

UniVario –  
the industrial detectors for every risk

*Cool down.  
Fire Protection by*

**MINIMAX**



# UniVario – keeping your industrial manufacturing processes

# SA

*Minimax is setting the standards in the field of developing custom-made fire protection systems, and these systems have been tried and tested around the world for decades. We have also applied our expertise and experience to developing a new heat and flame detector. This new generation of detectors stands out by their easy installation, their well-thought-out construction design and their high integration possibilities, thereby offering solution for all possible requirements including use in potentially explosive areas.*

Engine test room



Chemical production



**Modular in design – unlimited combinations**

The demands made upon industrial fire protection systems are complex. The main tool in combating fires is a superior fire and flame detector, which can detect a fire in a specific area and activate an extinguishing system. False alarms and malfunctions can only be avoided when a reliable technology is in place. A technology that independently filters out disturbances and ambient electronic discharges. With this in mind, Minimax has designed a new product line. The detectors are built into a high quality cast aluminium housing incorporating a user-friendly installation technology. These intelligent, platform-based microprocessor controlled detectors can cope with even the toughest conditions.

Thanks to their modular design and modern signal processing technology, the detectors can live up to harsh demands in an unusually broad field of applications. Expanding automation in all industrial operations puts new challenges before the fire protection industry. Minimax has accepted this challenge by inventing new products offering a high degree of flexibility in application and installation. This results in tailor-made solutions providing the best possible protection of equipment and facilities. As new requirements occur, our research and development teams will continue to provide viable and efficient technologies as answers to your most difficult fire protection needs. Industrial fire protection is our core business.

**Hangar****Wood panel production (below)**

# DETECTORS AT

## 24 hours alert

### **UniVario – industrial fire detectors on the job around the clock – 24/7**

To achieve the best possible protection, different designs and response levels are used to guard the equipment and product in question. These different detectors work inside, as well as, outdoors and in potentially explosive areas. In close proximity to the equipment, the UniVario WMX5000, at greater distances the FMX5000 UV is utilized. The units are suitable for clean rooms and "dirty" manufacturing environments. Use WMX5000 FS for high temperature applications. For further information please refer to the specification sheets enclosed.

This new generation of detectors is built into a rugged, cast aluminium housing and is easy and quick to install. They can be integrated into existing installations providing an affordable upgrade or alternative.

One major advantage of this new generation is the ability to forward data for the purpose of analysis, statistics or maintenance.

Detector types in versions which do not involve silicone and versions for use in ex-zones complete the programme.

### **UniVario WMX5000 – the heat detector with stainless steel heat sensor**

The WMX5000 is designed to detect open fires where temperature is increasing rapidly, such as highly combustible solids, liquids and gases. It responds instantaneously to any rapid rise in temperature or as soon as a pre-programmed temperature is exceeded. It offers a number of different installation options, making it suitable for monitoring rooms, as well as, processes.

It has been designed specifically with challenging industrial environments in mind, including inside and outside risks and for potentially explosive areas.

#### **Potential areas of application**

- ▶ Warehouses
- ▶ Production halls
- ▶ Painting facilities
- ▶ Hydraulic systems
- ▶ Transformers
- ▶ Waste incinerating plants
- ▶ Printing presses
- ▶ Fuel tanks
- ▶ Machine tools

#### **UniVario WMX5000 VA**





**UniVario WMX5000 FS –  
a high-temperature detector with a  
robust stainless steel heat sensor that  
protrudes from the housing**

The WMX5000 FS heat detector is specially designed to work in temperatures of up to 850 °C. Its protruding heat sensor enables simple and flexible installation. A microcontroller monitors the alarm to make sure it functions faultlessly and to analyse the readings taken.

With its tough, sealed housing and microcontroller monitoring, the WMX5000 FS can be used in all sorts of scenarios. Optimum results are provided even when subjected to extreme temperature fluctuations, heavy soiling and aggressive conditions.

The protruding heat sensor comes in different designs. The alarm temperature is programmable, making it suitable for a host of applications.

