General

The U5015 Explosion Proof Smoke Detector has Division and Zone explosion-proof ratings and is suitable for industrial and commercial applications. The detector is designed to operate effectively with smoldering and rapidly growing fires and contains the ability to annunciate fault ensuring no undisclosed failures. The U5015 Smoke Detector outputs include 0-20 mA, a localized LED, and relays.

Features

• IECEx Zone approved
• Trouble-free photoelectric operation
• 0-20 mA output for DCS integration
• Self-checking circuitry ensures reliable smoke detection
• Alarm, Auxiliary and Fault relays for controlling annunciating devices or fire panel interface
• LED provides a visual indication that an alarm has occurred
• IP44 ingress protection level suitable for onshore or offshore requirements
• Ideally suited for classified areas in the petrochemical, oil and gas industry
• DCS, PLC, integration with milliamp or relay outputs
• Rugged design for environmental extremes
• Visual confirmation of detector alarm
• Detects smoldering fires
• No undisclosed failures

Applications

• Combustible storage facilities
• Munitions manufacturing
• Volatile chemical storage
• Chemical processing plants
• Petroleum refineries
• Turbine enclosures
• Battery rooms
• HVAC applications

The hot-swappable sensor module is intrinsically safe and allows live maintenance while under power, without de-classifying the hazardous area. The integrated junction box is available in a variety of port configurations for simplified wiring and installation.

Certifications

FM Approved
• Class 1 Div 1 Groups B, C, D T4
• Class 1 Div 2 Groups A, B, C, D, T4
• Class 1 Zone1 AWX db ia IIc T4 Gb
IEC/IECEx
• FMG 15.0014X
• Ex db ia IIc T4 Gb

Specifications

Power Consumption 3.5 watts maximum (2.75 watts at 24 VDC)

Output Relays

• Smoke alarm relay, Form C, 5 amperes at 30 VDC. The smoke alarm relay has normally open/normally closed contacts and normally de-energized operation.
• Fault relay, Form A, 5 amperes at 30 VDC. The fault relay has normally open contacts and normally energized operation.
• Auxiliary relay, Form C, 5 amperes at 30 VDC. The auxiliary relay has normally open/normally closed contacts and normally de-energized operation.

Temperature Range

• Operating: −20°C to 65°C (−4°F to 149°F)
• Storage: −55°C to 70°C (−67°F to 158°F)

Humidity Range 5 to 95% relative humidity.

Ingress Protection IP44 (Applicable to ceiling mount only).

Current Output 0-20 mA (±0.3 mA) DC current, with maximum loop resistance of 300 ohms from 12-17.9 VDC, 500 ohms from 18 to 19.9 VDC, and 600 ohms from 20-30 VDC.

Terminals UL/CSA rated for 14-18 AWG or 2.5-0.75 mm² wire.

Thread Options 3/4 inch NPT or M25. Multi-port models available.

Enclosure Material Polycarbonate / ABS - Smoke Detector. Copper-free aluminum (painted) - Junction Box.

Shipping Weight (Approximate) 7.85 lbs (3.56 kg).

Warranty Period 1 year.
This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

For more information, contact Fire-Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.
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