



COSMO-4W Carbon Monoxide (CO)/Smoke Detector Specification

Architectural/Engineering Specifications

Carbon monoxide (CO)/Smoke detector shall be a System Sensor model number COSMO-4W, listed to UL 268 for Fire Protection Signaling Systems and to UL 2075 for Carbon Monoxide Gas Detection. The detector shall be photoelectric smoke sensing and electrochemical CO sensing and equipped with a sounder capable of Temp 3 and Temp 4 audible signals. The detector shall have nominal sensitivity of 2.5 percent per foot as measured in the UL smoke box. The detector shall be capable of automatically adjusting its sensitivity by means of drift compensation and smoothing algorithms. The detector's base shall be able to mount to a single-gang electrical box or direct (surface mount) to the wall or ceiling. Wiring connections shall be made by means of SEMS screws. The detector shall provide LED indication that blinks to indicate normal standby, smoke alarm, smoke maintenance, CO alarm, CO trouble/end-of-life. When the detector is in CO trouble condition, it shall send a trouble signal to the panel. The detector shall provide a means to test CO gas entry into the CO sensing cell. The detector shall provide this with a test mode that accepts CO gas from a test agent and alarms immediately upon sensing CO entry. The 2-wire model shall include a maintenance signal to indicate the need for maintenance at the alarm control panel and shall provide a loop testing capability to verify the circuit without testing each detector individually. The detector shall have a replaceable CO cell that can be replaced at end of cell life.

Electrical Specifications

The Operating Voltage shall be; Nominal: 12/24V non-polarized, Minimum: 8.5V, Maximum: 35V. The Standby Current shall be 50 μ A maximum. The Maximum Alarm Current shall be 40mA. The Alarm Contact Ratings shall be 100mA @ 36VDC, resistive.

Physical Specifications

The COSMO-4W dimensions (including base) shall be 5.5 inches (140 mm) diameter; 2.5 inches (64 mm) height. The approximate detector weight shall be 9.2 oz. (261 grams). The COSMO-2W detector Operating Temperature Range shall be 32°F–122°F (0°C–50°C). The COSMO-4W Operating Humidity Range shall be 20 to 95% RH non-condensing. The COSMO-2W Sensitivity shall be 2.5%/ft. nominal. The COSMO-2W Input Terminals shall be 14–22 AWG.

Mounting options for the COSMO-4W detector include; 3.5" and 4" Octagonal; Single-gang; 4" Square; 2 x 4", 3.5" and 4" round ceiling or direct mount to ceiling.

LED Modes

At Power up, the Green, Red and Blue LED's shall blink every 5 seconds. In Normal (standby) mode, the Green LED shall blink every 5 seconds; the Red LED shall be off; the Blue LED shall be off. In Smoke Alarm mode, the Green LED shall be off; the Red LED shall be solid; the Blue LED shall be off. In CO Alarm mode, the Green LED shall be off; the Red LED shall be off; the Blue LED shall be solid. During Smoke Trouble mode, the Green LED shall be off; the Red LED shall blink every 5 seconds; the Blue LED shall be off. In CO Trouble mode, the Green LED shall be off; the Red LED shall be off; the Blue LED shall blink every 5 seconds.