

# Explosion-safe Smoke Detector AR-025

## Based on optical detection technology



### Features

- ATEX certified
- Suitable for use in locations with gas and dust, zone 2 and 22
- Power supply 12 V DC
- Max. switching capacity 1 A at 30 V DC
- Connections normally open or normally closed
- Suitable for connection to a (fire) alarm system
- Equipped with status indication
- Ingress protection level IP65
- Coated aluminum housing



II 3 G Ex ec mc IIC T6 Gc  
II 3 D Ex mc tc IIIC T80°C Dc



### Description

The explosion-safe Artidor AR-025 optical smoke detector reacts to visible smoke particles. If too much smoke enters its measuring chamber, an alarm is triggered. In the measuring chamber, an integrated infrared light source generates a light pulse every 8 seconds. Smoke particles from a fire change the light signal received by the light diode. A relay trips and the alarm center reports a fire alarm. The 12 V optical smoke detector is mounted on the ceiling in the center of the room. The minimum distance to the side wall should be 30cm. We recommend a separate smoke detector for each entrance area, staircase, living-room, and bedroom. By changing a jumper, you can configure the optical smoke detector as NO or as NC detector. It is therefore suitable for every wired alarm system. The smoke detector is supplied externally with 12V operating voltage and is EN54 certified.

The AR-025 Smoke detector is mounted on top a coated aluminum housing. The explosion safety to gas and dust is arranged by the application of protection degrees against ignition "Increased safety", "molding" and "protected by enclosure".

The Artidor AR-025 Smoke detector is certified in accordance with European Directive 2014/34/EU (ATEX 114) for use in gas or dust hazardous areas and is CE marked.



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### Technical data

Explosion safety:	II 3 G Ex ec mc IIC T6 Gc, II 3 D Ex mc tc IIIC T80°C Dc
Applicable EU directives:	2014/34/EU (ATEX 114) and 2014/30/EU (EMC)
CE conformity:	EN 60079-0:2018, EN 60079-7:2015 / A1:2018, EN 60079-18:2015 / A1:2017 and EN 60079-31:2014
Sensor:	Photodiode
Supply voltage:	12 V DC
Rated current:	35 mA
Rated power:	0,368 W
Status indicator:	Green LED is blinking in operation, red LED lights continuously at an alarm
Certification:	EN 54-7
Switch power AC1:	1 A at 30 VDC
Output:	Switched NO or NC output with option to connect multiple detectors in series
Material:	Die cast aluminum housing (RAL 7015, slate grey)
Electrical connections:	Terminals 4 x 2,5 mm <sup>2</sup>
Entries:	M16 cable glands (2x) for cables from 5 – 9 mm in diameter
Ambient temperature:	-20 °C to +50 °C
Ingress protection:	IP 65 according to EN 60529
Housing dimensions (L x W x H):	120 x 120 x 113 mm (excluding cable glands)
Weight:	1,265 grams

### Ordering codes

Type number	Output
AR-025/001	NO
AR-025/002	NC

Other versions on request