

## Description

The 401 non-addressable ultra-violet flame detectors are suitable for connection to 2-wire and 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 detectors<sup>1</sup>.

The 401 UV flame detectors are suited to applications where flames rapidly develop due to the nature of the combustible materials, such as where petrochemical products are used or stored.

The 401 UV flame detector provides fire detection and alarm system designers with a Standards-compliant detector for life safety and property protection applications.

## Features

- High sensitivity UVtron sensor tube technology
- Surface-mount device (SMD) circuit board design uses digital ICs for stable and reliable operation
- Solar blind, with an electronic filter to eliminate unwanted alarms from naturally occurring phenomena
- High immunity to electrical noise and RF interference
- Fast response time
- Wide field of view
- Polarity insensitive
- 2-wire or 4-wire system operation
- DC 12 V or DC 24 V operation
- Remote LED output available on some models
- N/O alarm relay output available on some models
- Auto-reset available on some models
- Connectable to zone monitor for use with addressable control and indicating equipment
- Easy installation. No programming required
- Low maintenance



401 non-addressable flame detector

## Compliance

401 flame detectors have the following compliance.

	EN 54-10 <sup>a, b</sup>	CE
401-001	✓	✓
401-002	✓	✓
401-003	✓	✓
401-004	✓	✓

<sup>a</sup> EN 54-10 *Flame detectors – point detectors*

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

## Accessories

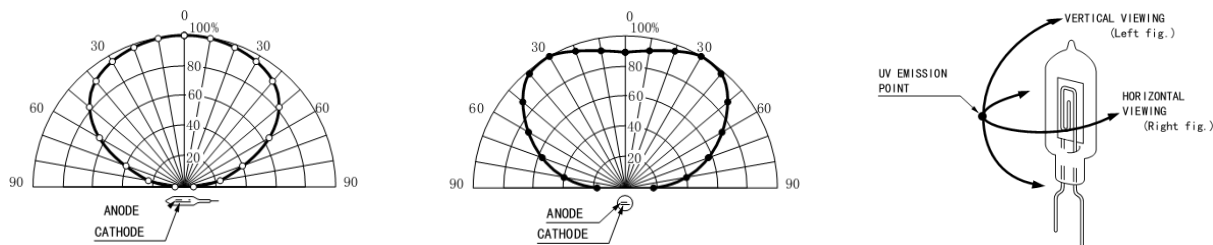
The following accessories are compatible with 401 flame detectors.

Description	Part number	Datasheet
5-terminal 102 mm low profile base	CN3023	31-0035
9-terminal 102 mm low profile base	CN3043	31-0037
Remote indicator <sup>a</sup>	681-001	31-0034
Detector monitor module	620-001	31-0027

<sup>a</sup> Requires 9-terminal base.

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

## Field of View



Note: The response time depends on the flame size and the distance from the detector. The UV flame detector is a line-of-sight device, and cannot see past obstructions such as storage racks.

## Specifications

	401-001 401-002	401-003	401-004
Operating voltage	DC (10.8 ~ 33) V		DC (10.8 ~ 26.4) V
Start-up current	≤ 100 μA		
Start-up time	≤ 30 s		
Quiescent current	30 μA		
Quiescent condition indicator	Dual flashing red LED		
Alarm current (max)	50 mA	30 mA	40 mA
Sampling time	(4 ~ 6) s		
Alarm condition indicator	Dual red LEDs		
Reset voltage	≤ 1 V		
Reset time	≤ 5 s		
Field of view	120° cone		
UV sensitivity	(185 ~ 260) nm		
Alarm response (typical)	30 mm gas flame at 4 m within 10 s		
Alarm relay	—	SPST. N/O. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V	
Auto reset time	—	—	< 30 s
Operating temperature	(-10 ~ +55)°C		
Operating humidity	(0 ~ 95)% RH, non-condensing		
Storage temperature	(-25 ~ +80)°C		
Storage humidity	(0 ~ 98)% RH, non-condensing		
Dimensions (excluding contacts)	Φ 102 mm × 45 mm		
Ingress protection rating	IP-42		

## Ordering Information

	2-Wire	4-Wire	Remote Indicator <sup>a</sup>	Relay Output	Auto Reset
401-001	✓	—	—	—	—
401-002	✓	—	✓	—	—
401-003	—	✓	—	✓	—
401-004	—	✓	—	✓	✓

<sup>a</sup> Requires 9-terminal base if remote indicator is installed.

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