InnovairFlex

Conventional Duct Smoke Detectors

NOTIFIER® by Honeywell

Conventional Initiating Devices

General

The Notifier InnovairFlex photoelectric smoke detector features a pivoting housing that fits various applications: both square and rectangular footprints mount to round or rectangular duct work.

This new duct smoke detector senses airflow speeds ranging from 100 to 4,000 feet per minute with proven precision. The enhancements built into this model improve false alarm immunity (with plug-in sensor head); broaden operating temperature (-4°F to 158°F, -17°C to 70°C) and humidity (0 to 95 percent non condensing) ranges; while simplifying installation and maintenance. These advance features can detect smoke even in the harshest duct applications.

The new design provides more wiring space with an added 3/4 inch conduit knockout. Numbers and labels for terminal designations are consistent with previous Innovair models. The new sampling tube can be clicked into position with one smooth motion from either the front or the back of the detector.

The Notifier InnovairFlex duct smoke detector has signals to indicate trouble and maintenance conditions. Additionally, a cover tamper feature is incorporated to indicate a trouble condition when the sensor cover is removed or improperly installed. An improved cover design, with an integrated low-flow feature, isolates the sensor head from the low-flow technology for simple maintenance.

The Notifier InnovairFlex series is designed for greater flexibility and reliable smoke detection to simplify installation and maintenance. The new InnovairFlex product line is backward compatible to existing Innovair models, including remote test accessories.

Features

- Photoelectric, integrated low-flow technology.
- Air velocity rating from 100 ft/min to 4,000 ft/min (0.5 m/s to 20.32 m/sec).
- Versatile mounting options in square or rectangular configuration with modular construction.
- Plug-in sensor.
- Superb false alarm immunity with the latest sensor technology.
- Broader ranges for operating temperature (-4°F to 158°F, -17°C to 70°C) and humidity (0% to 95% non-condensing).
- Patented sampling tube installs from front or back of the detector with no tools required.
- A cover tamper feature to indicate a trouble condition for removed or improperly installed sensor cover.
- Increased wiring space with a newly added 3/4" conduit knockout.
- Improved LED status.
- 24 VDC.
- Backward compatibility with existing Innovair products, including remote accessories.



innovairflexconventional.jpg

WARNING: Duct smoke detectors have specific limitations.
Duct Smoke Detectors are:
• **NOT** a substitute for an open area smoke detector
• **NOT** a substitute for early warning detection, and
• **NOT** a replacement for a building's regular fire detection system.

Specifications

Size: (Rectangle) 14.38 in (37 cm) Length; 5 in (12.7 cm) Width, 2.5 in (6.36 cm) Depth.

Size: (Square) 7.75 in (19.7 cm) Length; 9 in (22.9 cm) Width; 2.5 in (6.35 cm) Depth.

Weight: 1.8 lb (0.82 kg).

Operating Temperature Range: (-4°F to 158°F, -17°C to 70°C).

Storage Temperature Range: -22°F to 158°F (-30°C to 70°C).

Operating Humidity Range: 0% to 95% relative humidity (non-condensing).

Air Duct Velocity: 100 to 4,000 ft/min (0.5 to 20.32 m/s).

ELECTRICAL RATINGS

Power supply voltage: 8.5-35 VDC.

Input capacitance: 0.1uF max.

Reset voltage: 2.5 VDC min.

Reset time (with RTS151): 0.03 to 0.3 seconds.

Reset time (by power down): 0.3 seconds max.

Power up time: 35 seconds max.

Alarm response time: 15 seconds.

Current Requirements: (Using No Accessories)

- Peak standby current: 120uA.
- Max standby current: 60uA (average).
- Max alarm current: 130mA.

ACCESSORY CURRENT LOADS AT 24 VDC

Device	Standby	Alarm
RA100Z	0mA	12 mA Max
RTS151	0mA	12mA Max
RTS151KEY	12mA	12mA Max

Product Line Information

D2: InnovairFlex duct detector, includes 2-wire photo electric low-flow duct smoke detector.

D4120: InnovairFlex duct detector, includes 4-wire photo electric low-flow duct smoke detector.

D4120W: InnovairFlex duct detector, includes watertight 4-wire photo electric low-flow duct smoke detector.

D4P120: InnovairFlex duct detector, includes 4-wire photoelectric power board component only, 24VAC/DC, 120VAC.

2151: Replacement 2 wire conventional photo electrical sensor head.

2D51: Replacement 4-wire conventional photo electrical sensor head.

D4S: 4-wire photo electric sensor component only.

DCOIL: 2 wire remote test coil required with RTS151/RTS151KEY.

DST1: Metal sampling tube duct width up to 1 ft (0.3m).

DST1.5: Metal sampling tube duct widths up to 1 ft to 2 ft (0.3 to 0.6 m).

DST3: Metal sampling tube duct widths up to 2 ft to 4 ft (0.6 to 1.2 m).

DST5: Metal sampling tube duct widths up to 4 ft to 8 ft (1.2 to 2.4 m).

DST10: Metal sampling tube duct widths up to 8 ft to 12 ft (2.4 to 3.7 m).

DH400OE-1: Weatherproof enclosure.

ETX: Metal exhaust tube duct, width 1 ft (0.3 m).

M02-04-00: Test magnet.

P48-21-00: End cap for metal sampling tubes.

RA100Z: Remote annunciator alarm LED.

RTS151: Remote test station.

RTS151KEY: Remote test station with key lock.

RTS2: Multi-signaling accessory (4-wire).

AOS: Add-on strobe, optional accessory for RTS2.

RTS2-AOS: Multi-signaling accessory (4-wire); includes AOS add-on strobe.

Architectural / Engineering Specifications

The air duct smoke detector shall be a Notifier InnovairFlex D2 Photoelectric duct smoke detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velociites of 100 ft/min to 4,000 ft/min (0.5 m/sec to 20/32 m/sec). The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12-18 AWG wiring.

Agency Listings and Approvals

Consult product manual for lists of compatible UL-Listed devices. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL Listed: 268A

ULC Listed

CSFM: 3242-1653:0206 (D2), 3242-1653:0207 (D4120, D4P120, D4S)

FM approved

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