

CWV Series





SPECIFICATIONS

Input Voltage	Class 2; 20 to 30 Vdc, 24 Vac 50/60 Hz
Analog Output #1	4 to 20 mA (clipped & capped) or 0 to 3 Vdc/ 0 to 5 Vdc/0 to 10 Vdc (jumper selectable)
Analog Output #2	4 to 20 mA (clipped & capped) or 0 to 3 Vdc/ 0 to 5 Vdc/0 to 10 Vdc (jumper selectable)
Sensor Current Draw	200 mA Maximum
Operating Humidity Range	0 to 95% RH non-condensing
Operating Temp Range	0 to 50 °C (32 to 122 °F)
Housing Material	High impact ABS plastic
Terminal Block Torque	0.4 to 0.5 N-m (3.6 to 4.4 in-lbf) max.
Terminal Block Wire Size	24 to 14 AWG (02 to 2.5 mm2)
Relay Contacts	1 A@30 Vdc, resistive; 30 W max.

CO ₂ TRANSMITTER	
Sensor Type	Non-dispersive infrared (NDIR), diffusion sampling
Measurement Range	0 to 2000 ppm
Accuracy	±40 ppm ±5.5% of measured value
Repeatability	±30 ppm ±4.5% of measured value
Response Time	<60 seconds for 90% step change
WARRANTY	
Limited Warranty	1 year

EMC Conformance: Low voltage directive 2006/95/EC & EMC directive 2004/108/EC. EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1:2007 specification requirements).

DUAL ANALOG OUTPUTS, SWITCHABLE 0 TO 3/5/10 VDC/4 TO 20 mA OUTPUT

DESCRIPTION

The CWV Series is a non-dispersive infrared sensor designed for measuring ${\rm CO_2}$ concentration in office and living spaces. Its 2000 ppm measurement range makes it an ideal solution for meeting ASHRAE and other ventilation control standards.

The CWV Series features multiple output options, microprocessor-based digital technology, and a unique self-calibration algorithm which improves long-term stability and accuracy.

APPLICATIONS

- · Controlling HVAC in response to occupancy
- · Improving tenant comfort
- Schools, museums, airports, commercial buildings, etc.
- · OEM applications
- Home automation
- Big-box retail
- RestaurantsC-Stores
- · Bid/spec market

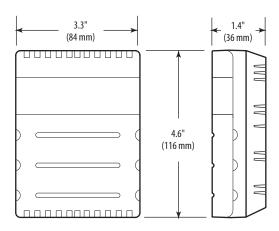
FEATURES

- Microprocessor-based design reduces long-term drift and calibration requirements
- Non-dispersive infrared technology (NDIR) repeatable to ±30 ppm ±4.5% of measured value...high accuracy
- Innovative self-calibration algorithm...easy to maintain
- 5-year calibration interval (recommended)
- Low ambient sensitivity
- Improve comfort and facilitate compliance with ASHRAE 62.1 standard for air quality
- Demand control ventilation provides reduction in energy costs...helps with green branding initiatives
- Dual analog outputs...added user convenience
- LED indication for power and error detection...reduces time spent troubleshooting
- Switchable 0 to 3/5/10 V output...increased flexibility
- US & European mounting holes...installation flexibility
- Field calibratable...reduce costly downtime
- 4 to 20 mA and voltage outputs in one unit...greater versatility

WIRING DIAGRAM

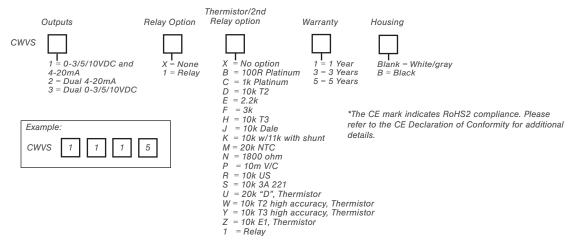
Relay 1 output (optional) Relay 2/temp output POWER SOURCE þ (optional) 20 to 30 Vdc or 24 Vac Output #2 mA or voltage Output #1 mA or voltage DDC PANEL COMMON d 80 80 80 80 80 80 800 1000 INPUT mA OR VOLTAGE V OUT 2 Relay 1 Status 10 8 8 8 ∞ INPUT mA OR VOLTAGE 5 800 1000 00 Calibrate

DIMENSIONAL DRAWING



ORDERING INFORMATION





ACCESSORIES

Calibration kits and gases (AA01, AA26, AA27, AA28, AA29) Handheld air quality testers (1010, 1008, 770)

