Innovair[™] Duct Smoke Detectors



The Next Level of HVAC Smoke Detection Has Arrived



Only System Sensor ...

Changing Air Speeds

Today's HVAC applications may utilize variable air volume systems for increased occupancy comfort and maximum energy efficiency. *Innovair*[™] *with Low-Flow Technology* is designed to work with these newer systems, offering UL Listed detectors for duct air speeds as low as 100 feet per minute to an upper range of 4,000 feet per minute.

Efficient and Self-contained Sampling Tubes

Innovair duct detectors have a selfcontained telescopic sampling tube for duct installations up to 18 inches across. This feature eliminates labor intensive cutting and drilling in small duct applications. System Sensor also offers a standard range of sampling tubes for duct widths from $1^{1}/_{2}$ ' to 12'. This flexibility allows the Innovair detectors to be installed quickly and efficiently in virtually any duct application.

Ease and Convenience

Unlike typical low airflow solutions that require costly installation of in-duct, pendant mounted detectors, Innovair duct smoke detectors are easy to install — and maintain. Their slim design and lightweight construction make them easy to handle. In addition, cover screws never fall out, and the detector's exterior mounting tabs simplify installation on round or rectangular ducts.

Built-in Interconnectability

Innovair allows multiple units to be easily interconnected. Innovair 4-wire detectors can be connected together so that if one Innovair goes into alarm, the auxiliary relays of the remaining interconnected detectors will activate. But, only the Innovair detecting smoke goes into alarm, making identification quick and easy.

Cover Missing Signal

Take the cover off of the 4-wire model and a timer starts, allowing 7 minutes to clean and maintain the unit. If the cover remains off longer than 7 minutes, a trouble signal is activated. This patented feature is found only on Innovair detectors and assures operational integrity in your HVAC duct detection system.

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Installer Flexibility

The 4-wire Innovair[™] design has three relays to assure that all smoke control configurations can be met. The auxiliary form C contacts are capable of initiating control of HVAC equipment upon alarm as well as operate the auxiliary contacts of the interconnected units. The alarm contact and trouble contact can be wired directly to a fire alarm panel or used with any of a variety of remote accessories.

Innovative Electronic Monitoring

You can tell instantly whether an Innovair duct detector is working. Whether viewing the Innovair straight on or at a 90-degree angle, Innovair's LED's are easy to read. A flashing green LED ensures that the detector is powered and operating above its minimum sensitivity setting. A red LED indicates the detector is in alarm.

Cover Reset Function

The front cover reset button on Innovair smoke detectors allows you to reset the detector easily after initiating an alarm test.

Meets or Exceeds Codes

Innovair duct detectors meet NEC as well as UL and NFPA requirements. We also bring a safety feature – a high-low voltage barrier – as standard to the Innovair product line.

Wide Range of Accessories

You'll find a comprehensive assortment of accessories for Innovair duct smoke detectors, including remote test stations, audible and visible annunciators and the versatile SSK451 multisignaling accessory. These accessories allow the Innovair to meet stringent code requirements anywhere.



Annunciator with Piezo Alarm, Magnet Remote Test Station, Remote Test Station with Key and Remote LED Annunciator

SSK451 Multi-signaling Accessory





SSK451 Multi-signaling Accessory with optional smoke strobe

Important Information about Duct Smoke Detectors

Several documents provide guidance concerning the performance, application and installation of duct smoke detectors, including:

- UL Standard 268A, Standard for Smoke Detectors for Duct Applications
- NFPA Standard 90A, Installation of Air Conditioning and Ventilating Systems
- NFPA 92A, Recommended Practice for Smoke Control Systems
- NFPA Standard 72, National Fire Alarm Code
- NFPA Standard 101, Life Safety Code
- ASHRAE Handbook and Product Directory, "Fire and Smoke Control"

Innovair Duct Smoke Detectors are useful in preventing the spread of dangerous combustion gasses and reducing property damage. For example, an HVAC fan motor overheats and begins to smoke. This smoke is detected by the Innovair smoke detector equipped with an auxiliary relay that immediately cuts power to the fan motor BEFORE significant amounts of smoke can be distributed to critical areas.

Or, assume that a fire starts on a second floor of a building. The HVAC system serving the second floor also serves floors one through four, thus providing a common supply to all levels. If area smoke detectors are not provided, one of the most cost effective means of automatic detection are duct smoke detectors. These can be located in the return air ducts on each floor, ahead of the main return plenum. Innovair duct detectors help establish predictable and reliable control of smoke, thereby assuring safety. System Sensor has additional information on the behavior of smoke and its proper detection and control. For more information, contact System Sensor.



Innovair[™] Duct Smoke Detectors — **For Every HVAC Application**

Your HVAC system supplies conditioned air to virtually every area of the building. But during a fire, toxic smoke and combustion gasses that are generated can be quickly drawn into the air duct system and then distributed throughout the building. Unless detected, the unchecked distribution of smoke can be costly and in some cases, tragic.

System Sensor Brings You Control Over Smoke

System Sensor is the world's largest manufacturer of commercial fire detectors and notification products. Innovair duct smoke detectors offer a practical, workable solution to control smoke in an HVAC system. Innovair has the widest detection range of duct air speeds on the market, giving you virtually complete control over smoke in the HVAC system during a fire.

Simple, Effective Operation

By continuously sampling air passing through a duct, Innovair senses the presence of particles of combustion. When sufficient smoke is detected. Innovair initiates control of fans, smoke dampers, doors or other components of the air handling system, thus preventing the uncontrolled distribution of smoke. And by offering the widest range of duct detection speeds, Innovair duct smoke detectors can bring your fire safety solutions to the next level of efficiency and performance.





DH100ACDCI Innovair 4-wire Ionization Duct Smoke Detector 2-wire Photoelectric Duct Smoke Detector

System Sensor is the world leader in smoke detection technology

Only System Sensor could manufacture Innovair. By continuously working to provide products that meet ever-changing application requirements, System Sensor has emerged as a global company with local expertise. Our commitment to serve the needs of a growing worldwide fire alarm market centers on:

- Quality products designed to meet every code requirement
- Unique built-in features that assure proper operation
- Ease and convenience equals installation, testing and maintenance savings

System Sensor has made the commitment to these goals, with a sales, service and manufacturing organization ready to work for you. For your next fire and smoke detection application, turn to the best in the market. Turn to Innovair, by System Sensor.

System Sensor is a global manufacturer of fire detection and notification devices, specializing in smoke detection and notification technology. System Sensor places a premium on research and development, resulting in products that are reliable, sophisticated and designed for real-world applications. With sales, service and manufacturing facilities throughout the Americas, Europe and Asia, System Sensor's high quality, innovative products are the most comprehensive in the industry.



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