BOSCH
Invented for life

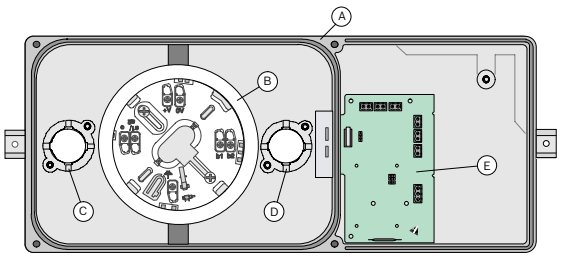
FAD-420-HS-EN Duct Smoke Detector



- **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**

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by

© Bosch Security Systems Inc. 2010 | Data subject to change without notice
T3887684107 | Cur: en-US, V22, 30 Sep 2010