

Devices for Hazardous Areas for the System Sensor Loop

- Loop technology with System Sensor protocol
- Optical smoke detector
- Protocol interface for the translation of the loop communication
- Safety barrier with galvanic isolation
- ATEX certified



IS Optical Smoke Detector 22051EISE

The addressable Intrinsically Safe Optical Smoke Detector 22051EISE uses the scattered light principle and was developed for the detection of smoke particles in hazardous areas. The modern design of the sensing chamber allows to reliably evaluate the characteristics of fire.

The proven loop technology with System Sensor protocol establishes a permanent communication between the fire detection control panel and the detector. That ensures a periodical function testing of the detector. In the control panel all types of fires are detected by continuously comparing fire patterns.

The influence of contamination on the optical measurement system is compensated for by using intelligent

evaluation algorithms. In this way, the response sensitivity of the detector is kept constant for a long time – a further effective step to avoid false alarms.

The two LEDs with 360° visibility indicate the activated condition of the detector. The detector address is selected with two decadic rotary switches in the range 01 to 99, thus allowing to change the detector without additional tools.

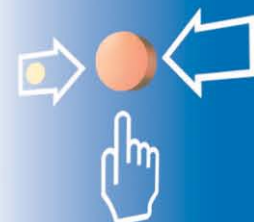
A detector function test can be conveniently conducted using a magnet or test gas. The detector can be protected against theft.

The Optical Smoke Detector 22051EISE is available in a white and a cream-coloured housing.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II 1 G Ex ia IIC T5 / T4 Ga
Operating voltage	Supply through loop voltage
Current consumption at 24V	330µA
Ambient temperature	-10°C to +60°C
Relative humidity	5 – 95% (no condensation)
Dimensions Ø x H	102 x 35 (mm)
Weight	110g
Approvals	Baseefa08ATEX0278X VdS G209129 LPCB 199m/07 2831-CPRF1956

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Optical Smoke Detector, white

Order number	241102
Order name	Optical Smoke Detector/200/IS 22051EISE

Optical Smoke Detector, cream-coloured

Order number	241101
Order name	Optical Smoke Detector/200/IS/Ivory 22051EISE-IV

Safety Barrier Y2

The Safety Barrier Y2 is used for the build-up of intrinsically safe electric circuits. The built-in zener barrier and the safe galvanic isolation allow the connection of fire

detectors in hazardous areas. Due to the galvanic isolation, the earth leakage monitoring can remain activated in the fire detection control panel.

Specifications

Ignition protection	intrinsically safe
Ex classification	Ex II (1) G [Ex ia Ga] IIC Ex II (1) D [Ex ia Da] IIIC Ex I (M1) [Ex ia Ma] I
Operating voltage	Supply through the loop voltage
Ambient temperature	-20°C to +60°C
Dimensions W x H x D	20 x 107.5 x 110 (mm)
Mounting	TS35 DIN rail
Colour	green
Weight	100g
Approval	BAS00ATEX7087
Order number	228006
Order name	Safety Barrier/200 Y2

Protocol Interface IST200

The Protocol Interface IST200 is applied on a loop with System Sensor protocol and serves for the translation of the bi-directional data traffic between fire detection control panel and fire detectors in hazardous areas.

The interface is always used together with the Safety Barrier Y2. The Surface Mounting Box SMB500 is required for mounting the protocol interface.

Specifications

Ignition protection	intrinsically safe
Operating voltage	Supply through loop voltage
Current consumption at 24V	14mA
Ambient temperature	0°C to +60°C
Relative humidity	5 – 95% (no condensation)
Dimensions W x H x D (without attaching sheet)	70 x 70 x 32 (mm)
Weight	155g
Order number	228007
Order name	Protocol Interface/200 IST200

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