


BOSCH

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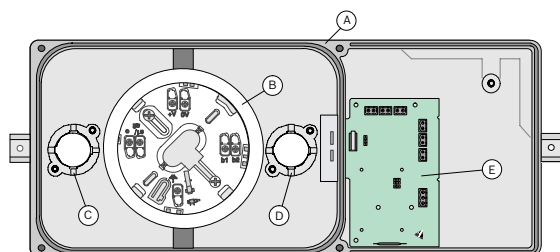
FAD-420-HS-EN Duct Smoke Detector



- Use in ventilation systems with air velocities from 1.5 m/s to 20 m/s
- For the activation of fans, door controls or external display devices an optional Relay Board can be installed
- A clear section on the frosted cover allows observing the alarm LED of the integrated FAD-O420 Detector
- Control to prevent unwanted removal of the cover
- Easy installation of the FAD-O420 Detector
- Maintains LSN loop functions in the event of wire interruption or short-circuit thanks to two integrated isolators

The FAD-420-HS-EN Duct Smoke Detector with integrated FAD-O420 Detector detects smoke in ventilation ducts. Smoke particles in the air are reliably detected and reported to the fire panel by the LSN improved bus system.

System Overview



- A Air sampling housing
- B Detector Base for the FAD-O420 Detector
- C,D Mounting flange for sample tube or ventilation tube
- E Connection board

Functions

Air from the ventilation duct is constantly directed through the sample tube and the air sampling housing to the purpose-built FAD-O420 Detector.

Smoke particles in the air are reliably detected and reported to the fire panel by the LSN improved bus system.

Certifications and Approvals

Region	Certification	
Europe	CE	FAD-O 420

Installation/Configuration Notes

- Air velocities from 1.5 m/s to 20 m/s
- Horizontal or vertical mount of housing
- If a remote indicator is connected (like MPA or FAA-420-RI), the FAD-RB-DIBT Relay Board **must not** be used!

Parts Included

Quant.	Component
1	Air sampling housing with connection board, Detector base and installation material
1	D344-1.5 sample tube (length 45.7 cm)
1	Ventilation tube
2	D344-TF air filter for sample and ventilation tube
Note	Please note that the FAD-420-HS-EN does not come with the required FAD-O420 Detector. The FAD-O420 Detector has to be ordered in addition.

Technical Specifications

FAD-420-HS-EN Duct Smoke Detector

Electrical

Operating voltage	24 V DC (15 ... 33 V DC)
Maximum current consumption	Approx. 0.5 mA (approx. 0.7 mA when FAD-RB-DIBT Relay Board is installed)
Electromagnetic susceptibility (EMS)	EN 50130-4
Electromagnetic emission (EME)	EN 61000-6-3

Mechanics

Dimensions (H x W x D)	16.5 x 39.5 x 11 cm
Material and Color	
• Housing base	Plastic fiber reinforced, PPE + PS (UL94-V1), grey
• Housing cover	Plastic, PC (UL94-V2), clear
• Weight	Approx. 1.5 kg

Environmental Conditions

Permissible air velocity	1.5 m/s ... 20 m/s
Permissible operating temperature	0 °C ... 50 °C
Permissible storage temperature	-20 °C ... 80 °C
Permissible relative humidity	95 %, non condensing
Protection class as per EN 60529	IP 30

FAD-RB-DIBT Relay Board

Maximum contact load	2 A at 30 V DC
Weight	11 g

Ordering Information

FAD-420-HS-EN Duct Smoke Detector The FAD-O420 Detector must be ordered in addition.	FAD-420-HS-EN
Accessories	
FAD-O420 Detector for Use in Air Sampling Housing	FAD-O420
FAD-RB-DIBT Relay Board for DIBT Application	FAD-RB-DIBT
FAA-420-RI Remote Indicator required if the detector is not directly visible or has been mounted in false ceilings or false floors	FAA-420-RI
D344-1.5 Sample Tube length 45.7 cm (1.5 ft)	D344-1.5
D344-3 Sample Tube length 91.4 cm (3 ft)	D344-3
D344-5 Sample Tube length 1.52 m (5 ft)	D344-5
D344-TF Filter for Sample/Ventilation Tube Replaceable filters for duct detector sampling tubes, available in packages of 20	D344-TF

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