CD-W00-00-1, CD-W00-N0-1

CD-W00-x0-1 Series Wall Mount CO_2 Transmitters

Description

Johnson Controls® offers carbon dioxide (CO_2) transmitters for measuring and transmitting CO_2 levels, ranging from 0 to 2,000 parts per million (ppm), within Heating, Ventilating, and Air Conditioning (HVAC) CO_2 applications. Specific HVAC CO_2 applications include Demand Control Ventilation (DCV), fresh air and Indoor Air Quality (IAQ), and rooftop air handling Economizer controls systems.

Features

- DCV strategies — offer potential for 10 to 70% energy savings
- Vaisala CARBOCAP® single-beam, dual-wavelength design — provides superior performance compared to other technologies
- CARBOCAP silicon, micro-machined construction — provides reliable CO2 measurement in room environments
- offers 5 years of reliable calibration
- stable infrared reference — compensates for light-source drift

Applications

This compact wall-mounted device produces 0 to 10 V and 4 to 20 mA signals. It is designed to work:

- in stand-alone mode
- as part of any integrated Building Automation System (BAS)

The CO_2 transmitter is easy to install, offers a full 3-year warranty, and requires no maintenance or field calibration.

Repair Information

If the CD-W00-x0-1 Series Wall Mount CO_2 Transmitters fail to operate within their specifications, replace the units. For a replacement CO_2 transmitter, contact the nearest Johnson Controls representative. Refer to the *CD-W00-x0-1 Series Wall Mount CO_2 Transmitters Product Bulletin (LIT-12011187)* for important product application information.

CD-W00-00-1 Wall Mount CO_2 Transmitter with Logo

Selection Chart

Product Code Number	Description
CD-W00-00-1	Wall Mount CO_2 Transmitter with Logo
CD-W00-N0-1	Wall Mount CO_2 Transmitter without Logo

Accessories

Product Code Number	Description
ACC-DWCLIP-0	Drywall Spring-Clip Mounting Kit
Y65T31-0	Multiple Primary Transformer, 40 VA, 120/208/240 V Primary, 24 V Class 2 Secondary with Screw Terminals: Foot Mounting or 4 x 4 in. (100 x 100 mm) Plate

Technical Specifications

CD-W00-00-1 and CD-W00-N0-1 Wall Mount CO_2 Transmitters		
Measuring Range		0 to 2,000 ppm CO_2
Accuracy at 77°F (25°C)		±[50 ppm + 3.0% of reading] (includes calibration uncertainty, repeatability, and non-linearity). All accuracy specifications reflect the testing of the transmitter using high-grade certified gases. The transmitter is intended for an altitude range of 0 to 2,000 ft (0 to 600 m) above sea level without compensation.
Temperature Dependence of Output		-0.35% of reading/°C, typical (may vary between individual units)
Long-Term Stability		<5.0% of Full Scale/5 Years
Response Time (0 to 63%)		1 Minute
Operating Temperature Range		23 to 113°F (-5 to 45°C)
Storage Temperature Range		-4 to 158°F (-20 to 70°C)
Humidity Range		0 to 85% RH (noncondensing), 85°F (29°C) maximum dew point
Transmitter CO_2 Output Signal		4 to 20 mA or 0 to 10 VDC; Maximum Output Current: 25 mA; Maximum Output Voltage: 12.5 V
Resolution of Analog Outputs		2.5 ppm CO_2
Recommended External Load		Current Output: Maximum 500 ohms Load Resistance; Voltage Output: Minimum 1,000 ohms Load Resistance
Power Supply Range		20 to 30 VAC (18 to 30 VDC), Class 2
Power Consumption		<2.0 W Average, excluding current output consumption
Current Consumption		150 mA peak (70 mA average)
Warm-Up Time		<1 Minute; <10 Minutes for Full Specification
Dimensions (H x W x D)		4-23/32 x 3-5/32 x 1-7/32 in. (120 x 80 x 31 mm)
Shipping Weight		0.26 lb (117 g)
Compliance	**United States**	UL Listed, File E27734, CCN XAPX, UL 873, Temperature Indicating and Regulating Equipment, FCC Compliant to CFR 47, Part 15, Subpart B, Class A
	Canada	UL Listed, File E27734, CCN XAPX7, CAN/CSA C22.2 No. 24, Temperature Indicating and Regulating Equipment. Industry Canada Compliant, ICES-003
CE	**Europe**	CE Mark – Johnson Controls, Inc., declares that the Wall Mount CO_2 Transmitters are in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC.

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 2012 Johnson Controls, Inc. **www.johnsoncontrols.com**