

# ASX ANALOGUE ADDRESSABLE FIRE DETECTORS

- "Flat response technology" reduces susceptibility to false alarms
- Twin alarm LEDs on the head for 360 degree viewing
- Rapid and error-free addressing using the handheld programmer
- Electronics-free base
- Multi Sensor and Photoelectric detectors have removable chamber for easy cleaning and replacement – simplifying maintenance
- Smoke detectors have adjustable alarm threshold to compensate for contamination
- Ease of installation
- One piece outer cover gives low-profile stylish appearance
- Designed to meet worldwide approvals
- LPCB approved to EN54 Parts 5 and 7
- Complies with EMC directive 89/336/ EEC (CE marked)



The Kidde ASX range of fire detectors comprises a multi sensor, optical and ionisation smoke sensors, a temperature sensor, short circuit isolator, compatible manual call-points and a wide range of input/output devices. ASX sensors are advanced in design and performance and offer significant benefits to the installer and end user. The

'Noise Immune' Enhanced Systems Protocol utilises interrupts for fast response to fires. Additionally a unique, handheld solid-state address coding tool ensures that the address data is efficiently and accurately stored in the head, whilst keeping the base free of electronic components that could be damaged during installation.

**ASX Multi Sensor**

The multi sensor incorporates optical and heat elements, with a removable, flat response chamber and twin fire LEDs. The multi sensor has three modes, which are controlled from the Control Panel, allowing either the optical element, thermal element or both elements to be active in making the fire decision. The sensor polling LEDs can also be controlled via the Control Panel.

**Part No: 23911-K049**

**ASX Ionisation Smoke Sensor**

A single radioactive source ionises two chambers which allows a small DC current to flow between electrodes in each chamber. Smoke can freely enter the outermost chamber whilst the inner one is sealed. Smoke entering the outer chamber causes a reduction in the DC current, the imbalance between the two currents is proportional to smoke density which is converted, filtered and transmitted as the analogue value.

**Part No: 23911-K011**

**ASX Heat Sensor**

This incorporates a highly linear thermistor circuit, with the thermistor being mounted externally. A voltage is produced proportional to the temperature which is scaled, linearised and transmitted as the analogue value. The fire alarm panel can adjust the sensor threshold for different standards' requirements.

**Part No: 23903-K021**

**ASX Optical Smoke Sensor**

The detection chamber consists of an LED and photodiode arrangement. The chamber is designed so that light emitted by the LED cannot normally reach the photodiode. When smoke particles enter the chamber the light is scattered and some of this falls on the photodiode. This is converted into an electronic signal, filtered and then transmitted as an analogue value.

The chamber is easily removed or replaced for cleaning. The thresholds on either smoke sensor can be adjusted to compensate for contamination using the built-in test facility.

**Part No: 23903-K020**

**ASX Isolator**

Designed to protect the ESP loop from short circuit faults, preventing the whole loop from becoming inoperable.

**Part No: 23901-H12**

**ASX Base**

Electronics-free, with stainless steel contacts and clamping for 2.5 mm cable, remote LED output and suitable for BESA box fixing.

**Part No: 23903-K022**



## TECHNICAL SPECIFICATION

TYPICAL AT 23°C AND 24 VDC UNLESS OTHERWISE STATED	ASX IONISATION	ASX OPTICAL	ASX HEAT	ASX ISOLATOR	ASX MULTI SENSOR
Device Part No.	23903-K011	23903-K020	23903-K021	23901-H12	23911-K049
Base/Back Box Part No.	23903-K022	23903-K022	23903-K022	23901-H013	23903-K022
Size of Device in Base					
Height x Diameter (mm)	52 x 100	46 x 100	50 x 100	32 x 88 x 88	46 x 100
Supply Voltage	17 - 41V	17 - 41V	17 - 41V	17 - 41V	17 - 41V
Quiescent Current	350 µA	390 µA	350 µA	100 µA	450 µA
Current at polling	22mA	22mA	22mA	–	22mA
Alarm Indication	2 LEDs	2 LEDs	2 LEDs	1 LED	2 LEDs
Current in alarm	9.1 mA	9.1 mA	9.1 mA	< 10 mA	9.1 mA
Normal Operating Temperature	-10° to 50°C	-10° to 50°C	-20° to 88°C	-10° to 50°C	-10° to +50°C
Humidity (no condensation)	95% at 40°C	95% at 40°C	95% at 40°C	95% at 40°C	95% at 40°C
Max wind (continuous)	10m/s	unaffected	unaffected in fixed temperature use	unaffected	unaffected

**Handheld Programmer**

Each ASX sensor has its ESP loop address set between 1 and 127 by a simple solid state programming method. The sensor's address is stored in a non-volatile memory within the sensor, the address can be changed from the factory default (127) using a hand held programmer.

**Part No: 23903-K023**

**Removable Chamber**

The photoelectric sensor has a removable chamber which can be easily cleaned or replaced, hence simplifying maintenance.

**ASX Ancillaries Range**

The following ESP ancillary items complement the ASX range. All devices are loop-powered with the exception of the Dual Sounder Controller and Dual Zone Monitor which require an external power supply. The Dual Sounder Controller requires 19.2 - 30 V (nominally 24V DC) and the Dual Zone Monitor requires 19.2 - 28.8 V (nominally 24V DC). All units are housed in grey IP66 rated polycarbonate enclosures.

**Dual Switch Monitor Unit**

Monitors the status of two independent switches (single-pole vfc, one address) and reports status to control equipment.

**160 x 110 x 92mm (inc enclosure)**

**Part No: 23911-K020**



#### Dual Sounder Controller

Provides two fully monitored sounder outputs and one monitored input on one address.

**235 x 160 x 92mm (inc enclosure)**

**Part No: 23911-K019**

#### Dual Relay Controller

Provides two independent voltage free relay outputs (NO or NC) and one monitored input on one address.

**160 x 110 x 92mm (inc enclosure)**

**Part No: 23911-K021**

#### Mini Zone Monitor

Provides a single input for full monitoring of up to six Hochiki slave smoke/heat detectors on one address.

**160 x 110 x 92mm (inc enclosure)**

**Part No: 23911-K023**

#### Dual Zone Monitor

Allows full monitoring of two zones of conventional Hochiki smoke/heat detectors (30 per zone). An auxiliary output is provided for remote fire indication.

**235 x 160 x 92mm (inc enclosure)**

**Part No: 23903-K032**

#### Service Tools

- Universal Telescopic Smoke Pole  
**Part No: 23903-K058**
- Spare Punk Sticks for above (50/Box)  
**Part No: 23903-K062**
- Universal Heat Detector Tester c/w battery and charger  
**Part No: 23903-K055**
- Detector Removal pole (requires holder and cup)  
**Part No: 23903-K060**
- Detector Removal cup holder  
**Part No: 23903-K061**
- Detector Removal cup (for CDX and ASX ranges)  
**Part No: 23903-K059**



Kidde Fire Protection

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