

Description

403 non-addressable photoelectric smoke/heat detectors are state-of-the-art detectors suitable for connection to 2-wire or 4-wire non-addressable fire detection control and indicating equipment, or to addressable fire detection control and indicating equipment that can accept non-addressable type detectors¹.

Advanced electronics in conjunction with a photoelectric smoke sensing chamber and an electronic thermistor provide early detection of fire and high immunity against unwanted alarms. The heat sensor provides sensitive rate-of-rise operation or fixed-temperature operation when the response threshold value is exceeded.

The 403 non-addressable detector range provides fire detection and alarm system designers with an economical smoke/heat detector for life safety and property protection applications.

Features

- Dual photoelectric smoke and heat sensors to detect either smoke, heat or a combination of the phenomena.
- Ideal for both fast-flaming and slow smouldering fires.
- Surface-mount device (SMD) circuit board design
- High immunity against unwanted alarms
- Stable smoke sensing chamber. No adjustment or replacement required
- Durable heat sensor. No adjustment or replacement required
- Dual LEDs for 360° visibility
- 2-wire and 4-wire models for DC 12 V and DC 24 V operation
- 4-wire model for DC 48 V operation
- 4-wire models available with N/O alarm relay output
- 4-wire models available with auto-reset function
- 2-wire models available with remote LED output
- Connects to zone monitor for use with addressable control and indicating equipment
- Sleek low-profile housing design
- Low maintenance

Compliance

403 smoke/heat detectors have the following compliance ^a.

	EN 54-5 ^b	EN 54-7 ^d	CE ^f
403-001	✓	✓	✓
403-002	✓	✓	✓
403-003	✓	✓	✓
403-004	✓	✓	✓
403-005	✓	✓	✓

^a Third-party conformance assessment has not been undertaken.

^b EN 54-5 *Fire detection and fire alarm systems. Heat detectors. Point detectors*

^c EN 54-7 *Fire detection and fire alarm systems. Smoke detectors. Point detectors using scattered light, transmitted light or ionization*

^d Conformité Européenne



403 non-addressable smoke/heat detector

Accessories

The following accessories are compatible with 403 smoke/heat detectors.

Description	Part number	Datasheet
3-terminal 99 mm low profile continuity base ^a	487-003	31-0117
5-terminal 99 mm low profile continuity base	487-007	31-0117
Remote indicator ^b	681-001	31-0034
Detector monitor module	620-001	31-0027

^a Suitable for 403-001 only.

^b Requires 5-terminal base.

¹ May be used with the 620-001 detector monitor module.

Specifications

Power	403-001	403-002	403-003	403-004	403-005
Operating voltage	DC (10.8 ~ 33) V		DC (10.8 ~ 26.4) V		DC (40 ~ 60) V
Start-up current	≤ 100 μA				
Start-up time	≤ 30 s				
Quiescent current	≤ 60 μA				
Alarm Condition					
Sampling time	≤ 3 s				
Alarm response threshold (smoke)	(0.08 ~ 0.15) dB/m				
Alarm response threshold (heat)	59 °C static, and rate-of-rise ^a				
Alarm current (max)	50 mA		30 mA		
Alarm condition indicator	Dual red LEDs				
Remote LED output current (max)	—	15 mA	—		
Alarm output relay	—		SPST. N/O. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V		
Reset					
Reset voltage	≤ 1 V				
Reset time	≤ 5 s				
Auto reset time	—		(4 ~ 6) s	—	
Environmental					
Operating temperature	(-10 ~ +55) °C				
Operating humidity	(0 ~ 95) % RH, non-condensing				
Storage temperature	(-25 ~ +80) °C				
Storage humidity	(0 ~ 98) % RH, non-condensing				
Miscellaneous					
Dimensions (excluding contacts)	Φ 99 mm × 51 mm				
Ingress protection rating	IP-42				

^a Detectors are factory-configured for 30 K/min and comply with EN 54-5 class A1 and class A2.

Ordering Information

	2-Wire	4-Wire	Remote Indicator ^a	Relay Output	Auto Reset
403-001	✓	—	—	—	—
403-002	✓	—	✓	—	—
403-003	—	✓	—	✓	—
403-004	—	✓	—	✓	✓
403-005	—	✓	—	✓	—

^a Requires 5-terminal base if remote indicator is installed.

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