One unique item is the high-temperature heat sensor with VdS and FM approvals for ex-zones 2 and 22.

**Potential areas of application**

- ▶ Exhaust gas ducts
- ▶ Engine test rooms
- ▶ Machine tools
- ▶ Fibreboard presses (heat tunnels)
- ▶ Chemical production
- ▶ Dryers

**UniVario WMX5000 FS**



**UniVario FMX5000 UV –  
a flame detector with spectral  
responsiveness in the ultraviolet  
range**

Flame detectors react to optical radiation and analyse specific wave lengths. They are installed wherever open flames are likely to develop quickly.

The detectors can be positioned such that they monitor entire machine areas and facilities that are particularly high-risk. With its perfect interplay of early detection, high responsiveness, high degree of reliability and very low risk of false alarms, the UniVario flame detector is indispensable when it comes to combating fast-developing fires. Fire-specific signals are digitally analysed by the microcontroller, making sure the alarm is not inadvertently triggered by a thunderstorm, hot surfaces or bright sunlight.

**Potential areas of application**

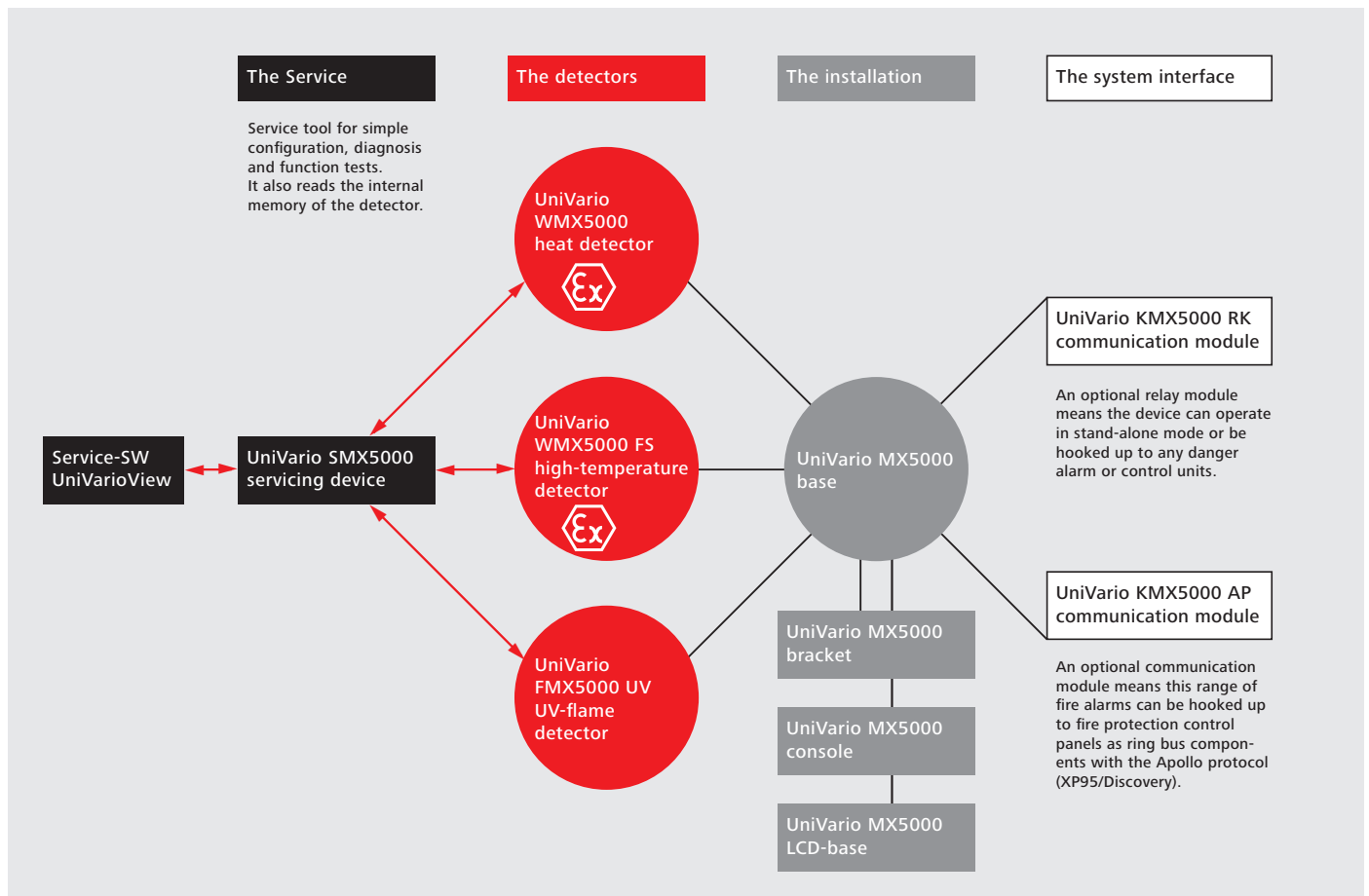
- ▶ Fuel tanks, tank farms
- ▶ Plane and helicopter hangars
- ▶ Condenser stations (natural gas)
- ▶ Chip/semiconductor manufacture (silane)
- ▶ Machine tools (Mg/Al/Ti dry processing)
- ▶ Printing machines (solvents)

