



Kingfisher Company, inc.

Intelligent Multi-Criteria Sensor KF2251TMB



Features:

- Rotary address switches for fast installations
- Reliable analog communications for trouble free operation
- Configured by the FX-2003 for three distinct methods of operation
- Age resistant polymer housing
- Dual electronic thermistor design eliminates directionality
- Superior EMI resistance for reliability
- Microprocessor based design to provide maximum features
- Simple field cleaning for code compliance
- Dual LED indicators for 360° visibility
- On board drift compensation reduces maintenance
- Transmits signal to indicate maintenance required
- Detector sensitivity increases in hot fires
- Transient smoke conditions are ignored



Description:

Kingfisher Company inc.'s, Intelligent Multi-Criteria Sensor uses advanced software to continuously sample the air in an environment and adjust its detection parameters and alarm threshold accordingly. It does this automatically, without user intervention. There's no need for an installer to set sensitivity levels at the control panel – the KF2251TMB makes the educated decisions. The Multi-criteria Detection Reduces Nuisance Alarms.

Kingfisher Company inc.'s, multi-criteria sensor, is an intelligent sensor in more ways than one. First, it incorporates both thermal and photoelectric technologies that interact to maximize detection. Second, an on-board microprocessor and advanced software focus on rejecting nuisance alarms.

A patented photoelectric sensing chamber and dual thermistor heat detector combine with an array of onboard software tools, to maximize fire detection.

In a real fire, the smoke and heat sensors work together to make the quickest possible decision. The photo sensor is optimized for smoldering fires, the heat sensors provide a faster response to flaming fires. A dual stage drift compensation feature reduces maintenance frequency.

The KF225TMB offsets the effects of gradual dust build-up and will notify the control panel before its compensation level is reached, allowing time for maintenance. Once the compensation limit is reached, a second signal is sent to the control panel indicating an urgent need for maintenance.

Operation:

Kingfisher Company inc.'s, Intelligent Multi-Criteria Sensor can be configured by the FX-2003 R/T Intelligent Analog Addressable Fire Alarm Control Panel for three distinct methods of operation:

Full Multi-Criteria Integration

This method of operation allows for the Intelligent Multi-Criteria Sensor to provide full multi-criteria functionality.

Time Selective Detection Sensor

This method of operation allows for the smoke sensor portion to remain off during the configured day period and turn on during the configured night period to provide full Intelligent Multi-Criteria Sensor protection. The heat sensor is configured as an alarm input to provide continuous alarm protection. This method of operation works in conjunction with the FX-2003 Fire Alarm Control Panel's "Day/Night" mode.

Typical Application

A typical application for this mode of operation is a public corridor or smoking lounge. These environments normally have a high level of product of combustion present which would cause a smoke sensor to false alarm. At night these products of combustion do not exist and the added protection of a smoke sensor can be utilized.

Dual Functionality In One Package

This method of operation allows for the heat sensor portion to be configured as an alarm input and the smoke sensor portion to be configured as a supervisory (latching/non-latching), trouble or monitor input. This allows the smoke portion of the sensor to act as a local intelligent smoke alarm with an optional sounder base. The heat sensor is configured as an alarm input to provide continuous alarm protection. This method of operation allows for one sensor to provide two different modes of operation, each with a distinct programmable message.

Typical Application

A typical application for this mode of operation is a hotel room where the smoke sensor acts as an addressable smoke alarm with a local sounder. The smoke sensor provides a local alarm while initiating an alert signal and annunciation point at the fire alarm control panel. The heat sensor acts as an addressable system alarm device which when activated initiates a general alarm.

Specifications:

Voltage Range	15-32 volts DC
Height	2.0 inches (51 mm)
Diameter	6.1 inches (155 mm) installed in B210LP base 4.1 inches (104 mm) installed in B501 base
Shipping Weight	5.2 oz. (153 g)
Velocity Range	0 - 4000 fpm (0 to 20.3 m/sec)
Thermal Rating	135°F (57°C) fixed set point
Relative Humidity	10% - 93% non-condensing
Self Test Capability	Magnet/control panel activated

