

Trusted above all.

# Fire Detection Systems Control Panels and Modules

**Product Catalogue** 



# **Table of Contents**

# Fire alarm and extinguishing panels

| FMZ 5000 base unit                                    | 1  |
|---|----|
| Additional and alternative components of the FMZ 5000 | 2  |
| Fire alarm panel FMZ 5000 mod 4                       | 3  |
| Fire alarm panel FMZ 5000 mod 12 LSZ AP               | 4  |
| Fire alarm panel FMZ 5000 mod XL 21U                  | 5  |
| Fire alarm panel FMZ 5000 mod XL 31U                  | 6  |
| Fire alarm panel FMZ 5000 mod XL 40U                  | 7  |
| FMZ 5000 Loop AP XP module                            | 8  |
| FMZ 5000 conventional detector module                 | 9  |
| FMZ 5000 control group module                         | 10 |
| FMZ 5000 8 relay module                               | 11 |
| FMZ 5000 MxNet module                                 | 12 |
| FMZ 5000 WEBNetmodule N & S cpl.                      | 13 |
| FMZ 5000 Modbus module                                | 14 |
| FMZ 5000 SIO1 module                                  | 15 |
| FMZ 5000 SIO3 module                                  | 16 |
| Fire alarm panel SOLID CFS                            | 17 |

# Aspirating smoke detection systems

| AMX4004                             | 18 |
|-------------------------------------|----|
| AMX5004 C                           | 19 |
| Fire brigade and system accessories |    |
| LMT-4 LED graphic panel             | 20 |

# Management systems

| Inveron – Hazard Management System | 21 |
|------------------------------------|----|
|------------------------------------|----|



# FMZ 5000 base unit



### FMZ 5000 – A fire alarm panel range for all safety concepts

Each FMZ 5000 model is a highly modern unit combining fire alarm and extinguishing control in a fully modular design with freely programmable controls to suit virtually any project requirement.

### Planning, operation and service made easy

The same hardware modules are used for both fire detection systems and extinguishing systems, in three different base unit layouts for wall-mounted installation or in 19" free-standing cabinets. The MxSysCon configuration program with full graphical user interface is used to adapt those hardware modules to the specific project, in the office or on site any time right up to the moment of startup.

# Optimal value for money – you only buy what you currently need

Changes in building use, in fire alarm controls or to your fire protection system can be implemented easily in the FMZ 5000 by replacing / adding / removing plug-in modules and adapting the configuration. Rewiring within the fire alarm panel is not required.

### State of the art technology

- All modern functions of today's fire alarm and extinguishing control panels are combined in a single device:

- Clear display of alarms and other signals and easy operation in every situation with the large graphical display screen and user menu interface.
- Loop technology for detection / control / monitoring with all modern features and any number of branches including explosion hazard areas.
- Operation of detectors for rough industrial environments in a wide range of operating voltages for all fire characteristics (such as heat - smoke - flame - CO fire gas etc.), also directly connected without couplers on the Loop.
- Up to 32 fire alarm and display/operating panels can be redundantly loop networked.
- Communication with building management systems or other control stations via open interfaces or field bus protocols.
- The freely programmable user interface meets all requirements for the display of messages and the controls to be executed in any logical and time combination.
- Redundant layout for fire detection and control of multi-zone extinguishing systems of any type.
- Easy adaptation to changing conditions of use and tasks through plug-in modules and graphical configuration.

A fire alarm panel system for universal application, with two VdS device approvals

G204124 fire alarm panel in accordance with EN54-2 A1 : 2006, EN54-4 A2 : 2006; 0786-CPD-20843

G205019 Electrical control device for multi-zone gas extinguishing systems in accordance with EN 12094-1 :2003; 0786 - CPD - 20222 as well as activation and control of water extinguishing systems

• International approvals like FM, CCC, RU for all main markets.

eserved.

All rights

otice



# Fire alarm and extinguishing control panels FMZ 5000 base unit

Additional and alternative components of the FMZ 5000





# Fire detection and suppression control panels FMZ 5000

## Fire alarm panel FMZ 5000 mod 4 NT5100 3A



### Application

For use for sole fire detection control or combined fire detection and extinguishing control in small-scale projects. Also for controlling multi-zone extinguishing systems through redundant hardware.

### **Technical specifications**

| Mains voltage                      | 115 V / 230 V AC ±15%  |
|------------------------------------|--|
| Mains frequency                    | 50 Hz - 60 Hz  |
| Operating voltage                  | nom. 24 V DC<br>min. 21 V DC<br>max. 27.2 - 29 V DC  |
| Power supply unit                  | 24 V DC / 1,5 or 3 A   |
| Quiescent current                  | approx. 120 mA DC  |
| Battery                            | 2 x 12 V / 12 Ah internal  |
| External control voltage           | min. 21 V DC<br>max. 27.2 - 29 V DC  |
| Ambient temperature                | -5°C to +40°C<br>(+23 °F to +104 °F)   |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation   |
| Enclosure                          | Sheet steel 4U   |
| Dimensions                         | 475 x 340 x 200 mm (WxHxD)<br>18.7 x 13.4 x 7.9 inch (WxHxD)<br>Length of mounting rail<br>1 x 213 mm (8.4 inch)<br>usable mounting rail length for<br>function modules 1 x 160 mm<br>(6.3 inch) |
| IP rating (EN 60529)               | IP 54  |
| Color                              | RAL 7035   |
| Weight                             | approx. 15 kg (33.1 lbs)<br>without modules  |
| Mounting                           | Wall-mounted installation  |
|                                    |  |

### Part no.: 908551

Smallest base unit in the modular fire alarm panel range FMZ 5000. The wall enclosure is also suitable for flush-mounted wall installation or for desk mounting. For connecting analogue addressable detectors and conventional detectors in standard or industrial design. Activation of remote transmission units for fire and fault signals, data transfer to management systems and control stations with open interfaces. Signal indication through large LC display and LEDs, menu-guided operation using configurable function keys.

### **Product features**

- Free selection of functional modules to be used for all project tasks
- Can also be expanded for control of multi-zone extinguishing systems with redundant hardware
- Up to 4 detector loops with 126 detectors each, 16 conventional detector lines for 32 detectors of any design each
- Up to 16 control groups and 32 relays
- 14 collective signal LEDs, some in two colours, 16 LED pairs, red/yellow, for individual signal indications
- Large LC display, fully graphical with menu-guided operation
- Can be loop networked up to 32 units in total
- The enclosure has space for emergency power batteries up to 12 Ah
- All settings are carried out via a fully graphical interface on a PC with the MxSysCon configuration program

### Included in delivery

Fire alarm panel with front display, operating plate, central card and power supply unit. Wired ready for the insertion of any modules. No additional wiring in the fire alarm panel required. Operating instructions, installation manual, drilling template.

### Not included in delivery

Modules, zone operating panel cards, batteries, report printer, installation material

### Note

Order batteries separately. Alternative batteries must be selected according to the table

# Approvals / marking

at the end of the chapter.

(depending on power supply unit)





# Fire detection and suppression control panels FMZ 5000

## Fire alarm panel FMZ 5000 mod 12 LSZ AP



### Application

For use as extinguishing control panel in single-zone extinguishing systems with optional extension possibilities.

