HFS-D(A)

Intelligent Non-Relay Photoelectric Duct Smoke Detector

FIRE·LITE ALARMS by Honeywell

Addressable Devices

General

The HFS-D(A) is flexible enough to fit mounting configurations from square to rectangular and everything in between.

The HFS-D(A) intelligent non-relay photoelectric duct smoke detector features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct. This unit senses smoke in the most challenging conditions, operating in airflow speeds of 100 to 4000 feet per minute, temperatures of -4°F to 158°F, and a humidity range of 0 to 95 percent (non-condensing).

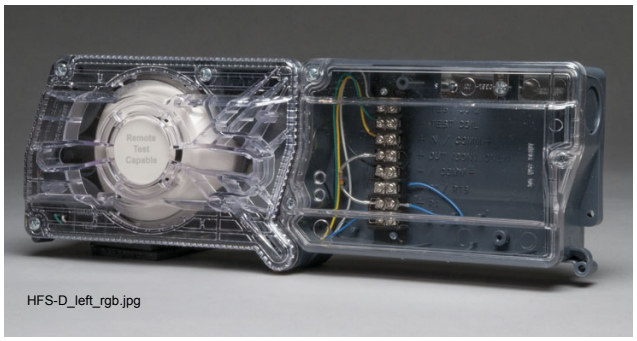
An improved cover design isolates the sensor head from the low-flow feature for simple maintenance. A cover tamper feature was added to indicate a trouble signal for a removed or improperly installed sensor cover. The housing provides a ¾-inch conduit knockout and ample space to facilitate easy wiring and mounting of the HFS-MR(A) relay module.

The HFS-D(A) can be customized to meet local codes and specifications without additional wiring. The new HFS-D(A) is compatible with various remote test accessories.

Features

- UL and ETL listed to UL 268A
- ULC listed to ULC S529
- Photoelectric, integrated low-flow technology (HFS-DPR(A) detector head included)
- Air velocity rating from 100 ft/min to 4000ft/min (0.5m/s to 20.32m/sec)
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature (-4°F to 158°F) and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- Cover tamper signal
- Increased wiring space with a newly added ¾-inch conduit knockout
- Available space within housing to accommodate mounting of relay module
- Easily accessible code wheels on sensor head
- Clear cover for convenient visual inspection
- Remote testing capability
- Requires data communication line power only

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.
REFER TO NFPA 72 AND 90A FOR ADDITIONAL DUCT SMOKE DETECTOR APPLICATION INFORMATION.



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Specifications

ARCHITECTURAL/ENGINEERING SPECIFICATIONS

The air duct smoke detector shall be a Honeywell HFS-D(A) Intelligent Non-Relay Photoelectric Duct Smoke Detector. The detector housing shall be UL listed per UL 268A and ULC listed per ULC S529 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 velocities of 100 ft/min to 4000 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 RTS151(A)/RTS151KEY(A) remote test station. Terminal connections shall be of the strip and clamp method suitable for 12–18 AWG wiring.

PHYSICAL SPECIFICATIONS

Dimensions:

- **Rectangular:** 14.38 in (37 cm) Length; 5in (12.7 cm) Width; 2.5 in (6.6 cm) Depth
- **Square:** 7.75 in (19.7cm) Length; 9 in (22.9cm) Width ; 2.5 in (6.35cm) Depth

Weight: 1.6 lb (0.73 kg)

Operating Temperature: –4°F to 158°F (–20°C to 70°C)

Storage Temperature: –22°F to 158°F (–30°C to 70° C)

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

Air Duct Velocity: 100 to 4000 ft/min (0.5 to 20.32 m/s)

ELECTRICAL RATINGS

Please see detector head installation manual for electrical specifications.

ACCESSORIES

Accessory Current Loads at 24 VDC: RA100Z(A), RTS151(A)/RTS151KEY(A) 12 mA max in alarm; 0 mA in standby.

System Sensor provides system flexibility with a variety of accessories, including two remote test stations and different means of visible and audible system annunciation. As with our duct smoke detectors, all duct smoke detector accessories UL/ULC listed (**RTS151(A), RTS151KEY(A), RA100Z(A):** UL S2522).

Ordering Information

HFS-D(A): Intelligent non-relay photoelectric low-flow duct smoke detector (HFS-DPR(A) detector head included)

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

HFS-DPR(A): Replacement photoelectric head for duct detector

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

M02-04-00: Test magnet

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

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

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

RA100Z(A): Remote annunciator alarm LED

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

RTS151(A): Remote test station

DH400OE-1: Weatherproof enclosure

RTS151KEY(A): Remote test station with key

Note: Use "A" versions for Canadian applications.

Agency Listings

- **UL Listed:** S24850
- **ULC Listed:** S6959
- **ETL (US):** # 100034702CHI-002

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ISO 9001 CERTIFIED
ENGINEERING & MANUFACTURING QUALITY SYSTEMS

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We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

Made in the U.S. A.

For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.
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