The FAD-420-HS-EN Duct detector housing with base with integrated FAD-425-O-R 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-425-O-R Detector

### Functions

Air from the ventilation duct is constantly directed through the sample tube and the air sampling housing to the purpose-built FAD-425-O-R Detector. Smoke particles in the air are reliably detected and reported to the fire panel by the LSN improved bus system.

### Certifications and approvals

<table>
<thead>
<tr>
<th>Region</th>
<th>Regulatory compliance/quality marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>CPR 0786-CPR-21151 FAD-420-HS-EN</td>
</tr>
<tr>
<td>Germany</td>
<td>VdS G 211088 FAD-420-HS-EN</td>
</tr>
<tr>
<td>Europe</td>
<td>CE FAD-420-HS-EN, FAD-425-OR, FAD-RBDIBT</td>
</tr>
<tr>
<td>Poland</td>
<td>CNBOP 063-UWB-0144 FAD-420-HS-EN</td>
</tr>
</tbody>
</table>
Installation/configuration notes

- Air velocities from 1 m/s to 20 m/s
- Horizontal or vertical mount of housing
- If a remote indicator is connected, the FAD-RB-DIBT Relay Board must not be used!

Parts included

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Air sampling housing with connection board, Detector base and installation material</td>
</tr>
<tr>
<td>1</td>
<td>D344-1.5 sample tube (length 45.7 cm)</td>
</tr>
<tr>
<td>1</td>
<td>Ventilation tube</td>
</tr>
<tr>
<td>2</td>
<td>D344-TF air filter for sample and ventilation tube</td>
</tr>
</tbody>
</table>

Notice

Please note that the FAD-420-HS-EN does not come with the required FAD-425-O-R Detector. The FAD-425-O-R Detector has to be ordered in addition.

Technical specifications

FAD-420-HS-EN Duct detector housing with base

**Electrical**

- Operating voltage: 24 V DC (15 ... 33 V DC)
- Maximum current consumption: Approx. 0.55 mA (approx. 0.75 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 m/s ... 20 m/s
- Permissible operating temperature: 0 °C ... 50 °C
- Permissible storage temperature: -20 °C ... 60 °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 detector housing with base air sampling housing with connection board and detector base for FAD-425-O-R. The detector must be ordered in addition. Order number FAD-420-HS-EN

Accessories

- FAD-425-O-R Duct detector, optical
  - Analog addressable optical detector for use in air sampling housing FAD-420-HS-EN
  - Order number FAD-425-O-R

- FAD-RB-DIBT Relay board for DIBT application
  - relay board for DIBT applications
  - Order number FAD-RB-DIBT

D344-1.5 Sample tube, duct 1.5'/45.7cm

- length 45.7 cm (1.5 ft)
- Order number D344-1.5

D344-3 Sample tube, duct 3'/91.4cm

- length 91.4 cm (3 ft)
- Order number D344-3

D344-5 Sample tube, duct 5'/152cm

- length 1.52 m (5 ft)
- Order number D344-5

D344-TF Duct tube filters, 20pcs

- Replaceable filters for duct detector sampling tubes, available in packages of 20
- Order number D344-TF

FAA-420-RI-DIN Remote indicator for DIN application

- For applications where the automatic detector is not visible, or mounted in false ceilings/floors.
- This version complies with DIN 14623.
- Order number FAA-420-RI-DIN

FAA-420-RI-ROW Remote indicator

- For applications where the automatic detector is not visible, or mounted in false ceilings/floors.
- Order number FAA-420-RI-ROW