### **Technical specifications**

| Mains voltage                      | 115 V / 230 V AC -15%, +10%  |
|------------------------------------|--|
| Mains frequency                    | 50 Hz - 60 Hz  |
| Operating voltage                  | 21 V - 29 V DC   |
| Power supply unit                  | 24 V DC / 5 A  |
| Quiescent current                  | approx. 330 mA DC  |
| Battery                            | 2 x 12 V / 26 Ah internal,   |
| External control voltage           | 21 V - 29 V DC   |
| Ambient temperature                | -5 °C to +40 °C<br>(+23 °F to +104 °F)   |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation   |
| Enclosure                          | Sheet steel 12U  |
| Dimensions                         | 600 x 604 x 225 mm (WxHxD)<br>23.6 x 23.8 x 89 inch (WxHxD)<br>Length of mounting rail<br>3 x 325 mm (12.8 inch) |
| IP rating (EN 60529)               | IP 54  |
| Specification according to         | EN 54-2 A1:2006<br>EN 54-4 A2:2006<br>EN 12094-1:2003  |
| Color                              | RAL 7035   |
| Weight                             | approx. 51 kg (112.4 lbs)  |
| Mounting                           | Wall-mounted installation  |

### Part no.: 910890

Medium-size base unit of the fire alarm panel range FMZ 5000. 19" wall enclosure with front door in stainless steel colored frame. Equipped and ready for fire detection, monitoring and control for one single-zone extinguishing system in a maximum of 256 devices in analogue addressable technology and a maximum of 256 devices in conventional technology. Signal indication through large LC display and LEDs, menu-guided operation using function keys.

### **Product features**

- Expansion of the fire alarm panel is designed for controlling of one single-zone extinguishing system
- 2 detector loops, 8 conventional detector lines, 4 control groups, 8 relays with 1 potential-free changeover contact each
- Collective signal LED and 16 individual LED pairs, red/yellow, for status indications
- Large LC display, full graphical with menu-guided operation
- Emergency power batteries 26 Ah
- The fire alarm panel is preconfigured and just needs individual settings

### Included in delivery

Fire alarm panel with front display and operating plate,

- 1 Central card
- 1 Power supply unit 5 A
- 1 Loop module
- 2 Conventional detector module
- 1 Control group module
- 1 Relay module
- 1 Power distribution module
- 1 Zone operating panel card
- 2 26 Ah batteries

Wired ready for operation and preconfigured. Operating instructions, terminal assignment, operator's log, installation manual, drilling stencil.

### Approvals / marking









~

# FMZ 5000 base unit

# Fire alarm panel FMZ 5000 mod XL 21U

### Application

For use for sole fire detection control or combined fire detection and extinguishing control in medium scale projects. Also control of multi-zone extinguishing systems through redundant hardware.

### **Technical specifications**

| Mains voltage                      | 115 V / 230 V AC -15%, +10%  |
|------------------------------------|--|
| Mains frequency                    | 50 Hz - 60 Hz  |
| Operating voltage                  | 21 V - 29 V DC   |
| Power supply unit                  | see table 1 - 20   |
| Quiescent current                  | approx. 120 mA DC  |
| Battery                            | see table 1 - 20   |
| External control voltage           | 21 V - 29 V DC   |
| Ambient temperature                | -5°C to +40°C<br>(+23 °F to +104 °F)   |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation   |
| Enclosure                          | Sheet steel 21U  |
| -                                  | 600 x 1012 x 373 mm (WxHxD)<br>23.6 x 39.8 x 14.7 inch (WxHxD)<br>Length of mounting rail                                      |
| Dimensions                         | 4 x 325 mm (12.8 inch)<br>usable mounting rail length for<br>function modules 2 x 270 mm<br>(10.6 inch), 1 x 170 mm (6.7 inch) |
| IP rating (EN 60529)               | IP 55  |
| Specification according to         | EN 54-2 A1:2006<br>EN 54-4 A2:2006<br>EN 12094-1:2003  |
| Colour                             | RAL 7035   |
| Weight                             | approx. 70 kg (154.3 lbs)<br>without modules   |
| Mounting                           | Wall-mounted installation  |
|                                    |  |

### Part no.: 905454

Base unit from the fire alarm panel range **FMZ 5000** as 19" version in a wall enclosure with a height of 21U. For connecting analogue addressable detectors and conventional detectors in standard or industrial design. Activation of remote transmission units for fire and fault signals, data transfer to management systems and control stations with open interfaces. Signal indication through large LC display and LEDs,

menu-guided operation using function keys.

### **Product features**

- Free selection of functional modules to be used for all project tasks
- Can also be expanded for controlling multi-zone extinguishing systems with redundant modules
- Up to 28 detector loops with 126 detectors each, up to 176 conventional detector lines for 32 detectors of any design each
- Up to 176 control groups and 176 relays
- 14 collective signal LEDs, some in two colours, max. 272 LED pairs, red/yellow, for signal indications
- Large LC display, full graphical with menu-guided operation
- Can be loop networked up to 32 units
- All settings are defined via a fully graphical interface on a PC with the MxSysCon configuration program.

### Included in delivery

Fire alarm panel in 21U wall enclosure fitted with front display and operating plate, central card. Wired ready for the insertion of any modules. No additional wiring within the fire alarm panel required for expansion. Operating instructions, operator's log, mounting manual.

### Not included in delivery

Cable set FMZ 5000 mod XL module 905113 Modules, zone operating panel card, power supply unit, front plate BBF, dummy plates, batteries, report printer, installation material

### Note

Control panel without power supply unit. The power supply unit and the batteries must be selected according to the table at the end of the chapter.

## Approvals / marking







# FMZ 5000 base unit

# Fire alarm panel FMZ 5000 mod XL 31U



### Application

For use for sole fire detection control or combined fire detection and extinguishing control in projects up to very large size. Also control of multi-zone extinguishing systems through redundant hardware.

### **Technical specifications**

| Mains voltage                      | 115 V / 230 V AC -15%, +10%   |
|------------------------------------|---|
| Mains frequency                    | 50 Hz - 60 Hz   |
| Operating voltage                  | 21 V - 29 V DC  |
| Power supply unit                  | see table 1- 20   |
| Quiescent current                  | approx. 120 mA DC   |
| Battery                            | see table 1- 20   |
| External control voltage           | 21 V - 29 V DC  |
| Ambient temperature                | -5°C to +40°C<br>(+23 °F to +104 °F)  |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation  |
| Enclosure                          | Sheet steel 31U   |
| Dimensions                         | 800 x 1600 x 600 mm (WxHxD)<br>(31.5 x 63 x 23.6 inch) (WxHxD)<br>(H without base)<br>Length of mounting rail<br>5 x 475 mm (18.7 inch)<br>usable mounting rail length for<br>function modules 3 x 425 mm |
|                                    | (16.7 inch), 1 x 325 mm (12.8 inch)   |
| IP rating (EN 60529)               | IP 53<br>with separate cable gland IP 55  |
| Specification according to         | EN 54-2 A1:2006<br>EN 54-4 A2:2006<br>EN 12094-1:2003   |
| Colour                             | RAL 7035  |
| Weight                             | approx. 160 kg (352.7 lbs)<br>without modules   |
| Mounting                           | Stand-alone cabinet   |
|                                    |   |

### Part no.: 905481

Base unit of the fire alarm panel range **FMZ 5000** as 19" version in a free-standing enclosure with a height of 31U with variable depth, width and base dimensions. For connecting analogue addressable detectors and conventional detectors in standard or industrial design. Activation of remote transmission units for fire and fault signals, data transfer to management systems and control stations with open interfaces. Signal indication through large LC display and LEDs, menu-guided operation using function keys.

### **Product features**

- Free selection of functional modules to be used for all project tasks
- Can also be expanded for controlling multi-zone extinguishing systems with redundant modules
- Up to 28 detector loops with 126 detectors each, up to 256 conventional detector lines for 32 detectors of any design each
- Up to 256 control groups and 512 relays
- 14 collective signal LEDs, some in two colours, max. 432 LED pairs, red/yellow, for signal indications
- Large LC display, full graphical with menu-guided operation
- Can be loop networked with up to 32 units
- All settings are defined via a fully graphical interface on a PC with the MxSysCon configuration program

### Included in delivery

Fire alarm panel in free-standing enclosure fitted with front display and operating plate, central card. Wired ready for the insertion of any modules. No additional wiring within the fire alarm panel required for expansion. Operating instructions, operator's log, mounting manual.

### Not included in delivery

Cable gland 800 mm IP rating IP 55908504Cable set FMZ 5000 mod XL module905113Modules, zone operating panels, front panel BBF, dummyplates, power supply unit, batteries, report printer, installationmaterial.

