

# Duct Smoke Detector KFSL-2000



### Features:

- Low-Flow Technology: Both Ionization and Photoelectric models listed for velocities between 100-4000 ft./min.
- Both models listed for high-temperature applications,
  KFSL-2000-P 140°F, KFSL-2000-N 158° F.
- Operating voltages: 230VAC, 115VAC, 24VAC, 24VDC
- Interconnect up to 30 units for common functions
- "No-Tools Required" front or rear loading and removing sampling/exhaust tubes
- "Test Port Valve" allows for aerosol smoke testing without cover removal
- Clear cover fitted with four captive "No-Tools Required" thumbscrews
- Instantaneous cover removal trouble indication
- Staggered terminal blocks for easier wiring
- Flashing LED on detector head indicates normal operation
- Magnet test capability (magnet included)
- More wiring space than competitive models
- Footprint allows easy retrofit in many applications without additional drilling
- Over 15 remote accessories available





## **Description:**

The KFSL-2000 Series Smoke Duct Detector is the latest innovation for early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down in the event of smoke detection.

The KFSL-2000 is designed and built to meet all local code requirements, as well as the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a wide range of remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push buttons.

# **Application:**

The KFSL-2000 includes many features that represent true innovations from current generation duct smoke detectors. This philosophy provides a new level of efficiency in after-purchase value to both the installer/servicer and end-user. The attention to detail has yielded a host of "No-Tools Required" features, as well as a multi-application performance level as yet unmatched in the industry. Innovative product combined with unsurpassed customer service equals the right combination for all of your projects. The key features listed on the right detail many of the customer-driven innovations incorporated in the KFSL-2000 Series.

#### **Features continued:**

- Duct wall gaskets on back of enclosure are pre-installed
- Compatible with the WP-2000 weatherproof enclosure
- Reset switch is also an alarm test switch competitive models require a magnet or cover removal to test at unit
- Unit includes green pilot and red alarm visual indicators
- External mounting tabs do not require cover removal to install
- Colored cover gasket indicates proper cover seal
- UL, CUL, CSFM, and MEA Listed
- Compact, lightweight size means easy handling, lower shipping costs
- One set of 2A form "A" alarm contacts
- One set of 10A form "C" trouble contacts
- Large terminal connection screws
- Standard interchangeable "plug-in" UL268 photoelectric or ionization heads
- · Advanced detector head design yields internal dust filtering
- No additional screens or filters to clean
- Compatible with building automation and fire alarm systems
- Ionization and Photoelectric versions available
- · Complete wiring details permanently attached to unit

## **Specifications:**

MODEL: KFSL-2000-N lonization: 230VAC, 115VAC, 24VAC, 24VDC

KFSL-2000-P Photoelectric: 230VAC, 115VAC, 24VAC, 24VDC

SAMPLING TUBES: KFSTN-1.0 Sampling tube for 12" or less duct width

KFSTN-2.5 Sampling tube for 6" to 2.5' duct width KFSTN-5.0 Sampling tube for 2.5' to 5.0' duct width KFSTN-10.0 Sampling tube for 5.0' to 10.0' duct width

ACCESSORIES: KFMS- and KFMSR-Series remote accessories, KFWP-2000 weatherproof

enclosure

**POWER REQUIREMENTS:** (without accessories)

Standby: 230VAC 12 mA

115VAC 22 mA 24VAC 55 mA 24VDC 14 mA

Alarm: 230VAC 18 mA

115VAC 32 mA 24VAC 190 mA 24VDC 68 mA

#### **RELAY CONTACT RATING:**

Alarm Contacts: Resistive load: 2 sets form "C" rated at 10 Amps @ 115VAC

Resistive load: 1 set form "A" rated at 2 Amps

Trouble Contacts: Resistive load: 1 set form "C" rated at 10 Amps @ 115VAC

**AIR VELOCITY:** 100 to 4,000 ft./min.

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# **Specifications continued:**

AMBIENT TEMPERATURE: KFSL-2000-N 32°F to 158°F (0°C to 70°C)

KFSL-2000-P 32°F to 140°F (0°C to 60°C)

HUMIDITY: 85 ±5 % RH (@32 ±2°C; 86 ±3.6°F) Non-Condensing / Non-Freezing

WIRING: Solid or stranded: #12 to #22 AWG terminals

APPROVALS: UL & CUL Listed (UL268A, UROX, UROX7) File # S2829 CSFM Listed (3240-

1004:105)

MEA Accepted (73-92-E; VOL. 27)

MATERIAL: Grey plastic backbox, clear plastic cover (Makrolon 94V-0)

**DIMENSIONS:** 13 ½" L x 4 ½" W x 2 ¼" H

MAX. NET WT.: 2 ½ lbs.

RADIOACTIVE ELEMENT: For KFSL-2000-N (Ionization) Americium 241; 0.9 Micro-Curie Do not expose to

corrosive atmospheres

HARDWARE: 7" exhaust tube, sampling tube end cap, mounting template, test magnet, and

mounting hardware included

## ORDERING INFORMATION

KCi#	Model #	Description
84116	KFSL-2000-N	Ionization Duct Detector
84117	KFSL-2000-P	Photoelectric Duct Detector
84122	KFSTN-1.0	Sampling Tube—Up to 1 foot
84118	KFSTN-2.5	Sampling Tube—Up to 2.5 feet
84187	KFSTN-5.0	Sampling Tube—Up to 5 feet
84188	KFSTN-10.0	Sampling Tube—Up to 10 feet
81089	KFMS-RA	Remote Alarm LED
81088	KFMS-KA/R	Remote Alarm LED with Key operated test / re-set switch
84189	KFWP-2000	Weatherproof Enclosure for KFSL-2000 Duct Detectors, NEMA 3R
84112	KF225-APO	Replacement Smoke Detector Head—Ionization (See Datasheet 84112)
84113	KF325-APO	Replacement Smoke Detector Head—Photoelectric (See Datasheet 84112)
84116-DTS		Specification Data Sheet

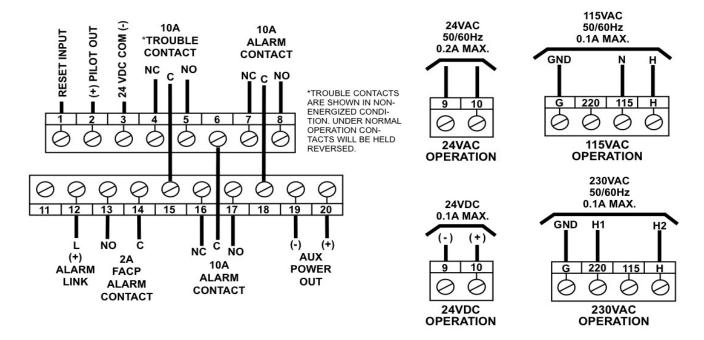
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NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Kingfisher Company, inc., standard terms and conditions

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## DRAWINGS OR DIAGRAMS

### **Electrical Installation**



#### WIRING:

• **CAUTION**: Do not use looped wire under terminals. Break wire run to provide for proper supervision of connections.

With detector head removed, connect one of the appropriate dedicated power sources to the applicable terminals (see above). Replace detector head and depress the cover removal switch (SW1) and the unit will be energized. The green pilot LED will be illuminated, and when pressing the test/reset button (SW2), the red alarm LED will be illuminated. This test confirms the correct basic operation of the duct smoke unit, excluding the detector head (see functional testing).

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