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
- **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-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>
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</thead>
<tbody>
<tr>
<td>Europe</td>
<td>CPR</td>
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<td></td>
<td>0786-CPR-21151 FAD-420-HS-EN</td>
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<td>Germany</td>
<td>VdS</td>
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<td>G 211088 FAD-420-HS-EN</td>
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<td>CE</td>
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<td>FAD-420-HS-EN, FAD-425-OR, FAD-RB-DIBT</td>
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<td>Poland</td>
<td>CNBOP</td>
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<td>063-UWB-0144 FAD-420-HS-EN</td>
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</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**

- Order number: FAD-420-HS-EN | F.01U.029.411

**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 | F.01U.308.231
  F.01U.283.067

**FAD-RB-DIBT Relay board for DIBT application**

- Relay board for DIBT applications
- Order number: FAD-RB-DIBT | F.01U.029.619

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

- Order number: D344-1.5 | F.01U.029.219

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

- Order number: D344-3 | F.01U.029.175

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

- Order number: D344-5 | F.01U.029.174

**D344-TF Duct tube filters, 20pcs**

- Replaceable filters for duct detector sampling tubes, available in packages of 20
- Order number: D344-TF | 4.998.137.961

**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 | F.01U.289.620

**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 | F.01U.289.120

**FAD-RB-DIBT Relay board for DIBT application**

- Relay board for DIBT applications
- Order number: FAD-RB-DIBT | F.01U.029.619