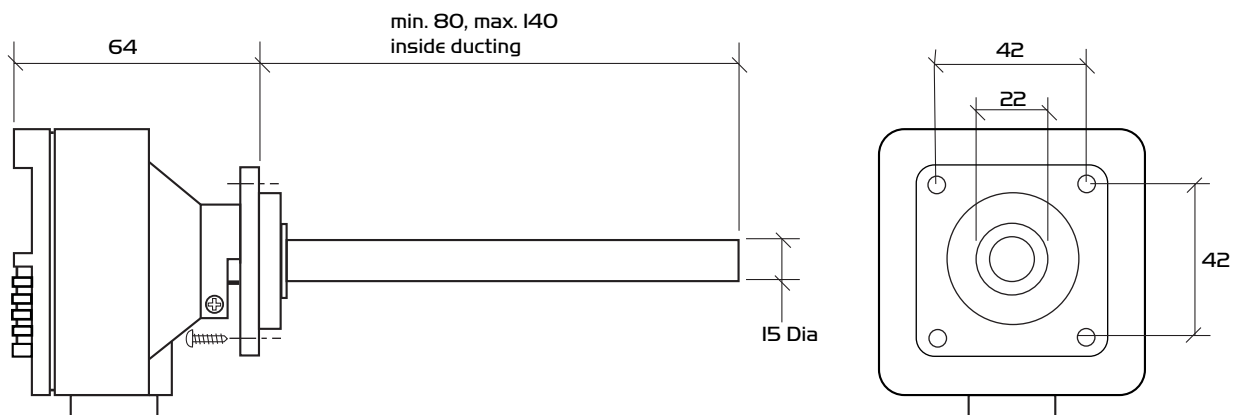
Nuaire can assist you in all aspects of service. Our service department will be happy to provide any assistance, initially by telephone and if necessary arrange for an engineer to call.

Telephone 029 2085 8585
Fax 029 2085 8586

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 |

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.