### Note

Control panel without power supply unit. The power supply unit and the batteries must be selected according to the table at the end of the chapter.

### Approvals / marking



© The Viking Corporation (Far East) Pte Ltd | 69 Tuas View Square | Westlink Techpark | Singapore 637621



→ 301-410\_010 / AI00\_2015en → The contents of this publication are subject to modifications without notice. All rights reserved

# FMZ 5000 base unit

# Fire alarm panel FMZ 5000 mod XL 40U

### Application

For use for sole fire detection control or combined fire detection and extinguishing control in projects up to very large size. Also control of multi-zone extinguishing systems through redundant hardware.

### **Technical specifications**

| •                                  |  |
|------------------------------------|--|
| Mains voltage                      | 115 V / 230 V AC -15%, +10%  |
| Mains frequency                    | 50 Hz - 60 Hz  |
| Operating voltage                  | 21 V - 29 V DC   |
| Power supply unit                  | see table 1 - 20   |
| Quiescent current                  | approx. 120 mA DC  |
| Battery                            | see table 1 - 20   |
| External control voltage           | 21 V - 29 V DC   |
| Ambient temperature                | -5°C to +40°C<br>(+23 °F to +104 °F)   |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation   |
| Enclosure                          | Sheet steel 40U  |
| Dimensions                         | 800 x 2000 x 600 mm (WxHxD)<br>(31.5 x 78.7 x 23.6 inch) (WxHxD)<br>(H without base)<br>Length of mounting rail<br>7 x 475 mm (18.7 inch)<br>usable mounting rail length for |
|                                    | function modules 5 x 425 mm<br>(16.7 inch), 1 x 325 mm (12.8 inch)   |
| IP rating (EN 60529)               | IP 53<br>with separate cable gland IP 55   |
| Specification according to         | EN 54-2 A1:2006<br>EN 54-4 A2:2006<br>EN 12094-1:2003  |
| Colour                             | RAL 7035   |
| Weight                             | approx. 190 kg (418.9)<br>without modules  |
| Mounting                           | Stand-alone cabinet  |
|                                    |  |

### Part no.: 905041

Base unit from the fire alarm panel range **FMZ 5000** as 19" version in a free-standing cabinet with a height of 40U with variable depth, width and base dimensions and various design variants.

For connecting analogue addressable detectors and conventional detectors in standard or industrial design. Activation of remote transmission units for fire and fault signals, data transfer to management systems and control stations with open interfaces.

Signal indication through large LC display and LEDs, menu-guided operation using function keys.

### **Product features**

- Free selection of functional modules to be used for all project tasks
- Can also be expanded for controlling multi-zone extinguishing systems with redundant modules
- Up to 28 detector loops with 126 detectors each, up to 256 conventional detector lines for 32 detectors of any design each
- Up to 256 control groups and 256 relays
- 14 collective signal LEDs, some in two colours, max. 432 LED pairs, red/yellow, for signal indications
- Large LC display, full graphical with menu-guided operation
- Can be loop networked with up to 32 units
- All settings are defined via a full graphical interface on a PC with the MxSysCon configuration program

### Included in delivery

Fire alarm panel in free-standing enclosure fitted with front display and operating plate, control card. Wired ready for insertion of any modules. No additional wiring within the fire alarm panel required for

expansion. Operating instructions, operator's log, mounting manual.

### Not included in delivery

| Cable gland 800 mm IP rating IP 55                            | 908504 |  |
|---|--------|--|
| Cable set FMZ 5000 mod XL module                              | 905113 |  |
| Modules, zone operating panels, dummy front plates, power     |        |  |
| supply unit, batteries, report printer, installation material |        |  |

### Note

Control panel without power supply unit. The power supply unit and the batteries must be selected according to the table at the end of the chapter.

### Approvals / marking





FMZ 5000 modules/cards

### FMZ 5000 Loop AP XP module



### **Product features**

- For the interface connection of analogue addressable detectors and modules with Loop AP protocol
- The high loop current enables the operation of multiple modules, sounders, flash lights and detectors in a single loop
- All settings of the module, the detectors and the detector zones are configured using the MxSysCon configuration program
- No further adjustment is required

### **Technical specifications**

| Operating voltage (module)         | 18 V - 30 V DC   |
|------------------------------------|--|
| Quiescent current<br>(module-bus)  | max. 52 mA DC  |
| Supply current                     | max. 1.440 mA DC   |
| Loop current                       | max. 400 mA DC   |
| Loop voltage                       | 27 V DC  |
| Number of loops                    | 2  |
| Number of detectors per loop       | 126  |
| Max. terminal cross-section        | 2.5 mm <sup>2</sup> (AWG 13)                               |
| Ambient temperature                | -5 °C to +40 °C<br>(+23 °F to +104 °F)                     |
| Relative humidity<br>(IEC 721-3-3) | max. 95 % no condensation                                  |
| IP rating (EN 60529)               | IP 20  |
| Enclosure                          | Polyamide PA6.6, green                                     |
| Installation position              | vertical   |
| Mounting                           | Mounting rail 35 DIN 46277,<br>top hat profile             |
| Weight                             | 220 g (0.5 lbs)  |
| Dimensions                         | 35 x 99 x 114.5 mm (WxHxD)<br>1.4 x 3.9 x 4.5 inch (WxHxD) |
| Total cable length                 | max. 2000 m (6562 ft) per loop                             |

### Part no.: 906185

Functional module for use in all design variants of the fire alarm system **FMZ 5000.** Includes 2 detector loops for connection of up to 126 devices each. Instead of a loop, 2 branches can be connected to the module. Any number of T branches can be connected to each loop. The loop devices can be fire detectors, input/output modules, control modules for sounders and loop couplers for the operation of conventional detectors in the loop. For use in potentially explosive atmospheres, IS-detectors can be connected to the loop via protocol interface and safety barriers.

### Application

For fire detection with detectors using loop technology. System monitoring by connecting switches to addressable input modules. Control of fire protection devices via dry contacts or monitored via output modules. Interface connection of monitored zone horns via a sounder module. For the operation of conventional detectors in the loop, these are connected to a loop coupler. The module is inserted into the panel with separate powersupply by power distribution module. The power supply and system communication are connected via plug-in connections on the module enclosure. Up to 14 modules can be used in one fire alarm panel.

### **Included in delivery**

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

| 4 Socket terminal strips FKCT 2.5/3-ST | 901564 |
|--|--------|
| Power distribution module              | 904093 |

# Application in potentially explosive atmospheres

| Only the following barriers are permitted: |        |
|--|--------|
| Safety barriere IS addressable 24 V        | 901324 |
| Loop AP protocol interface                 | 901322 |

### Note

If the loops of one loop module are used for fire detection or controlling several extinguishing zones, the loop module AP XP redundant, Part no. 906186 must be used.

### Approvals / marking

See panels



### FMZ 5000 modules/cards

### FMZ 5000 conventional detector module



### **Product features**

- Large range of detector types available for in virtue of the wide adjustment range of the line voltages and current thresholds
- All detectors can be operated with two-detector dependency and all zones with two-zone dependency
- All settings are carried out with the MxSysCon configuration program
- No further adjustment is required

### **Technical specifications**

| 19 V - 29 V DC   |
|--|
| 2 mA - 50 mA DC  |
| 9 V - 20 V DC  |
| 5 mA - 80 mA DC  |
| 1.8 kΩ   |
| 4, quiescent current controlled                              |
| 32 pieces (VdS)  |
| 2.5 mm <sup>2</sup> (AWG 13)                                 |
| -5 °C to +40 °C<br>(+23 °F to +104 °F)                       |
| max. 95 %<br>no condensation                                 |
| IP 20  |
| Polyamide PA6.6, green                                       |
| vertical   |
| Mounting rail 35 DIN 46277,<br>top hat profile               |
| 120 g (0.26 lbs)   |
| 17.5 x 99 x 114.5 mm (WxHxD)<br>0.7 x 3.9 x 4.5 inch (WxHxD) |
|  |

### Part no.: 901773

Functional module for use in all design variants of the fire alarm system **FMZ 5000.** Includes 4 quiescent current monitored detector lines for the connection of conventional detectors in accordance with the applicable national regulations. A detector event is reported via a current increase. Each line has 4 adjustable thresholds: quiescent current, wire breakage, short circuit, event. The voltage of each line can be adjusted separately in the range of 9 V to 20 V.