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ORDERING INFORMATION

KCi #	Model #	Description
52805	KF2251TMB	Intelligent Multi-Criteria Sensor– Photoelectric Detector with 135° F Heat Detector.
52803	KFB210LP	Detector Base- Intelligent, Low Profile, with Flange
52810	KF224RB	Detector Base with Relay- Intelligent, Low Profile with Flange
52811	KF224BI	Detector Base- Isolator for Style 7 Operation, Intelligent, Low Profile with Flange
52503	KFB501BH	Detector Base with Sounder- Intelligent, Low Profile with Flange (requires separate 24 VDC power for sounder- use with UL 864 Rev 8 panels only) (also needs EOL Relay 20132 and Mini Monitor Module, 52123 for 24VDC Supervision)
52805-DTS		Specification Data Sheet

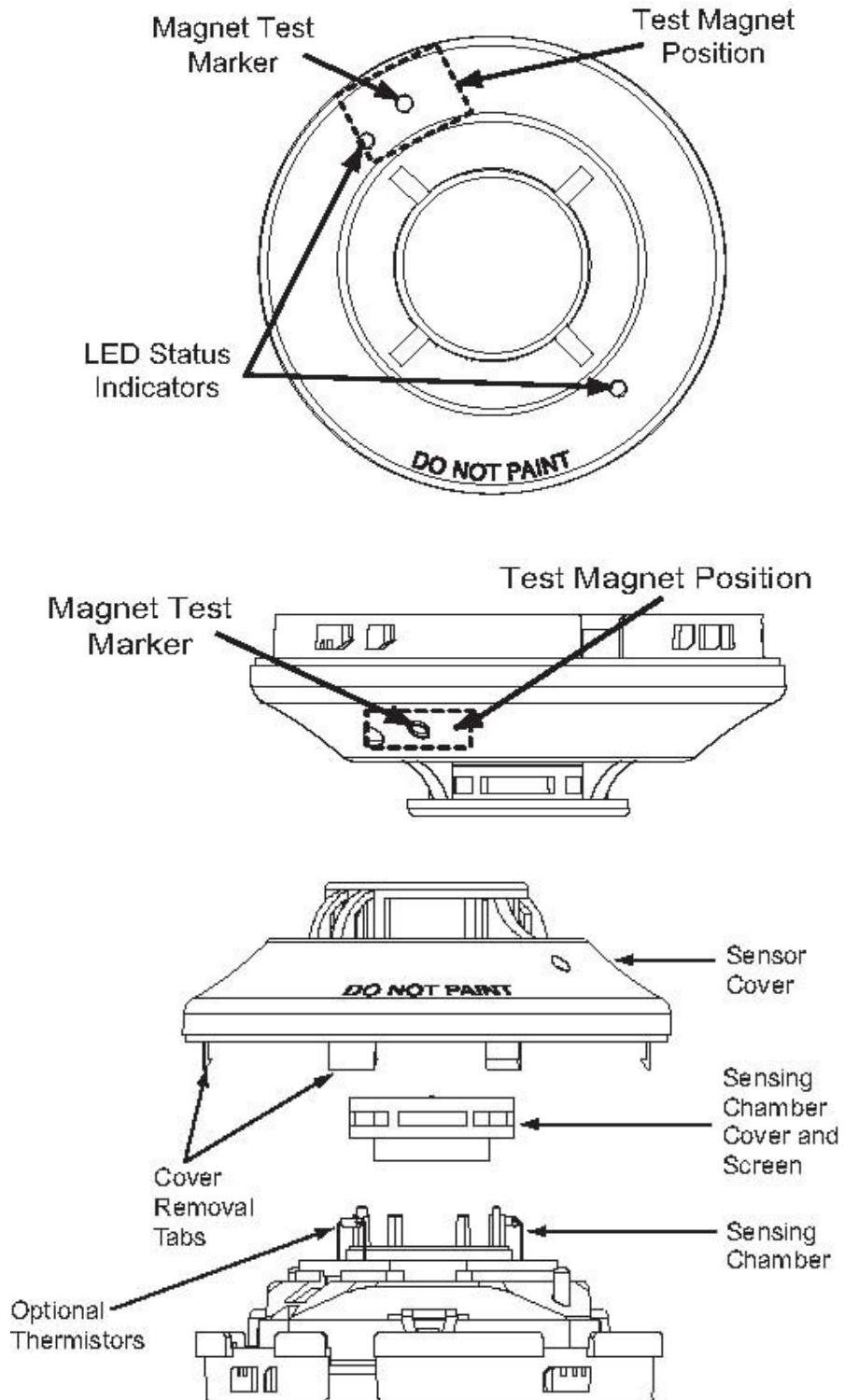
Kingfisher Company, inc., products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Kingfisher Company, inc., standard terms and conditions.

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DRAWINGS OR DIAGRAMS

Installation:



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