



## Flame detector UniVario FMX5000 IR – superior triple view

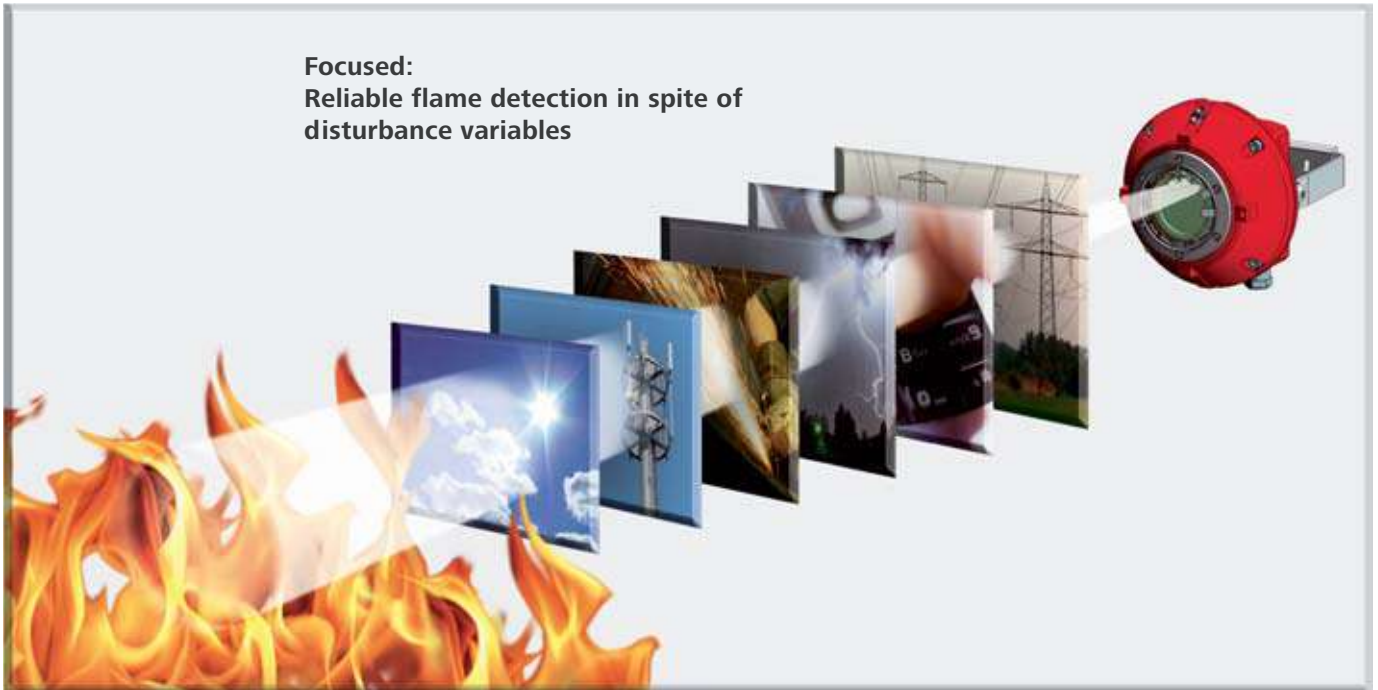
*Cool down.  
Fire Protection by*

**MINIMAX**

### ► Product ► Application + Advantages

- ▶ The 3 channel flame detector FMX5000 IR evaluates the IR range of the optical spectrum.
  - ▶ FMX5000 IR flame detectors meet the highest sensitivity class 1 in accordance with EN 54-10.
  - ▶ Fire-specific signals are digitally processed by the microcontroller preventing false alarms (e.g. lightning).
  - ▶ The detector window is monitored for optical integrity in the IR spectral range. All 3 sensors are monitored separately.
  - ▶ The integrated microcontroller monitors the function of the detector. Faults are displayed on the detector and a signal is sent to the fire control panel.
  - ▶ Heavy-duty industrial housing for rough industrial applications.
- ▶ FMX5000 IR flame detectors are designed to detect open flames that can be caused by the combustion of solid or liquid materials (e.g. plastics, wood, gases, oil products, etc.).
  - ▶ Typical applications include:
    - Tank farm monitoring
    - Heating and coal-fired power plants
    - Motor test benches
    - Large industrial plants
    - Airplane and helicopter hangars
    - Chemical storages and chemical production plants
    - Fuel stores
    - Pump stations
    - Print shops
    - Wood product industry
- + Monitoring of the function of window, sensor, soft- and hardware controlled by microcontroller.
  - + 3 channel infrared analysis with the highest response sensitivity.
  - + Triple optical test monitors full function.
  - + High resistance to interference, due to intelligent evaluation algorithms.
  - + Application parameter is set via DIP switch or service device.
  - + Special oil-tight, chemical-resistant and silicone-free versions available.
  - + Optional upgrades:
    - Communication module for use as a ring bus participant
    - Relay module with floating contacts for disturbance and alarm
  - + Various installation adapters available.
  - + Comprehensive service options.

**Focused:**  
**Reliable flame detection in spite of**  
**disturbance variables**



- ▶ As the first flame detector suitable for industrial use, the UniVario FMX5000 IR can be integrated into an Apollo bus system, due to the optional UniVario KMX5000 AP communication module. This makes individual alarm identification and parameterisation possible.
- ▶ A separate cable connection port makes installation and maintenance easy and inexpensive.
- ▶ The large range of power supply and an optional module with relay contacts enables the stand-alone mode and application in different danger alarm or control units.
- ▶ Because the FMX5000 IR requires minimal energy, smaller cross section cables can be used and multiple sensors can be operated on one detection line.
- ▶ Converting from conventional type to ring bus mode is achieved by simply installing a communication module – there's no need to switch cables.
- ▶ The new, innovative housing design is extremely robust, seawater-resistant and has an IP 67 rating. The FMX5000 IR is made for the most extreme industrial application environments.
- ▶ Due to measures taken on the housing and safety-oriented electronic design, the FMX5000 IR flame detector exceeds modern EMC requirements.
- ▶ Failure signals are registered at central position via a separate current increasing line.
- ▶ A service device to simplify configuration, diagnosis, function checks and data archiving is available.
- ▶ Analysis of internal history memory by using the UniVarioView service software.

## Technical data

Type	Special Features	Spectral sensitivity	Operating temperature range	Protection class	External display	Approvals	Monitoring range (VdS) acc. to hazard
UniVario FMX5000 IR	Alarm-/Malfunction and operating LED Optional extras: – Communication module – Relay module Freely configurable Service interface Past events memory Supply voltage range 7.6 V to 30 V DC	2 µm bis 6 µm	–20 °C to +80 °C –4 °F to 176 °F	IP 67 (NEMA 6)	Optional	VdS G209141 EN 54-10 Klasse 1 FM 3036782 Russian certificate of conformity C-DE.ПБ01.В00323	max. 676 m <sup>2</sup> (7276 ft <sup>2</sup> ) Room height max. 45 m (148 ft)

Subject to technical modifications

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