

## FCD-350 Duct smoke detector



- ▶ Detects smoke within HVAC ducts
- ▶ New Rugged Durable Housing
- ▶ Easy Smoke Testing Port
- ▶ Removable Terminal Cover

This device is designed and built to meet all local requirements, as well as the NFPA regulations regarding duct smoke detectors. This device has a local test button, and output terminals for remote status indicators and test switches. Air sampling is accomplished by two tubes which protrude into the duct. The 7.5 in. exhaust tube is supplied with the duct smoke detector unit. Once the duct width has been determined the air intake sampling tubes must be ordered. Sampling tubes are supplied in three standard lengths 2.5ft., 5 ft. and 10ft. and cut to size to fit the duct.

### Functions

This device detects the presence of smoke in HVAC ducts and trigger an alarm to the connected system in order to reduce the recirculation of smoke in areas by the air handling systems, fans and blowers. Complete systems may be shut down in the event of smoke detection. This device operates on 120VAC, 240VAC, 24VAC, or 24VDC.

### Regulatory information

Region	Agency	Certification
US	UL	UL 268A: Smoke Detectors for Duct Applications
	CSFM	California State Fire Marshall (see our website)

### Installation/configuration notes

#### Electrical installation

Wiring must conform to applicable local codes, ordinances and regulations covering these types of devices. Wire the detectors according to the engineering drawings for the particular job requirements. These detectors are not intended for open area protection, nor should they be used for open air protection. Refer to NFPA 90A and NFPA 72 for general and additional information on Duct Smoke Detectors concerning operation and installation. Terminals are suitable for up to #14 gauge wire.

### Parts included

Quantity	Component
1	Detector
1	Hardware pack
1	Installation guide

### Technical specifications

#### Mechanical

Dimensions (H x W x D) (cm)	24.13 cm x 19.05 cm x 6.35 cm
Dimensions (H x W x D) (in)	9.50 in x 7.50 in x 2.50 in
Weight (lb)	3 lb
Detector head type	Conventional photoelectric

Housing material	18 G.A. steel backbox, clear plastic cover
Sampling tubes	2.5 ft, 5 ft or 10 ft
Visual indicators	PILOT: Green - Normal   Off - Shutoff/Detector missing ALARM: Off - Normal   Yellow - Check voltage/Detector head   Red - Alarm
Material	Plastic (ABS)
Color (RAL)	RAL 1014 Ivory

### Environmental

Operating temperature	Inside duct: 0°C (32°F) ~ 38°C (100°F) Housing ambient: 0°C (32°F) ~ 49°C(120°F)
Storage temperature (°C)	-30 °C – 70 °C
Storage temperature (°F)	-22 °F – 158 °F
Ambient temperature	0°C (32°F) - 38°C (100°F)
Operating relative humidity, non-condensing (%)	10% – 93%
Usage	Indoor/Dry
Air velocity	1000 - 4000 ft/min.
Sensitivity	1.36-2.33%/FT @ 4000FPM

### Electrical

Input voltage	Alarm: 24 VDC, 78 mA   24 VAC, 370 mA   115 AC, 48 mA   230 VAC, 31 mA Normal standby : 24VDC 20mA   24VAC 263mA  115AC 15mA   230VAC 10mA
Standby current	20 mA @ 24 VDC
Alarm current	78 mA @ 24 VDC
Alarm contacts	2 form C rated 10A @ 115/230 VAC, 7A @ 28 VDC

### Ordering information

#### FCD-350 Duct smoke detector

Provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial and Residential applications.  
Order number **FCD-350 | F.01U.397.735**

#### Accessories

##### FAA-325-2.5 Sample tube, duct 2.5'/76.2cm

2.5 ft. (762 mm) long sample tube for use with the FAD-325, FAD-325-R, FAD-325-V2F, and FAD-325-V2F-R Analog Duct Detectors  
Order number **FAA-325-2.5 | F.01U.133.075**

##### FAA-325-5 Sample tube, duct 5'/152.4cm

5 ft. (1.52 m) long sample tube for use with the FAD-325, FAD-325-R, FAD-325-V2F, and FAD-325-V2F-R Analog Duct Detectors  
Order number **FAA-325-5 | F.01U.133.076**

##### FAA-325-10 Sample tube, duct 10'/304.8cm

10 ft. (3.05 m) long sample tube for use with the FAD-325, FAD-325-R, FAD-325-V2F, and FAD-325-V2F-R Analog Duct Detectors  
Order number **FAA-325-10 | F.01U.133.077**

##### D304 Remote indicator plate

Brushed stainless steel indicator plate with a red alarm LED and a green pilot LED  
Order number **D304 | 4.998.125.873**

##### D305 Remote test/indicator plate, 24V

Brushed stainless steel annunciator plate, red alarm LED, green pilot LED, key-operated Test/reset switch  
Order number **D305 | F.01U.020.620**

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