All conventional detectors in the Minimax detector range can be used with this operating voltage range, as well as devices from other manufactures.

### Application

For connection of any type of conventional detectors or manual call points in standard or industrial design. System monitoring takes place by connecting appropriate monitoring switches with dry contacts. The module is inserted into the panel without additional wiring. The power supply and system communication are connected via plug-in connections on the module enclosure. Up to 64 modules can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the panel

### Not included in delivery

4 Socket terminal strips FKCT 2.5/3-ST

### Note

Each module may be operated only with Minimax detectors or with detector of other manufactures. Manual call points and monitoringcontests can be freely mixed with all other detector types.

### Approvals / marking

See panels



Page 9

901564

FMZ 5000 modules/cards

# FMZ 5000 control group module

# Part no.: 901673

Functional module for use in all design variants of the fire alarm system **FMZ 5000.** 

Includes 4 control lines for the monitoring and control of fire protection devices. The line to the devices is monitored for wire breakage and short circuits.

The connected fire protection devices are also monitored to verify that they are present and in proper condition.

## Product features

- Control groups can be time-controlled with delays, pulse controlled or continuously controlled
- All settings are carried out with the MxSysCon configuration program.
- No furher adjustment work is required

### **Technical specifications**

| -                                  |  |
|------------------------------------|--|
| Operating voltage                  | 21 V - 29 V DC   |
| Quiescent current                  | 25 mA DC   |
| Number of control groups           | 4, quiescent current monitored                               |
| External control groups            | 21 V - 29 V DC   |
| Output current                     | 1 A, continuous load   |
| Control                            | Time-controlled, continuous,<br>pulse, inverted              |
| Max. terminal cross-section        | 2.5 mm <sup>2</sup> (AWG 13)                                 |
| Ambient temperature                | -5 °C to +40 °C<br>(+23 °F to +104 °F)                       |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation                                 |
| IP rating (EN 60529)               | IP 20  |
| Enclosure                          | Polyamide PA6.6, green                                       |
| Installation position              | vertical   |
| Mounting                           | Mounting rail 35 DIN 46277,<br>top hat profile               |
| Weight                             | 100 g (0.2 lbs)  |
| Dimensions                         | 17.5 x 99 x 114.5 mm (WxHxD)<br>0.7 x 3.9 x 4.5 inch (WxHxD) |

### Application

For monitoring and control of e.g. valves, solenoids or horns in extinguishing systems or other fire protection devices. The module is inserted into the panel with separate powersupply by power distribution module. The power supply and system communication are connected via plug-in connections on the module enclosure. Up to 64 modules can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

| 4 Socket terminal strips FKCT 2.5/3-ST | 901564 |
|--|--------|
|--|--------|

### Spare parts

| Fuse 2 A / 125 V | 784352 |
|------------------|--------|
|                  |        |

### Note

If the module is used to sounders or extinguishing devices in multi-zone extinguishing systems, a separate control group module must be used for each extinguishing zone.

### Approvals / marking

See panels





## FMZ 5000 modules/cards

## FMZ 5000 8 relay module

## odule

## Product features

- Relays are time-controlled with delays, pulse control or continuous control
- All settings are carried out with the MxSysCon configuration program
- No further adjustment work is required

### **Technical specifications**

| Operating voltage               | 19 V - 29 V DC   |
|---------------------------------|--|
| Quiescent current               | 10 mA DC   |
| Current per relay               | 10 mA DC   |
| Number of relays                | 8 TQ   |
| Contacts per relay              | 1 changeover, dry  |
| Contact load                    | 1 A / 30 V DC, 0.5 A / 125 V AC                            |
| Max. switching capacity         | 30 W / 62.5 VA   |
| Control                         | Time-controlled, continuous, pulse, inverted               |
| Max. terminal cross-section     | 2.5 mm <sup>2</sup> (AWG 13)                               |
| Ambient temperature             | -5°C to +40 °C<br>(+23 °F to +104 °F)                      |
| Relative humidity (IEC 721-3-3) | max. 95 %<br>no condensation                               |
| IP rating (EN 60529)            | IP 20  |
| Enclosure                       | Polyamide PA6.6, green                                     |
| Installation position           | vertical   |
| Mounting                        | Mounting rail 35 DIN 46277,<br>top hat profile             |
| Weight                          | 170 g (0.4 lbs)  |
| Dimensions                      | 35 x 99 x 114.5 mm (WxHxD)<br>1.4 x 3.9 x 4.5 inch (WxHxD) |
|                                 |  |

### Part no.: 901595

Functional module for use in all design variants of the fire alarm system **FMZ 5000.** 

The module has 8 relays, each with a dry contact. An activated relay is indicated by a red status LED. A separate relay card with up to 8 additional relays can be connected via a plug connector strip. Control happens via open collector outputs parallel to the relays in the module. This allows relays with higher switching voltages or currents to be used.

### Application

For the dry-contact control of e.g. fire protection devices, graphic annunciators, ventilation system shutdown or for general signal transfer.

The module is inserted into the panel without additional wiring. The power supply and system communication are connected via plug-in connections on the module enclosure. Up to 64 modules can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

| 8 socket terminal strips FKCT 2.5/3-ST | 901564 |
|--|--------|
| Relay card 8 TQ                        | 800843 |
| Relay card 8                           | 802587 |

### Note

The contacts of the relays in the module are not suitable for the switching of 230/110 V AC mains voltage

### Approvals / marking

See panels



-

FMZ 5000 modules/cards

### FMZ 5000 MxNet module



### **Product features**

- Communication to the networked devices uses the MX2 protocol in all versions
- Up to 32 devices can be networked in a ring
- No adjustment work is required

### **Technical specifications**

| Operating voltage                  | 19 V - 29 V DC   |
|------------------------------------|--|
| Quiescent current                  | 58 mA DC   |
| Outputs                            | COM1 RS-232 SUB-D socket<br>Path 1 RS-485 modular terminal<br>Path 2 RS-485 modular terminal |
| Max. terminal cross-section        | 2.5 mm <sup>2</sup> (AWG 13)   |
| Ambient temperature                | -5 °C to +40 °C<br>(+23 °F to +104 °F)   |
| Relative humidity<br>(IEC 721-3-3) | max. 95 %<br>no condensation   |
| IP rating (EN 60529)               | IP 20  |
| Enclosure                          | Polyamide PA6.6, green   |
| Installation position              | vertical   |
| Mounting                           | Mounting rail 35 DIN 46277,<br>top hat profile   |
| Weight                             | 200 g (0.4 lbs)  |
| Dimensions                         | 35 x 99 x 114.5 mm (WxHxD)<br>1.4 x 3.9 x 4.5 inch (WxHxD)                                   |

### Part no.: 904877

Functional module for use in all design variants of the fire alarm systems **FMZ 5000**, as well as mimic panels and operating panels.

Allows devices to be connected in a line-redundant loop network. Communication with the connected devices takes place via a serial interface in RS-232 standard. All data lines are continuously monitored. In the event of line faults in the network, line redundancy means that the functions of the devices are not affected.

The module is supplied with power by the networked device.

### Application

The module enables a device to communicate with other devices in a loop network. The signals from the devices can be displayed at several central control points. Likewise, commands to the devices are possible from different points in the network and from outside the network (control stations). Each network participant a module required.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Note

All parameters can be set using jumpers. Module is preconfigured by jumpers. Alternatively the module and the network can be configured centrally using the configuration program "MxNet.exe". Use of the module in a FMZ 5000 fired detection control panel requires additionally a module SIO1 903466 or module SIO3 903467

The module must be placed directly to the right of the SIO module. Activation is done via the R-232 interface by means of a ribbon cable.

