SERIES CDTA | COMMUNICATING CARBON DIOXIDE DETECTOR

European style

North American style

FEATURES/BENEFITS

- **Digital Intelligent Temperature Compensation Algorithm (DITCA) corrects for errors due to self heating effects of combination wall sensors**
- **Field selectable Modbus® and BACnet communications reduces wiring**
- **Single beam dual wavelength CO_2 sensor**
- **Replaceable humidity/temperature sensor**
- **Physical hardware lockout**
- **Optional remote display tool**

APPLICATIONS

- Demand control ventilation in schools, office buildings, hospitals, and other indoor environments
- LEED® certification

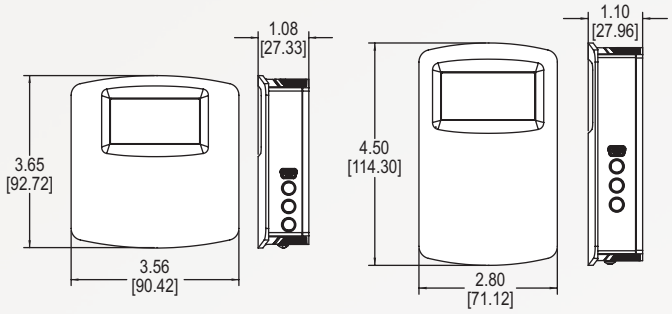
DESCRIPTION

The **Series CDTA Communicating Carbon Dioxide Detector** combines the function of three room sensors into a single, compact housing. Parameters include carbon dioxide, humidity, temperature, and temperature set point with override. By having field selectable Modbus® and BACnet Communications, only four wires are needed for power and the communication signal. The communicating detectors can be daisy chained together to further reduce installation cost. In order to reduce the set up time, the RS-485 MAC address is set up using on board dip switches. A second set of dip switches are used to select whether output is Modbus® RTU or BACnet MS/TP communication protocols and to limit access to the set up menu.

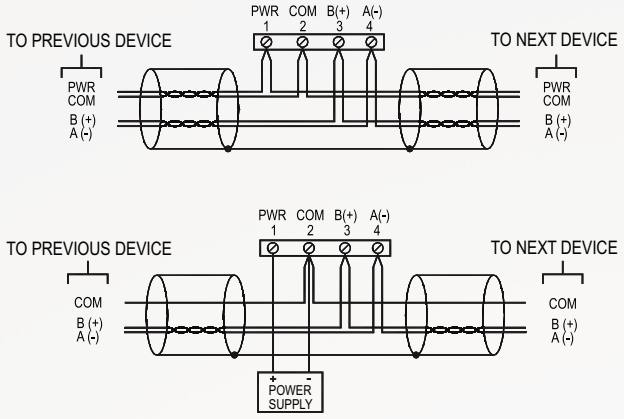
SPECIFICATIONS

Sensor (CO_2)	Single beam, dual wavelength NDIR; Humidity: Capacitive polymer; Temperature: 10K Ω thermistor.
Range	CO_2: 0 to 2000 or 5000 PPM CO_2 (depending on model); Humidity: 0 to 100% RH; Temperature: 32 to 122°F (0 to 50°C).
Accuracy	CO_2: ±40 PPM ±3% of reading; RH: ±2% (10 to 90% RH); Temperature: ±1°C @ 25°C.
Temperature Dependence (CO_2)	±8 PPM / °C at 1100 PPM.
Non-Linearity (CO_2)	16 PPM.
Pressure Dependence (CO_2)	0.13% of reading per mm of Hg.
Response Time (CO_2)	2 minutes for 99% step change.
Temperature Limits	32 to 122°F (0 to 50°C).
Humidity Limits	10 to 95% RH (non-condensing).
Power Requirements	10-42 VDC / 10 to 30 VAC.
Power Consumption	0.5 watts; Peak: 1.2 watts.
Output	2-wire RS-485, Modbus® RTU or BACnet MS/TP communication protocol.
Weight	4.4 oz (125 g).
Enclosure Rating	IP20.
Agency Approvals	BTL, CE.

DIMENSIONS



WIRING DIAGRAM



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

CDTA **-2** **N000** **-LCD**

SERIES
CDTA: Carbon dioxide detector

RANGE
-2: 0 to 2000 PPM
-5: 0 to 5000 PPM

OPTIONS
-LCD: Display
-FC: Factory calibration certificate

HOUSING STYLE
N000: North American
E000: European

ACCESSORIES

Model	Description
GCK-200CO-2000CO2	Calibration gas kit
A-449	Remote LCD display
A-CDT-KIT	Accessory kit including terminal block and power supply

Modbus® is a registered trademark of Schneider Automation, Inc.
LEED® is a registered trademark of the U.S. Green Building Council

ORDER ONLINE TODAY!

dwyer-inst.com/Product/SeriesCDTA

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DS-CDTA Rev. 2