BOSCH

FCD-350-DH Duct smoke detector head, photo

- ▶ Computer-designed non-directional smoke chamber
- ▶ 360° view of detector status LED
- ▶ Highly stable operation, RF/Transient protection
- ▶ One built-in power/sensitivity supervision/alarm LED

This device is a reliable, high quality replacement Photoelectric Duct Smoke Detector head for in-duct applications. The computer-designed smoke chamber makes this device well suited for detecting smoldering fires as well as fast-flaming fires.

System overview

This photoelectric duct smoke detector is a replacement head for the FCD-350.

Functions

This device utilizes an Infrared and Blue LED light source and silicon photodiode receiving element in the smoke chamber. In a normal standby condition, the receiving element receives no light from the pulsing LED light source. In the event of a fire, smoke enters the device smoke chamber and light is reflected from the smoke particles to the receiving element. The light received is converted into an electronic signal.
Fire Judgement signals are processed and compared to a reference level. When the signal exceeds the reference level, the alarm signal is triggered. The status LED latch on continuously during the alarm period.

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

Sensitivity test feature

This device has a built-in automatic sensitivity test feature. In normal conditions, the status LED flashes green. When the sensitivity drifts outside of its sensitivity limits, the status LED flashes red. In an alarm state, the status LED is red continuously. When the sensitivity drifts outside of its sensitivity limits and the status LED flashes red, the device needs to be cleaned.

Parts included

Quantity	Component
1	Detector
1	Hardware pack
1	Installation guide

Technical specifications

Mechanical

Dimensions (H x W x D) (cm)	10.03 cm x 10.03 cm x 4.57 cm
Dimensions (H x W x D) (in)	3.95 in x 3.95 in x 1.8 in
Material	Plastic (ABS)
Color in 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)
Operating relative humidity, non-condensing (%)	95%
Usage	Indoor/dry
Air velocity range	0-4000 fpm
Sensitivity test feature	Automatic Sensitivity window verification test
Sensitivity range	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
Light source	Infrared Emitting Diode

Ordering information

FCD-350-DH Duct smoke detector head, photo
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-DH | F.01U.397.736**