### Approvals / marking

See panels



~

# Fire detection and suppression control panels

Modules/cards

### WEBmodule N cpl.

### **Product features**

- Remote polling messages and statuses of fire detection control panels
- Display of the messages and statuses in a web browser
- Messages can be stored to a remote FTP server
- For better evaluation, messages can be repeatedly filtered
- Option of time synchronization by NTP Timeserver

### **Technical specifications**

| Operating voltage                  | 19 V - 28 V DC   |
|------------------------------------|--|
| Quiescent current                  | 80 mA at 24 V DC   |
| Rated current                      | 115 mA at 24 V DC  |
| Data interfaces                    | 1 RS-232<br>1 Ethernet                                   |
| Storage temperature                | -40 °C to +85 °C<br>(-40 °F to +185 °F)                  |
| Ambient temperature                | -0 °C to +65 °C<br>(+32 °F to +149 °F)                   |
| Relative humidity<br>(IEC 721-3-3) | max. 90 %<br>no condensation                             |
| IP rating (EN 60529)               | IP 20  |
| Enclosure                          | Polyamide PA6.6, green                                   |
| Installation position              | vertical   |
| Mounting                           | Mounting rail 35 mm DIN 46277,<br>top hat profile        |
| Weight                             | 162 g (0.35 lbs)   |
| Dimensions                         | 52 x 99 x 114 mm (WxLxH)<br>2.1 x 3.9 x 4.5 inch (WxLxH) |
|                                    |  |

### FMZ 5000 WEBmodule S cpl.

### Part no.: 914365

Functional module for use in mod 12 and mod XL variants of the FMZ 5000 fire detection series. The module is intended for the communication with a fire alarm panel via the TCP/IP protocol. It contains an interface according to the RS-232 standard for communication with the control panel over module SIO1 (part no. 903466) or SIO3 (part no. 903467) via the Mx2 protocol. The connection of the IP network occurs via patch panel to the Ethernet interface with a RJ-45 female connector.

### Application

The messages transmitted per Web browser by a fire alarm panel to a PC can be displayed and stored via WEBmodule from any location.

Time synchronization procedures between fire alarm panel and WEBmodule are possible.

These remote diagnostics optimal scheduling of service interventions and increased availability of the fire detection system.

### **Included in delivery**

Module ready for installation into the control panel.SIO-Adapter FMZ WEBmodule(Connection SIO-Module WEBmodule)909409Patch panel914347Cable patch cable CAT6 1.0 m (39 inch)914349

### Note

Use a CAT5 or higher category cable for field network connection on the patch panel.

In order to preserve electromagnetic compatibility the direct interconnection between WEBmodule and field network installations is not permitted.

Only use the equipment supplied (patch cable, patch panel) to connect the WEBmodule to the field network installation. Max. cable length for the RS-232 interface 10 m (390 in). Any unauthorized access to the control panel has to be prevented by suitable IT protection measures to be taken by the customer.

### Part no.: 914366

The version WEBmodule S can send switching commands to the connected control panel (deactivates and activates detectors and groups, revision mode, user reset).

Otherwise like part no.: 914365





# FMZ 5000 modules/cards

## FMZ 5000 Modbus module

## **Product features**

- All parameters for the transmission of data to a Modbus master are configurable
- Communication to the Modbus master can be point to point
- All settings are carried out with the MxSysCon configuration program
- No adjustment work is required

## **Technical specifications**

| 19 V - 29 V DC  |
|---|
| 58 mA DC  |
| COM1 RS-232 SUB-D socket<br>COM2 RS-422<br>opto-isolated modular terminal |
| 2.5 mm <sup>2</sup> (AWG 13)  |
| -5 °C to +40 °C<br>(+23 °F to +104 °F)                                    |
| max. 95 %<br>no condensation  |
| IP 20   |
| Polyamide PA6.6, green  |
| vertical  |
| Mounting rail 35 DIN 46277,<br>top hat profile                            |
| 200 g (0.4 lbs)   |
| 45 x 99 x 114.5 mm (WxHxD)<br>1.8 x 3.9 x 4.5 inch (WxHxD)                |
|   |

### Part no.: 904566

Functional module for use in all design variants of the fire alarm system FMZ 5000.

The module includes an serial interface RS422 standard for communication using the Modbus protocol. It supports the Modbus RTU format. The Modbus module is always the Modbus slave and must be queried by a Modbus master. Each slave can be assigned an address in the range of 1-99.

### Application

For the transmission of signals and system states from the FMZ 5000 fire alarm panel to a control station (Modbus master) via the Modbus RTU protocol. Operations such as isolations or resets are also possible from the control station to the panel. Using separate converter modules connected in series, the transmission can also be carried out using other field bus protocols (e.g. Profibus via adapter). A maximum of 2 Modbus modules can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

4 Socket terminal strips FKCT 2.5/4-ST

### 901565

### Note

The use of the Modbus module is always subject to greatly differing, project-specific requirements. Therefore the required range of functions and all conditions must be defined at an early stage with all project participants and the parties responsible for the modbus master. If your project requires an RS-458 interface, use the Modbus RS-458 (906853) module. The RS-232 interface is not suitable for Modbus communication

### Approvals / marking

See panels





FMZ 5000 modules/cards

# FMZ 5000 SIO1 module

Functional module for use in all design variants of the fire alarm system **FMZ 5000.** 

Includes a serial communication channel in RS-232 standard. Preferred for data transmission to an WEBmodule, a MxNet module or a report printer. The module status is indicated by 3 LEDs.

### Product features

- An RS-232-standard serial interface is connected to an SUB-D socket
- Baud rates adjustable from 300 to 115.200 baud.
- All settings of the module, the application and the communication parameters are carried out with the MxSysCon configuration program.

### **Technical specifications**

| Operating voltage               | 19 V - 29 V DC   |
|---------------------------------|--|
| Quiescent current               | 42 mA DC   |
| Outputs                         | COM1 RS-232 SUB-D socket                                     |
| Max. terminal cross-section     | 2.5 mm <sup>2</sup> (AWG 13)                                 |
| Ambient temperature             | -5 °C to +40 °C<br>(+23 °F to +104 °F)                       |
| Relative humidity (IEC 721-3-3) | max. 95 %<br>no condensation                                 |
| IP rating (EN 60529)            | IP 20  |
| Enclosure                       | Polyamide PA6.6, green                                       |
| Installation position           | vertical   |
| Mounting                        | Mounting rail 35 DIN 46277,<br>top hat profile               |
| Weight                          | 100 g (0.2 lbs)  |
| Dimensions                      | 22.5 x 99 x 114.5 mm (WxHxD)<br>0.9 x 3.9 x 4.5 inch (WxHxD) |

### Application

Part no.: 903466

For serial data transmission in RS-232 standard. When using the Minimax data protocol MX2, all signals from the fire alarm panel can be sent to control stations or visualisation programs and commands can be received from them. Up to 3 modules can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

SUB-D plug, 9-pin

### Note

The interface is not opto-isolated. If devices outside the fire alarm panel system are connected, these must be opto-isolated using a separate converter.

### Approvals / marking

See panels





~



FMZ 5000 modules/cards

# FMZ 5000 SIO3 module

# Part no.: 903467

Functional module for use in all design variants of the fire alarm system FMZ 5000. Includes a serial communication channel in RS-232 standard plus two serial communication channels in RS-422 / 485 standard. One RS-422 / 485 channel is

opto-isolated for interface connection with devices with an external power supply.

The module status is indicated by 9 LEDs.

### Application

For serial data transmission in RS-232, RS-422 or RS-485 standard.

When using the Minimax data protocol MX2, all signals from the fire alarm panel can be sent to control stations or visualisation programs and commands can received from them. Devices with their own power supply can be connected directly to the opto-isolated communication channel. Up to 2 modules or a total of 6 data channels can be used in one fire alarm panel.

