

## Description

400-series non-addressable carbon monoxide (CO) gas alarms are suitable for connection to 2-wire and 4-wire non-addressable fire detection control and indicating equipment, 400 detectors can also connect to 2-wire and 4-wire addressable fire detection control and indicating equipment that can accept non-addressable detectors<sup>1</sup>.

Advanced electronics in conjunction with a semiconductor gas sensor provide early detection of carbon monoxide gas and high immunity against unwanted alarms.

The 400 CO alarm range provides fire detection and alarm system designers with a Standards-compliant, economical gas detector for life safety and property protection applications.

## Features

- Advanced algorithms provide advanced detection discrimination
- Stable gas sensing chamber. No adjustment or replacement required
- High immunity against unwanted alarms
- Surface-mount device (SMD) circuit board design
- 2-wire or 4-wire system operation
- Detector auto-reset once gas levels fall below alarm threshold levels
- Magnet-initiated alarm test function
- DC 12 V or DC 24 V operation
- N/C or N/O alarm relay output
- Loud 85 dB internal sounder available on some models
- Audible warning signal of an internal fault on some models
- Easy installation. No programming required
- Connectable to zone monitor for use with addressable control and indicating equipment
- Sleek, low-profile housing design
- Low maintenance



400 non-addressable CO gas alarm

## Compliance

400 CO alarms have the following compliance.

	EN 50291 <sup>a, c</sup>	UL 2075 <sup>b, c</sup>	CE
400-001	✓	✓	✓
400-002	✓	✓	✓
400-003	✓	✓	✓

<sup>a</sup> EN 50291 *Electrical apparatus for the detection of carbon monoxide in domestic premises. Test methods and performance requirements*

<sup>b</sup> UL 2075 *Gas and Vapor Detectors and Sensors*

<sup>c</sup> Third-party conformance assessment has not been undertaken.

## Accessories

The following accessories are compatible with 400 CO alarms.

Description	Part number	Datasheet
4-term. 99 mm low profile base <sup>a</sup>	CN1021	31-0036
8-terminal 99 mm low profile base	CN1041	31-0038
Remote indicator <sup>b</sup>	681-001	31-0034
Detector monitor module	620-001	31-0027

<sup>a</sup> Suitable for 400-001 only.

<sup>b</sup> Requires 8-terminal base.

<sup>1</sup> May be used with the 620-001 detector monitor module.

## Specifications

	400-001 400-002	400-003
Operating voltage	DC (10.8 ~ 33) V	
Start-up current	≤ 100 μA	
Start-up time	≤ 10 min	
Quiescent current	50 μA	
Quiescent condition indicator	Flashing red LED every 5 s	
Alarm current (max)	50 mA	
Sampling time	(2 ~ 4) s	
Alarm response threshold	70 μL/L for 60 min ~ 240 min <sup>a</sup> 150 μL/L for 10 min ~ 50 min <sup>a</sup> 400 μL/L for 4 min ~ 15 min <sup>a</sup>  50 μL/L for 60 min ~ 90 min <sup>b</sup> 100 μL/L for 10 min ~ 40 min <sup>b</sup> 300 μL/L for < 3 min <sup>b</sup>	
Alarm condition indicator	Continuous red LED	
Alarm relay	—	SPST. N/O or N/C. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V
Sounder output	—	≥ 85 dB @ 3 m
Reset voltage	≤ 1 V	
Reset time	≤ 10 s	
Auto reset time	< 30 s	
Internal fault indication	Single short audible signal every 30 s	
Operating temperature	(-10 ~ +40)°C	
Operating humidity	(0 ~ 95)% RH, non-condensing	
Storage temperature	(-25 ~ +70)°C	
Storage humidity	(0 ~ 98)% RH, non-condensing	
Dimensions (excluding contacts)	Φ 99 mm × 45 mm	
Ingress protection rating	IP-42	

<sup>a</sup> Complies with UL 2075, *Gas and Vapor Detectors and Sensors*.

<sup>b</sup> Complies with EN 50291, *Electrical apparatus for the detection of carbon monoxide in domestic premises. Test methods and performance requirements*.

## Ordering Information

	2-Wire	4-Wire	Remote Indicator <sup>a</sup>	Internal sounder	Relay Output
400-001	✓	—	—	—	—
400-002	✓	—	✓	—	—
400-003	—	✓	—	✓	✓

<sup>a</sup> Requires 8-terminal base if remote indicator is installed.

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