Experts in fire protection

MINIMAX

Clunid FMZ6000 fire detection and suppression control panel

Safer. Easier. Universal

Clunid – the heart of fire protection

In fire detection and extinguishing control panels, the information from all fire detection and monitoring elements comes together. They receive events, evaluate them and automatically manage the necessary actions in a targeted manner: from alerting, managing and testing extinguishing systems to the situational control of building services depending on the course of the fire. Fire detection and extinguishing control panels thus form the heart of fire protection.

However there are often restrictions in the operation and use of fire detection control panels. On the one hand older systems especially often no longer meet today's technical requirements. On the other hand the operation of a fire detection and extinguishing control panel requires particular skills. In stressful situations even experienced people can quickly make errors in interpretation and operation, with serious consequences. Minimax has the appropriate solution: Clunid FMZ6000.

The Clunid FMZ6000 is a modular fire detection and extinguishing control panel, precisely tuned and assembled to the particular customer requirements. High levels of operating safety and simple operation characterize the unique properties of the Clunid panel generation. The application possibilities are almost infinite. From the standardized and standard-conformant control of complex multi-zone extinguishing systems to the freely programmable situational fire control system, anything is possible. With this the Clunid FMZ6000 offers a technology with a high degree of flexibility which is ahead of its time.

Simple to use

Users appreciate the operation via the full-color 7" touch display. User navigation is intuitive thanks to the tile design, functional conditions being visualized via the display color and messages being displayed in clear text. Additional functions can be easily managed by programmable area control panels.

Even the legally required documentation becomes simpler. The LogicManager configuration software automatically generates general system documentation. So when making changes to configuration and use, documentation becomes child's play.

Furthermore functional tests for refurbishment or maintenance measures are user-guided and securely saved.

High levels of operating safety

The new and up-to-date control panel technology has a powerful performance with generously-sized event and history memory.

The system stands for the highest level of availability. In the Clunid FMZ6000, besides the redundancy (required as standard) of the central signal processing unit, the processors on all functional modules and zone control boards are also implemented redundantly. This makes breakdowns and downtimes a thing of the past – without having to build in components twice and unnecessarily waste space. Even when replacing individual function modules, operation can continue without a break thanks to hot-plug integration.

Still not enough though. The newly integrated LogicManager prevents errors by plausibility checks right from configuration and thus increases the dependability of the total system.

Clunid FMZ6000 redundant function module

Limitless application possibilities

The integrated and standardized control functions of the Clunid FMZ6000 also allow a situational and complex management of the operating equipment. This has given rise to a fire detection and extinguishing control panel which can manage an entire fire incident matrix of an active principle test across disciplines. There is no limit placed on these complex requirements thanks to the powerful network technology.

Furthermore, system planning is more flexible and economic with the Clunid FMZ6000. New communication protocols make a wide selection of detectors and actuators available for worldwide use. All detector protocols are downwards compatible for addressable loop participants.

The sophisticated module concept offers a series of additional benefits for project planning and service. All modules have the same size and can be used regardless of module type on any slot in the control panel. This allows space in the control panel housing to be used flexibly and optimally – right down to the last slot.

When a module is incorporated, addressing is automatic, so that the control panel is immediately ready for operation. This reduces project planning times, because manual hardware and software assignment is not applicable.

International hardware and software requirements are already integrated and certified. There is nothing to stop the Clunid FMZ6000 from being used worldwide.

As standard the Clunid FMZ6000 is fitted with a 7" touch display including group displays, a central and redundant signal processing unit, power supply unit and battery supply. It is prepared for up to 80 function modules and 27 zone control panels.

Signal processing unit
The control panel technology is characterized by rapid responses and powerful performance. The signal processing unit is fitted with redundant processors and thus reduces the probability of failure to a minimum.