### Included in delivery

Module completely assembled and ready for installation in the fire alarm panel

### Not included in delivery

SUB-D plug, 9-pin 4 Socket terminal strips FKCT 2.5/4-ST 901565

### Note

Slide switches are used to switch over from RS-422 to RS-485 and to activate the bus terminating resistor. Only use opto-isolated interfaces for data transmission to external devices or arrange for separate opto-isolation. The RS-485 interface cannot be used for data transfer with MX 2 protocol.

Approvals / marking

See panels

301-The 1/1



### **Product features**

- The RS-232 serial interface is connected to a 9-pin SUB-D socket
- The RS-422 / 485 serial interfaces (one opto-isolated) are connected to series terminal
- Baud rates are adjustable from 300 to 115.200
- All settings of the module, the communication parameters and the application are carried out with the MxSysCon configuration program

### **Technical specifications**

| Operating voltage19 V - 29 V DCQuiescent current58 mA DCOutputsCOM1 RS-232 SUB-D socket<br>COM2 RS-422 / RS-485<br>opto-isolated series terminal<br>COM3 RS-422 / RS-485<br>series terminalMax. terminal cross-section2.5 mm² (AWG 13)Ambient temperature-5 °C to +40 °C<br>(+23 °F to +104 °F)Relative humidity<br>(IEC 721-3-3)max. 95 %<br>no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)<br>1.8 x 3.9 x 4.5 inch (WxHxD) |                             |   |
|---|-----------------------------|---|
| COM1 RS-232 SUB-D socket<br>COM2 RS-422 / RS-485<br>opto-isolated series terminal<br>COM3 RS-422 / RS-485<br>series terminalMax. terminal cross-section2.5 mm² (AWG 13)Ambient temperature-5 °C to +40 °C<br>(+23 °F to +104 °F)Relative humidity<br>(IEC 721-3-3)max. 95 %<br>no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)  | Operating voltage           | 19 V - 29 V DC  |
| OutputsCOM2 RS-422 / RS-485<br>opto-isolated series terminal<br>COM3 RS-422 / RS-485<br>series terminalMax. terminal cross-section2.5 mm² (AWG 13)Ambient temperature-5 °C to +40 °C<br>(+23 °F to +104 °F)Relative humidity<br>(IEC 721-3-3)max. 95 %<br>no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)   | Quiescent current           | 58 mA DC  |
| Ambient temperature-5°C to +40°C<br>(+23°F to +104°F)Relative humidity<br>(IEC 721-3-3)max. 95%<br>no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)  | Outputs                     | COM2 RS-422 / RS-485<br>opto-isolated series terminal<br>COM3 RS-422 / RS-485 |
| Ambient temperature(+23 °F to +104 °F)Relative humiditymax. 95 %(IEC 721-3-3)no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277, top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)   | Max. terminal cross-section | 2.5 mm <sup>2</sup> (AWG 13)  |
| (IEC 721-3-3)no condensationIP rating (EN 60529)IP 20EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)  | Ambient temperature         |   |
| EnclosurePolyamide PA6.6, greenInstallation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)   | 3                           |   |
| Installation positionverticalMountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)  | IP rating (EN 60529)        | IP 20   |
| MountingMounting rail 35 DIN 46277,<br>top hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)   | Enclosure                   | Polyamide PA6.6, green  |
| Wountingtop hat profileWeight190 g (0.4 lbs)Dimensions45 x 99 x 114.5 mm (WxHxD)  | Installation position       | vertical  |
| Dimensions 45 x 99 x 114.5 mm (WxHxD)   | Mounting                    | <b>u</b>  |
|   | Weight                      | 190 g (0.4 lbs)   |
|   | Dimensions                  |   |



# Fire detection and suppression control panels

Small control panels



### Application

Use as fire detection and extinguishing control panel in special extinguishing systems.

### **Technical specifications**

| Mains frequency50 Hz - 60 HzOperating voltage19.6 V - 28.7 V DCPower supply unit19.6 V - 28.7 V DC / 3 AQuiescent current80 mA DCBattery capacity2 x 12 V / 2.2 Ah internalNominal output voltage24 V DCOutput current max.2.4 AExternal control voltage19.6 V - 28.7 V DC / 3 ACollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5° C to +55° C<br>(+23° F to 131°F)Storage temperature-20° C to +65° C<br>(-4°F to +149°F)Relative humidity<br>(IEC 721-3-3)340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)EnclosurePolycarbonate | Mains voltage            | 115 V / 230 V AC -10% +15%                 |
|--|--------------------------|--|
| Power supply unit19.6 V - 28.7 V DC / 3 AQuiescent current80 mA DCBattery capacity2 x 12 V / 2.2 Ah internalNominal output voltage24 V DCOutput current max.2.4 AExternal control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Mains frequency          | 50 Hz - 60 Hz                              |
| Quiescent current80 mA DCBattery capacity2 x 12 V / 2.2 Ah internalNominal output voltage24 V DCOutput current max.2.4 AExternal control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation,1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Operating voltage        | 19.6 V - 28.7 V DC                         |
| Battery capacity2 x 12 V / 2.2 Ah internalNominal output voltage24 V DCOutput current max.2.4 AExternal control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Power supply unit        | 19.6 V - 28.7 V DC / 3 A                   |
| Nominal output voltage24 V DCOutput current max.2.4 AExternal control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Quiescent current        | 80 mA DC                                   |
| Output current max.2.4 AExternal control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)   | Battery capacity         | 2 x 12 V / 2.2 Ah internal                 |
| External control voltage19.6 V - 28.7 V DCCollective relays1 extinguishing system delay,<br>1 fire, 1 operation, 1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)   | Nominal output voltage   | 24 V DC                                    |
| Collective relays1 extinguishing system delay,<br>1 fire, 1 operation,1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Output current max.      | 2.4 A                                      |
| Contact load1 fire, 1 operation,1 extinguishingContact load1 x 1 A / 30 V DC<br>3 x 2 A / 230 V ACMax. switching capacity1 x 30 VA / 3 x 460 VAAmbient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | External control voltage | 19.6 V - 28.7 V DC                         |
| Contact load $3 \times 2 \text{ A} / 230 \text{ VAC}$ Max. switching capacity $1 \times 30 \text{ VA} / 3 \times 460 \text{ VA}$ Ambient temperature $-5 \degree C \text{ to } +55 \degree C$ $(+23 \degree F \text{ to } 131 \degree F)$ Storage temperature $-20 \degree C \text{ to } +65 \degree C$ $(-4 \degree F \text{ to } +149 \degree F)$ Relative humiditymax. 90 %(IEC 721-3-3)no condensationDimensions $340 \times 300 \times 140 \text{ mm (WxHxD)}$ $13.4 \times 11.8 \times 5.5 \text{ inch (WxHxD)}$   | Collective relays        |  |
| Ambient temperature-5 °C to +55 °C<br>(+23 °F to 131 °F)Storage temperature-20 ° C to +65 °C<br>(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)   | Contact load             |  |
| Ambient temperature(+23 °F to 131 °F)Storage temperature-20 °C to +65 °C(-4 °F to +149 °F)Relative humiditymax. 90 %(IEC 721-3-3)no condensationDimensions340 x 300 x 140 mm (WxHxD)13.4 x 11.8 x 5.5 inch (WxHxD)   | Max. switching capacity  | 1 x 30 VA / 3 x 460 VA                     |
| Storage temperature(-4 °F to +149 °F)Relative humidity<br>(IEC 721-3-3)max. 90 %<br>no condensationDimensions340 x 300 x 140 mm (WxHxD)<br>13.4 x 11.8 x 5.5 inch (WxHxD)  | Ambient temperature      |  |
| (IEC 721-3-3)     no condensation       Dimensions     340 x 300 x 140 mm (WxHxD)       13.4 x 11.8 x 5.5 inch (WxHxD)   | Storage temperature      |  |
| 13.4 x 11.8 x 5.5 inch (WxHxD)   | 5                        |  |
| Enclosure Polycarbonate  | Dimensions               |  |
| Toryourbonate  | Enclosure                | Polycarbonate                              |
| IP rating (EN 60529) IP 66   | IP rating (EN 60529)     | IP 66                                      |
| Colour RAL 7035  | Colour                   | RAL 7035                                   |
|  | Weight                   | approx. 4.2 kg (9.3 lbs) without batteries |
| Weight approx. 4.2 kg (9.3 lbs) without batteries  | Mounting                 | Wall-mounted installation                  |
| Weight approx. 4.2 kg (9.3 lbs) without batteries  | Mounting                 | Wall-mounted installation                  |
|  |                          |  |

### Part no.: 929022

Small control panel of the SOLID control panel family in a wall housing. For operation of heat detectors, smoke detectors and multisensor detectors in standard design by different manufacturers and for monitored triggering of alarm devices, valves and release devices. Explicit LED notification and group specific control units allow a quick and intuitive operation of the panel.

