Product
4W-B Smoke Detector

Architectural/Engineering Specifications
Smoke detector shall be a System Sensor i3 Series model number 4W-B, listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a photoelectric type detector. The detector shall include a mounting base for mounting to 3½-inch and 4-inch octagonal, single gang, and 4-inch square back boxes with a plaster ring, or direct mount to the ceiling using drywall anchors. Wiring connections shall be made by means of SEMS screws. The detector shall allow pre-wiring of the base and the head shall be a plug-in type. The detector shall have a nominal sensitivity of 2.5 percent-per-foot nominal 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 shall provide dual color LED indication which blinks to indicate power up, normal standby, out of sensitivity, alarm and freeze trouble conditions.

Electrical Specifications
The 4W-B Operating Voltage shall be; Nominal: 12/24V non-polarized, Minimum: 8.5V, Maximum: 35V. The Maximum Ripple Voltage shall be 30% peak to peak of applied voltage. The Standby Current shall be 50 μA maximum average. The Maximum Alarm Current shall be 20 mA @ 12V, 23mA @ 24V. The Alarm Contact Ratings shall be 0.5 A @ 30V AC/DC.

Physical Specifications
The 4W-B dimensions (including base) shall be 5.3 inches (134 mm) diameter; 2.0 inches (51 mm) height. The 4W-B detector weight shall be 6.3 oz. (178 grams). The 4W-B detector Operating Temperature Range shall be 32°F–120°F (0°C–49°C). The 4W-B Operating Humidity Range shall be 0 to 95% RH non-condensing. The 4W-B Sensitivity shall be 2.5%/ft. nominal. The 4W-B Input Terminals shall be 14–22 AWG.

Mounting options for the 4W-B detector include; 3½-inch octagonal back box, 4-inch octagonal back box, Single gang back box, 4-inch square back box with a plaster ring, or direct mount to ceiling.

LED Modes
At Power up, the Green LED shall blink every 10 seconds; the Red LED shall blink every 10 seconds. In Normal (standby) mode, the Green LED shall blink every 5 seconds; the Red LED shall be off. In Out of sensitivity mode, the Green LED shall be off; the Red LED shall blink every 5 seconds. In Alarm mode, the Green LED shall be off; the Red LED shall be solid.

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