

CD-W00-x0-2 Series Wall Mount CO₂ and Temperature Transmitters

Description

Johnson Controls offers carbon dioxide (CO₂) and temperature transmitters for measuring and transmitting CO₂ levels, ranging from 0 to 2,000 parts per million (ppm) and temperatures, ranging from 32 to 122°F (0 to 50°C) within HVAC CO₂ and temperature applications.

Specific HVAC CO₂ applications include Demand Control Ventilation (DCV), fresh air and Indoor Air Quality (IAQ), and rooftop air handling Economizer controls systems.

This compact wall-mounted device produces 0 to 10 V or 4 to 20 mA signal for CO₂ output and provides connections to a platinum temperature sensor (Pt1000 RTD). It is designed to work as part of any integrated Building Automation System (BAS).

The CO₂ and temperature transmitter is easy to install and requires no maintenance or field calibration.

Refer to the *CD-W00-x0-2 Series Wall Mount CO₂ Transmitters Product Bulletin (LIT-12012118)* for important product application information.

Features

- Energy savings from DCV strategies offer potential for 10 to 70% energy savings.
- Second-generation CARBOCAP® single-beam, dual-wavelength design provides superior performance compared to other technologies.
- Second-generation CARBOCAP silicon, micro-machined construction provides reliable CO₂ measurement in room environments.
- Platinum temperature sensor provides multiple functions in a single device, eliminating the need to install multiple devices.
- Calibration reliability offers 5 years of reliable calibration.
- Stable infrared reference compensates for light-source drift.



CD-W00-00-2 Wall Mount CO₂ and Temperature Transmitter

Repair Information

If the CD-W00-x0-2 Series Wall Mount CO₂ and Temperature Transmitter fails to operate within its specifications, replace the unit. For a replacement CO₂ and temperature transmitter, contact the nearest Johnson Controls® representative.

Selection Charts

CD-W00-x0-2 Series Wall Mount CO₂ and Temperature Transmitters


Product Code Number	Description
CD-W00-00-2	Wall Mount CO ₂ and Temperature Transmitter with Logo
CD-W00-N0-2	Wall Mount CO ₂ and Temperature Transmitter without Logo

Repair Parts and 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

CD-W00-x0-2 Series Wall Mount CO₂ and Temperature Transmitters (Continued)

Technical Specifications

CD-W00-x0-2 Series Wall Mount CO ₂ and Temperature Transmitters		
CO₂ Measuring Range	0 to 2,000 ppm CO ₂	
CO₂ Accuracy Across Temperature Range	68 to 86°F (20 to 30°C): ±(30 ppm +3% of reading) 50 to 68°F (10 to 20°C), 86 to 104°F (30 to 40°C): ±(35 ppm +3.7% of reading) 32 to 50 °F (0 to 10°C), 104 to 122°F (40 to 50°C): ±(40 ppm +4.8% of reading)	
Long-Term Stability	±(15 ppm +2% of reading) over 5 years	
Response Time (0 to 63%)	1 minute	
Temperature Measurement Range	32 to 122°F (0 to 50°C)	
Platinum Temperature Sensor	Temperature Sensor: 1,000 ohms, Class F0.15 IEC 60751 (Class A), thin-film platinum Temperature Coefficient: Approximately 2 ohms per F° (3.9 ohms per C°) Reference Resistance: 1,000 ohms at 32°F (0°C) Accuracy: ±0.34F° at 70°F (±0.18C° at 21°C)	
Operating Temperature Range	32 to 122°F (0 to 50°C)	
Storage Temperature Range	-40 to 158°F (-40 to 70°C)	
Operating Humidity Range	0 to 95% RH (noncondensing), 86°F (30°C) maximum dew point	
Transmitter CO₂ Output Signal	4 to 20 mA and 0 to 10 VDC Maximum Output Current: 21 mA; Maximum Output Voltage: 11 V	
Resolution of Analog Outputs	0.3 ppm CO ₂	
Recommended External Load	Minimum 1,000 ohms load resistance for 0 to 10 V Maximum 600 ohms load resistance for 4 to 20 mA	
Power Supply Range	24 VAC ±20%, 50/60 Hz (18 to 30 VDC), Class 2	
Power Consumption	<1.0W Average, excluding current output consumption	
Current Consumption	100 mA Peak on AC power; 45 mA Peak on DC power	
Warm-Up Time	<1 minute <10 minutes for full specification	
Dimensions (H x W x D)	5 x 3-3/16 x 1-1/32 in. (127 x 81 x 26 mm)	
Shipping Weight	0.25 lb (114 g)	
	United States	UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment, FCC Compliant to CFR 47, Part 15, Subpart B, Class A
	Europe	CE Mark - Johnson Controls, Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC directive 2014/35/EU.
	Canada	UL Listed, File E107041, CCN PAZX7, CAN/CSA C22.2 No. 205-12, Energy Management Equipment, Industry Canada Compliant, ICES-003
	Australia and New Zealand	RCM Mark, Australia/NZ Emissions Compliant.