### **Product features**

- Two detector groups for fire detection through dual group dependency
- One detector group for triggering the extinguishing system manually
- One control input for monitoring mechanical blocking of the extinguishing system
- One control input for delay button
- One control input for supervision devices
- One control unit for audible notification devices
- One control unit für optical notification devices
- One control unit for valve control
- One relay 24 V DC for signal transmission (delay extinguishing system/pre-alarm)
- Three relays 230 V AC for signal transmission (fire, operating state state, triggering of extinguishing system)
- One internal contact group for actuation of an input module IUX 760 M-I for condition transmission (fire, fault) via Loop to a superordinated control panel
- Collective and individual LEDs, partly red/yellow

### Included in delivery

Control panel with display and operating front panel, mainboard with power supply, conventional groups, control inputs, control groups and relay groups. Wired ready for operation. Operating manual and configuration instructions in German and English, log book, mounting material. Spare key 911745

### Not included in delivery

| Input module IUX 760 M-I     | 908531 |
|------------------------------|--------|
| Batteries 2 x 12 V DC 2.1 Ah | 927121 |
| Batteries 2 x 12 V DC 2.2 Ah | 236023 |

### Approvals / Marking

FM



EN54-2, EN54-4, EN12094-1
1725-CPR-E0009





~

# Aspirating smoke detection system

### AMX4004, basic devices

### AMX4004



### **Product features**

- Up to three combined sensors can be used for different application areas (scattered light smoke sensor, ionisation smoke sensor, carbon monoxide gas sensor)
- High aspiration capacity
- Scattered light smoke sensors for different sensitivity ranges, with pollution compensation for use in critical environments
- Ionisation smoke sensor for detecting very small and dark smoke particles
- Carbon monoxide gas sensor for earliest fire detection (40 ppm CO)
- Integrated LC display for indicating status information
- Configurable without accessories (menu-controlled)

### **Technical specifications**

| Operating voltage                 | 18 V - 30 V DC  |  |
|-----------------------------------|---|--|
| Rated voltage                     | 24 V DC   |  |
| Measuring principle               | dependent on detector heads   |  |
| Max. current consumption          | Detector approx. 400 mA   |  |
| Max. contact load                 | 60 V DC, 1 A  |  |
| IP rating                         | IP 54   |  |
| Ambient temperature               | -20 °C to +50 °C<br>(-4 °F to +122 °F)                                    |  |
| Sampling pipe                     | 25 mm (0.98 inch)   |  |
| Sampling pipe length              | max. overall length 100 m (328 ft)<br>max. 50 m (164 ft) as single strand |  |
| Relative humidity                 | max. 95 %,<br>at 35 °C (+95 °F), no condensation                          |  |
| Enclosure material                | Die cast aluminium  |  |
| Cable gland                       | 4 x M16, clamping range 5-9 mm<br>(0.19 - 0.35 inch                       |  |
| Weight without detector head      | 3.4 kg (7.5 lbs)  |  |
| Dimensions<br>without cable gland | 280 x 170 x 90 mm (WxHxD)<br>11.02 x 6.7 x 3.5 inch (WxHxD)               |  |

### Part no.: 909244

The aspirating smoke detector AMX4004 is an active smoke detection system that can be individually tuned to the application area with up to three different detector heads. Up to 12 suction holes with a 100 m (328 ft) pipe system are possible thanks to the powerful fan.

### **Application**

Aspirating smoke detector for the detection of smoke particles and/or fire gases in aspirated air samples. The system actively draws air samples from the monitored area via a pipe system.

Typical application areas are:

- Equipment monitoring: computer rooms, warehouses, high rack storage areas, hollow floors.
- cultural assets protection, transformer stations, etc.

### **Included in delivery**

| 1 Aspirating smo | ke detector AMX4004 | 909244 |
|------------------|---------------------|--------|
|------------------|---------------------|--------|

### Not included in delivery

| Detector heads:                               |        |
|---|--------|
| Optical smoke detector OMX1002C 1HU,          |        |
| 2.73 % / m (0.83 % / ft)                      | 906323 |
| Optical smoke detector OMX1002C HS 1HU,       |        |
| 0.34 % / m (0.10 % / ft)                      | 906324 |
| Optical smoke detector OMX1002C VHS 1HU,      |        |
| 0.11 % / m (0.04 % / ft)                      | 910389 |
| Ionisation smoke detector IMX1002E 1HU, y=0.8 | 909491 |
| Carbon monoxide gas detector                  |        |
| GMX1002CO 1HU, 40 ppm                         | 909492 |
|   |        |

### Note

The AMX4004 uses three conventional lines for three alarms as well as one fault line for connection to the fire alarm panel FMZ 5000. In addition floating contacts for three alarms as well as fault are available.

### Approvals / marking







Approval holder: Minimax GmbH & Co. KG

# Aspirating smoke detectors HELIOS AMX5000

### AMX5004 C



### **Product features**

- Airflow monitoring
- Adjustable sensitivity of 0.006 10 % / m (0.0018 - 3.049 % / ft)
- Highly sensitive smoke sensors with contamination compensation for use in critical environments
- Full integration into fire alarm system FMZ 5000

### **Technical specifications**

| Operating voltage                                | 14 - 30 V DC   |  |
|--|--|--|
| Rated voltage                                    | 24 V DC  |  |
| Alarm sensitivity                                | 0.02 % / m - 10 % / m<br>(0.006 % / ft - 3.049 % / ft)   |  |
| Pre-Alarm signals 1,2,3                          | 4 (3 pre signals fix adjusted)<br>30 / 50 / 70 %   |  |
| Max. current consumption                         | 75 mA  |  |
| Number of relays                                 | 2 (1 alarm, 1 fault)   |  |
| Max. contact load                                | 50 V DC, 1 A (UL 30 V DC)  |  |
| IP rating  | IP 54  |  |
| Ambient temperature                              | -10 °C to +55 °C (VdS)<br>(14 °F to +131 °F) (VdS)<br>-10 °C to +40 °C (UL)<br>(14 ° F to 104 °F) (UL) |  |
| Intake pressure                                  | > 30 Pa  |  |
| Suction noise at fan level 1                     | < 25 dB (A)  |  |
| Number of installation spaces for add-on modules | 1 Relay interface module<br>HELIOS AMX5004C  |  |
| Sampling pipe                                    | Plug-in system 25 mm (0.98 inch)   |  |
| Relative humidity                                | max. 95 %<br>no condensation   |  |
| Enclosure material                               | ABS-Blend, UL 94-V0  |  |
| Specification according to                       | UL 268, EN 54-20   |  |
| Weight   | 1950 g ( 4.3 lbs)  |  |
| Dimensions                                       | 195 x 290 x 140 mm (WxHxD)<br>7.7 x 11.4 x 5.5 inch (WxHxD)  |  |

### Part no.: 923277

The HELIOS AMX5004 C aspirating smoke detector is a highly sensitive active smoke detection system of the latest generation. In addition to monitoring advance signals and contamination, it also provides the option of the user-specific adjustment of the sensitivity. The powerful fan enables up to 12 sampling holes with 75 m (246 ft) pipe system per smoke sensor. The HELIOS AMX5004 C is even able to detect the smallest smoldering fires and can be used practically everywhere.