Function modules
Depending on requirements, additional function modules are available – from input modules such as conventional detector or loop AP via output modules such as control groups or relays up to communication modules such as fire brigade periphery or networking. A suitable module is available for every application.
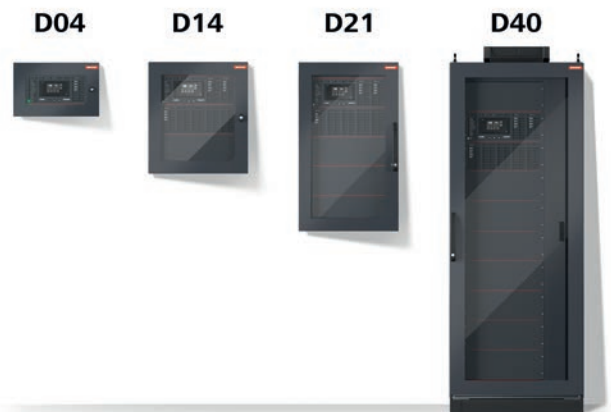
Power supply unit
The Clunid FMZ6000 can be used worldwide. The power supply units used come with extended voltage range input and cover various supply voltages. The voltage output and control group modules are provided with electronic fuses and are thus UL and FM-conformant.

DC/DC converter
A DC/DC converter can be optionally integrated which stabilizes the output voltage from the control groups and thus provides for a constant output voltage even in battery operation or during temperature fluctuations. This is often necessary for standard components such as horns or solenoid valves without adequate extended voltage range input.

Housing sizes
All components can be fitted in the four standard housing sizes D04, D14, D21 and D40. These can be individually extended and offer sufficient scope for a configuration that meets your needs.

| 1 | Signal processing unit | 3 | Battery | 5 | DC/DC converter |
| 2 | Function modules | 4 | Power supply unit | 6 | Power supply input |

LogicManager
LogicManager is the configuration software for the Clunid FMZ6000. This is constructed on the component concept and consistently separates logic and hardware. For example it is possible to change between loop and limit value functions at any time without having to restart the configuration This offers flexibility and reduces project overhead. Moreover LogicManager has a fully implemented redo and undo design and numerous logic modules with extra features.

ServiceAssistant
To assist with maintenance work on site, fitters and technicians can use ServiceAssistant to read off the actual status of the control panel and event and history messages at any time during operation.

Information and images can be easily stored and called up later during follow-up work. Furthermore various parameters can be directly adjusted to the installation conditions on site.

Documentation of activity for commissioning, maintenance, inspection or troubleshooting also takes place in ServiceAssistant. A sophisticated role design grants different authorizations depending on the level of skills and experience.

The ServiceBox is connected to the control panel via a USB interface. Using a WLAN connection the technician can carry out both an upload and download of the LogicManager configuration and service work via the ServiceBox. Consequently a system update of all control panel components can still only take place via an interface, so that this process does not require any special skills and tools. The licensing design ensures that only authorized persons can work on the control panel.

Clunid FMZ6000 LogicManager

Areas of application
The Clunid FMZ6000 meets the requirements for different applications. It is used among other things:

- As a pure fire detection control panel
- As a combined fire detection and extinguishing control panel for gas and spark extinguishing systems
- As a monitoring panel for water-based suppression systems
- For the activation and monitoring of pilot-operated dry alarm valve stations
- For the activation of hydrant systems in Loop technology
- For the activation of FSX valves (hydrant technology) with and without external resetting
- As a control panel for complex fire incident matrices for active principle test

With the Clunid FMZ6000 the flexible configuration allows complex tasks to be solved and extensions and modifications to use easily implemented.

The Clunid FMZ6000 fire detection and extinguishing control panel is acknowledged by VdS Schadenverhütung and certified by FM Global.

Advantages at a glance
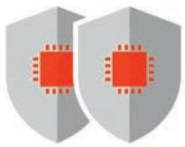
High levels of operating safety

- The processors in all function modules and zone operating panels are always implemented redundantly.
- Automatic plausibility checks prevent user errors right from configuration up to the upload.
- Updates and parameterizations take place during operation, thus reducing risky shutdowns

Simple to use

- Intuitive and modern user guidance via touch display
- Consistently self-explanatory icons with binding operating instructions prevent errors
- Flat menu structures allow direct and rapid navigation for all events

Limitless application possibilities

- Control of complex multiple-zone extinguishing systems via modular system technology
- New communication protocols allow wide selection of detectors and actuators
- International hard and software requirements are integrated and certified

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