

The **CWS** wall mount CO_2 based occupancy sensor utilizes a new solid electrolyte CO_2 sensing technology, which provides a low cost solution for improving air quality. The self-calibrating sensor allows for easy installation and setup and no time spent troubleshooting. The CWS is equipped with an adjustable setpoint relay for direct control and alarm applications. There are four jumper settings to program the set-point alarm relay and an LED for local status indication.

- Indoor use only, away from direct sunlight, radiant heat, and vibration
- Sensor is NOT suitable for use in environments where CO₂ concentrations are consistently elevated, because the unit automatically adjusts its calibration to daily low ambient CO₂ levels
- Facilitate compliance with ASHRAE 62.1-2004 standard for air quality

APPLICATIONS

- Control HVAC in response to occupancy
- Improve tenant comfort

SPECIFICATIONS

Power Supply	3-wire (terminal blocks) 24 VAC or 12-30VDC
Response Time	2-min to 90% of saturated level, 4-min to 90% of base level
Lifespan	5 years at room temperature
Detection Range	300-3000ppm CO ₂
Operating Temp. Range	10° to 35°C (50° to 95°F)
Accuracy	$\pm 150 \text{ ppm}@25^{\circ}\text{ C } (77^{\circ}\text{ F}) \pm 2.5 \text{ppm/}^{\circ}\text{ C } (\pm 4.5 \text{ppm/}^{\circ}\text{ F})$
Relay Setpoint	Jumper selectable; 800 ppm, 1000ppm, 1500ppm, 2000ppm
Output	Relay contact, normally open (Form A), 1A@30VDC, 0-3V
	(used for testing verification)
Status Indicators	Solid GREEN=Below Threshold, RED=Above Threshold
	Flashing GRFFN=Warm Up: Flashing RFD=Sensor Fail

[•]Warm up time - 24 hours

ORDERING INFORMATION

MODEL	DESCRIPTION
CWS	CO ₃ Based Occupancy Sensor Switch

CWS

CO₂ Based Occupancy Sensor Switch

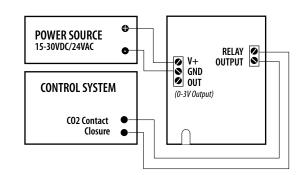
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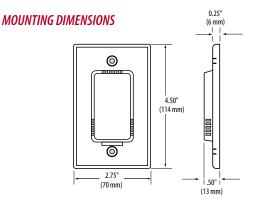
Features

- Low-profile rugged housing mounts directly to wall...aesthetically pleasing and durable
- Jumper-selectable relay settings for ventilation setpoints...application flexibility
- Sensor comes factory calibrated, so no field setup calibration is required...
 save labor costs
- LED for local indication of normal operation, venting, and malfunction mode
- Calibration algorithm maintains accuracy over time

WIRING DIAGRAMS

CWS Diagram







[•]Typical ppm range is 380 for 2 hours; for optimal performance allow 5 days to stabilize NOTE: Any test gas must be air balanced. DO NOT use nitrogen balanced gas.