

407 non-addressable reflective beam line-type smoke detector

EN 54-12, CE

Line-type smoke detector for 2-wire system applications

Description

The 407 non-addressable reflective beam line-type smoke detector is suitable for connection to 2-wire non-addressable fire detection control and indicating equipment, or to addressable fire detection control and indicating equipment using an input module.

The transceiver component detects smoke over distances from 8 m to 100 m.

Automatic compensation adjusts for lens contamination, alignment drift, ambient light conditions and transmitted beam ageing.

The 407 non-addressable reflective beam line-type smoke detectors provide fire detection and alarm system designers with a Standards-compliant, economical smoke detector for high spaces and areas with complex ceilings where point-type smoke detectors may not be suitable due to environmental conditions.

Features

- Long detection distance from 8 m to 100 m at up to 14.5 m width
- Single transceiver and separate reflector components
- Quiescent condition indicator
- Automatic compensation for lens contamination, alignment drift, ambient light conditions and transmitted beam ageing
- Self-diagnostics function monitors internal faults
- Separate Alarm and Fault relay outputs
- Easy to install and commission
- Low maintenance

Compliance

407 line-type smoke detectors have the following compliance ^a.

	EN 54-12 ^b	CE ۵
407-001	✓	✓

- ^a Third-party conformance assessment has not been undertaken.
- ^b EN 54-12 Fire detection and fire alarm systems. Smoke detectors Line

detectors using an optical light beam

^c Conformité Européenne

Accessories

The following are accessories compatible with the 407 line-type smoke detectors.

Description	Part number	Datasheet
Reflector	407-002	_
Input module	621-007	31-0122



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Specifications		
Power	407-001	
Operating voltage	DC (15 ~ 28) V	
Commissioning current	≤ 20 mA @ DC 28 V	
Quiescent current	≤ 12 mA @ DC 28 V	
Quiescent condition		
Quiescent indication	Flashing red LED	
Alarm		
Obscuration sensitivity level	(1.3 ± 0.3) dB/m	
Alarm current (max)	22 mA @ DC 28 V	
Alarm indicator	Red LEDs	
Alarm N/O relay	2.0 A @ DC 28 V	
Reset time	15 s	
Fault		
Fault indicator	Yellow LED	
Fault N/O relay	2.0 A @ DC 28 V	
Environmental		
Operating temperature	(-10 ~ +50)°C	
Operating humidity	(0 ~ 95)% RH, non-condensing	
Storage temperature	(-25 ~ +80)°C	
Storage humidity	(0 ~ 98)% RH, non-condensing	
Miscellaneous		
Detection distance ^a	(8 ~ 100) m	
Detection width	14.5 m	
Beam adjustment angle	±6°	
Transmitted beam path angle	±0.5° directional	
Alignment indicator (during commissioning)	Green LED Yellow LED	
Dimensions (h x w x d)	(206 x 95 x 95) mm	
Weight (with base)	405 g	
Ingress protection rating	IP-20 IP66 ^b	

^a 2 x 2 reflector matrix required for detection distances > 40 m. ^b Prepared with glue-seal treatment.



407-001

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