AS2045-00

Conventional Photoelectric Smoke Detector

Product Datasheet

Description

The AS2045 Series of detectors are reliable, high-quality, UL 268 7th Edition listed Photoelectric Smoke Detectors allowing them to be used in all open areas where smoke detection is required. The new multi-spectrum smoke categorization technolo-gy detects smoldering and flaming fires, including poly-urethane fuels, while reducing nuisance cooking alarms.

Detector Spacing

Smoke sensor spacing shall be in compliance with NFPA 72. For smooth ceilings and in the absence of specific performance-based design criteria, the distance between smoke sensors shall not exceed a nominal spacing of 30 ft. (9.1m) or all points on the ceiling shall have a sensor within a distance equal to or less than 0.7 times the nominal 30 ft. (9.1m) spacing. Sensors shall be located within a distance of one-half the nomi-nal spacing, measured at right angles from all walls or partitions extending upward to within the top 15 percent of the ceiling height. For additional instructions see NFPA 72

Standard Features

- High signal-to-noise ratio and sensitivity stability are effective in a wide range of environmental conditions.
- Wide viewing angle alarm indicators.
- Automatic drift compensation and maintenance indi-cation.
- Built-in magnetic test feature.
- Break-away, hidden locking feature for use with NS bases.
- Optimized reduction to false alarms and enhanced reaction time to real fires.

Operation

The AS2045-00 Photoelectric Smoke Detector utilizes a green/red LED for indication of status. In a normal standby condition the LED flashes green every 3 sec-onds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LED will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status the LED will latch on Red. The detector utilizes an IR-LED and Blue LED to distin-guish smoke characteristics.

AS2045-00 Conventional Photoelectric Smoke Detector

Sensing Element	Smoke	IR LED, Blue LED, Photodiode
Supply Voltage	Operating Voltage Range	8-35VDC
	Absolute Max Voltage	42VDC
	Maximum Voltage Ripple	8200mVAC
	Maximum Input Capacitance	0.01uF
Current Consumption	Standby Current	59µA
	Minimum Allowable Alarm Current	5mA
	Maximum Allowable Alarm Current	150mA
Startup	Time	25s (Max)
	Current	160uA (Max)
Reset	Time	100ms (Min)
	Voltage	2.5V (Min)
Compatible Bases	AS2050-00, AS2051-00	
	HSC-220R, HSC-221R, HSC-224R, HSC-4R ,HSC-4R12	
	*W suffix (not listed above) indicates white color	
Operating Temperature Range	32°F ~ 120°F	
UL Listed Ambient Temperature	32°F ~ 120°F	
Storage Temperature Range	-22°F ~ +140°F	
Operating Humidity Limit	<95%RH at 104°F, <85%RH at 140°F	
Dimension	3.94” diameter x 1.69” tall	
Color	Ivory	
Weight	3.53 oz.	
Air Velocity Range	0-4000 fpm	
Sensitivity Range	1.82-3.16%/ft	
Testing	Test with Smoke Sabre aerosol cans or the Testifire 1000/1001 or 2000/2001 with TS3 smoke capsules * Refer to Conventional Detectors Technical Bulletin Rev 07/21