**UniVario FMX5000 UV**



# APPLICATION

## of our components in any environment



## Alarm installation options and components

- 1 Installation bracket
- 2 Console
- 3 Stainless steel flex hose to set apart sensor and electronic for thermal decoupling
- 4 Single-hole installation with UniVario MX5000 LCD-base



# TECHNICAL SPECIFICATIONS SHEET MISSING?

**Tel. +49 4531 803-0**

**Fax +49 4531 803-248**

FIRE DETECTION SYSTEMS

FLAME DETECTORS



*Cool down.  
Fire Protection by*

**MINIMAX**

Flame detector UniVario FMX5000 UV –  
the watchful eye

► Product   ► Application   + Advantages

► The FMX5000 UV flame detectors evaluate the UV range of the optical spectrum.

► FMX5000 UV flame detectors are designed to detect open flames that can be caused by the combustion of

+ Monitoring of the function of window, sensor, soft- and hardware controlled by microcontroller.

faults can be displayed on the detector and signalled to the fire control panel.

► Heavy-duty industrial housing for rough industrial applications.

– Print shops  
– Wood product industry

► Approvals: VdS, FM

also go to page 10  
– Relay module with floating contacts for disturbance and alarm

+ Various installation adapters available.  
+ Comprehensive service options.

# ADVANTAGES

## for our clients



► **Fast fire detection with a very low risk of false alarms**

Highly responsive sensors, application-specific configuration of signal processing. Protection against typical disturbance variables using intelligent evaluation algorithms, high electromagnetic tolerance

► **Highly reliable**

High degree of protection (IP 67), oil-tight, impact and vibration-resistant, microcontroller monitors functionality, optical test (only FMX5000 UV), sensor test (all detectors)

► **Broad field of application**

Disturbances such as cosmic radiation and lightning are masked (FMX5000 UV), response temperatures of up to 850 °C (WMX5000 FS), can be adjusted down to the degree (WMX5000 and WMX5000 FS), use in potentially explosive areas

► **Easy to adapt to changes in conditions**

Signal processing can be configured to suit the application, highly modular (single base for different detector types, different communication modules), optional temperature display, inexpensive fire alarm wiring can be used.

With their lower power consumption, more detectors can be applied per group or loop. As a result, there is a potential for cutting costs when it comes to conventional line modules and loop modules and when setting up the emergency power supply.

### Photo credits

Page 2 Engine test room: © obs/AVL List GmbH  
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Minimax GmbH & Co. KG  
Industriestrasse 10/12  
23840 Bad Oldesloe  
Germany  
Tel. +49 45 31 803-0  
Fax +49 45 31 803-248  
E-mail [info@minimax.de](mailto:info@minimax.de)  
[www.minimax.de](http://www.minimax.de)