### Application

Aspirating smoke detector for the detection of smoke particles in aspirated air samples. The system actively takes air samplings in from the monitored area via a pipe system.

Typical applications:

- Equipment monitoring: IT systems, electrical distributors, switch cabinets, etc.
- Room monitoring: IT rooms, clean rooms, warehouses, hollow floors, protection of cultural assets, transformer stations, etc.

### Included in delivery

1 Aspirating smoke detector AMX5004 C with smoke sensor OMX5020S

### Not included in delivery

| , , , , , , , , , , , , , , , , , , , |        |
|---------------------------------------|--------|
| Memory card SD HELIOS AMX5004 C       | 925156 |
| Relay-interface module KMX5006RK      | 924106 |
|                                       |        |

### Spare parts

| Smoke sensor OMX5020S  | 924107 |
|------------------------|--------|
| Air flow sensor AFS 32 | 925155 |

### Note

The HELIOS AMX5004 C can be connected to a higherlevel fire detection panel via potential-free changeover contacts. The HELIOS AMX5004 C can be integrated into the FMZ 5000 fire detection system with LoopAP via modules. Indication and operation are thus possible at the panel.

### Approvals / marking





Fire brigade and system accessories Graphic panel

### LMT-4 LED graphic panel



### **Technical specifications**

| Output voltage   | 24 V DC  |
|------------------|--|
| Housing material | Aluminium  |
| Protection class | IP 54  |
| Weight           | 1850 g (4.1 lbs)   |
| Dimensions       | 359 x 272 x 46 mm (WxHxD)<br>14.13 x 10.7 x 1.8 inch (WxHxD) |

# LMT-3 LED graphic panel



**Technical specifications** 

| Output voltage   | 24 V DC   |
|------------------|---|
| Housing material | Aluminium   |
| Protection class | IP 54   |
| Weight           | 3050 g (6.7 lbs)  |
| Dimensions       | 482 x 359 x 46 mm (WxHxD)<br>19 x 14.1 x 1.8 inch (WxHxD) |

### Part no.: 910169

LED graphic panel in an aluminium housing with hinged grid plate and transparent front window for a user-defined layout that can be replaced at any time, e.g.. diagram, plot etc. The panel allows the placement of LEDs that light up the inserted plan at desired points, plus sensor buttons which trigger switch functions at any place in the plan by tapping through the front plate as on a touch panel.

### **Product features**

- For DIN A4 insert with lock
- extensive accessories and various interfaces and connection- and distribution boards with parallel or serial signal inputs

### Included in delivery

1 LMT-4 LED graphic panel without attachment material

### Not included in delivery

| Red LED diodes for LMT panel     | 910172 |
|----------------------------------|--------|
| Green LED diodes for LMT panel   | 910173 |
| Yellow LED diodes for LMT panel  | 910174 |
| 8 LED adapter card for LMT panel | 910175 |
| Capacitive butten for LMT panel  | 910176 |
| LED distribution board VK-16     | 910177 |
|                                  |        |

### Part no.: 910171

LED graphic panel in an aluminium housing with hinged grid plate and transparent front window for a user-defined layout in between that can be replaced at any time, e.g. diagram, plot etc. The panel allows the placement of LEDs that light up the inserted plan at desired points, plus sensor buttons which trigger switch functions at any place in the plan by tapping through the front plate as on a touch panel.

### **Product features**

- For DIN A3 insert with lock
- Extensive accessories and various interfaces and connection- and distribution boards with parallel or serial signal inputs

### Included in delivery

1 LMT-3 LED graphic panel without attachment material

### Not included in delivery

| Red LED diodes for LMT panel     | 910172 |
|----------------------------------|--------|
| Green LED diodes for LMT panel   | 910173 |
| Yellow LED diodes for LMT panel  | 910174 |
| 8 LED adapter card for LMT panel | 910175 |
| Capacitive butten for LMT panel  | 910176 |
| LED distribution board VK-16     | 910177 |



-

### Inveron - Hazard Management System



- · Support of Minimax fire alarm and extinguishing control panels FMZ 4100 and FMZ 5000
- · Interfaces to a variety of control panels
- · Expandable up to 15 subsystems
- · Connection of additional signals via SPS-Controller
- · Automatic generation and printing of fire brigade route guides
- · Forwarding messages via text message and/or e-mail
- AutoCAD<sup>®</sup> interface for simple project planning
- · Compatible with BMA CAD
- · Extensive archive storage
- · Schedule and calendar
- · Clear instructions in case of action for operating personnel
- · Individual user authorizations and logins
- · Support of many different languages

### Inveron - Hazard Management System

Inveron offers a high degree of clarity by bringing together all messages and events automatically in a user-friendly interface with clear graphics. The current status of control points can be displayed graphically, textually or as an animation. This applies both to messages for above and below threshold values, which are displayed in real time.

The system provides the operator with comprehensive continuous information such as reports on maintenance work and helps with on-screen messages. Action procedures can be stored and will be dependable guide to the necessary actions.

The Inveron Hazard Management System includes software and hardware components. A personal computer and/or server and monitor are required and, if needed, cameras and PLC I/O controllers.

Inveron can be used in all areas of industry and is individually adapted to relevant requirements and special hazards.

| Licenses     | Subsystems<br>max. | Data points<br>max. | interfaces<br>max. |
|--------------|--------------------|---------------------|--------------------|
| Express      | 1                  | 3.000               | 3                  |
| Basic        | 5                  | 5.000               | 5                  |
| Professional | 15                 | 25.000              | 15                 |

### Included in delivery

Customized soft- and hardware according to individual requirements. Inveron can only be purchased including this service.

### Contact

Service Center Automation scada@minimax.de





# NOTE

•

# NOTE

•



### SINGAPORE (Asia Headquarters)

### The Viking Corporation (Far East) Pte Ltd

69 Tuas View Square Westlink Techpark Singapore 637621

Tel: (+65) 6278 4061 Fax: (+65) 278 4609 Email: YCPANG@vikingcorp.com

### **CHINA**

# Viking Fire Protection Equipment Trading (Shanghai) Co. Ltd.

Room 507-511, Fourth Floor, Building 1 No. 801, Zhujin Road Songjiang District, Shanghai, China 201615

Tel: (+86) 21 5774 0775 Fax:(+86) 21 5776 0329 Email: WYU@vikingcorp.com

### **HONG KONG**

### Viking Supply Network (Hong Kong) Limited

Unit C, 6th Floor, Gee Hing Chang Industrial Building No.16 Cheung Yue Street Cheung Sha Wan, Kowloon, Hong Kong S.A.R

Tel: (+852) 2391 1078 Fax: (+852) 2787 6063 Email: AEE@vikingcorp.com

### INDIA

### Viking Fire Products (India) Pvt. Ltd.

No. 138, 1st Floor, SRS Tower, 14/5, Main Mathura Road, Near Metro Station, Mewla, Maharajpur, Faridabad – 121003, Haryana, India

Tel: (+91) 129 6900 025 to 31 Email: SGUPTA@vikingcorp.com

### JAPAN

### The Viking Corporation (Japan) AlOS Gotanda Ekimae Building 4th Floor 1-11-1 Nishigotanda, Shinagawaku Tokyo 141-0031, Japan Tel: (+81) 3 6303 9571 Fax: (+81) 3 6303 9572

Email: KYOSHIMASU@vikingcorp.com

### KOREA

### **Viking Korea Limited**

#71 Gunpo-Ro, Gunpo - City Gyeunggi-Do Korea 15888 South Korea

Tel: (+82) 31 502 2510 Fax: (+82) 31 438 0137 Email: JHwang@vikingcorp.com

Trusted above all.