

## **CO**<sub>2</sub> **Duct Sensor** and **CO**<sub>2</sub> Wall Sensor

Figure 1: CO, Duct Sensor



The wall and duct-mounted carbon dioxide (CO<sub>2</sub>) sensors are designed especially for demand-controlled ventilation zone applications. The sensor is compatible with Trane VAV and VariTrac<sup>®</sup> controllers. Long-term stability and reliable sensing performance come from advanced silicon based Non-Dispersive Infrared (NDIR) technology. When connected to a building automation system and the appropriate ventilation equipment, the Trane CO, sensors measure and record carbon dioxide in parts-per-million (ppm) in occupied building spaces. These carbon dioxide measurements are typically used to identify under-ventilated building zones and to override outdoor airflow beyond design ventilation rates if the CO<sub>2</sub> exceeds acceptable levels. Please visit trane.com or contact a local Trane representative for more information.

## Features

- Wall- or Duct-mounted
- Measures CO<sub>2</sub> in ppm.
- NDIR Sensing Technology
- Demand-Controlled Ventilation

## Figure 2: CO, Wall Sensor



**Table 1: Sensor Specifications** 

|                                   | Duct  | Wall   |
|-----------------------------------|---|--|
| Measuring Range                   | 0–2000 parts per million (ppm)                          |  |
| Accuracy at 77°F (25°C)           | $< \pm$ (30 ppm CO <sub>2</sub><br>+ 3% of reading)     | $< \pm$ (40 ppm CO <sub>2</sub><br>+ 3% of reading)      |
| Recommended calibration interval  | 5 years   |  |
| Response time                     | 1 minute (0-63%)  |  |
| Operating Temperature             | 23 to 113°F<br>(-5 to 45°C)                             | 59 to 95°F<br>(15 to 35°C)                               |
| Storage Temperature               | -4 to 158°F (-20 to 70°C)                               |  |
| Humidity Range                    | 0–85% relative humidity (RH)                            |  |
| Output Signal (jumper selectable) | 4-20 mA, 0–20 mA, 0–10 VDC                              |  |
| Resolution of analog outputs      | 10 ppm CO <sub>2</sub>                                  |  |
| Power Supply                      | Nominal 24 VAC  |  |
| Power Consumption                 | < 5 VA  |  |
| Housing Material                  | ABS plastic   |  |
| Dimensions                        | 3 1/8" x 3 1/8" x 7 3/4"<br>(80 mm x 80 mm x<br>200 mm) | 4 1/4" x 3 1/8" x 1 7/16"<br>(108 mm x 80 mm x<br>36 mm) |





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