

TECHNICAL INFORMATION

FEATURES

- front panel keyboard
- backligned LCD display
- internal clock
- time slots programming
- watch dog circuit
- 1000 storable events
- printer output
- serial port for external communication
- relay outputs

APPLICATIONS

- smoke and gas detection systems in general
- industrial environments
- stores
- musei
- chiese
- magazzini

The 5000-64 Control Unit has been designed to be used in medium dimensions gas and fire alarm systems.

It is able to control 2 lines of 32 detectors each with a RS485 BUS connection type.

Each detector should be equipped with a suitable digital address (our IDP03 or IDP04).

So the alarm individuation is on each single detector.

It is possible to program an AND alarm condition (alarm of both 2 sensors) for all the 32+32 detectors (an adjacent couple) to increase the protection against false alarms. This possibility is very important when the detection system is associated to an automatic extinguishing system.

All the Control Unit functions are constantly monitored by an internal control circuit able to signal any problems and faults (Watch Dog).

Every detector connected to the 5000-64 Control Unit can be excluded or activated at will.

All the Control Unit functions can be controlled by using the front panel keyboard and the backligned LCD alphanumeric display.

The events up to a maximum of 1.000, like alarms, switch-ons, switch-offs, exclusion of some detectors, etc. are stored on an internal non volatile memory and can be visualized on the display or printed with a centronics parallel port printer (optional) using the suitable connector on the Control Unit.

A large number of relay outputs and Open Collector outputs allow the connection of the 5000-64 Control Unit with many external peripherals like sound alarms, light alarms, phone dialers etc.

The 5000-64 Control Unit can drive up to 24 external relays by means of suitable expansion boards connected to the Control Unit by the RS485 serial port.

A complete dotation of indicating leds and the LCD display allow



the user to have a general view of the status and of the events of the detection system.

It is possible to connect the Control Unit to every detector equipped with a static output or with a relay output:

- point type smoke detector
- rate of rise heat detectors
- fixed temperature heat detectors
- flame detectors
- gas detectors

The 5000-64 Control Unit has been designed in accordance to the EN 54-2 european standard.



GENERAL TECHNICAL DATA

The **5000-64** Control Unit is a device that is able to manage gas detectors and smoke detectors connected to the EDS bus.

- Linear Stabilized Power Supply 12V-3A protected against overvoltages and overcurrents
- RISC microcontroller CPU system
- Backlighted front LCD display 20X4.
- Front programming keyboard
- 1 device reset jumper
- 9 signalling leds: power net 220Vac supply ,12Vdc board power supply, Control Unit state, zone Exclusion , Malfunction, Fault , 3 threshold alarm leds
- 5 leds to signal the activation of the corresponding relay (3 thresholds ,1 malfunction ,1 generic)
- Control Unit functioning monitoring circuit (Watch-dog).
- n 2 bus 485 input lines for detectors
- up to 64 detectors or input elements connectable
- 3 threshold alarm relays associated to the zones
- 1 relay associated to the malfunctions with a configurable activation delay
- 1 freely configurable relay
- 1 parallel port to connect a printer (Centronics).
- 1 internal buzzer with the function of beeper for errors or malfunctions
- 3 configurable thresholds for gas and heat detectors
- 1000 storable events
- Internal clock for possible time programmed switch on/off's or to localize the events in time
- Date, Time, Control Unit configuration, and stored events will be kept stored for a long time if the power is disconnected (minimum 10 years).
- 3 switching on modes: Total, Partial and Time Slots.
- 2 switch off Time Slots
- Immunity to false alarms and false malfunctions
- Possibility to have 2 passwords (to be defined) to enter in the menus
- Excludable Zones
- Double RS485 output to connect a relay expansion module or to connect the EDS2000 pc monitoring system
- Power supply command from the menu to reactivate point type detector lines
- Recognized malfunctions: input malfunctions (cut,short circuit), clock malfunction, power supply voltage malfunction, net power supply failure, earth protection malfunction
- 8bit Dip Switch to select configuration
- Control Unit Test (Led, Buzzer, Relays, 12V, Zones).
- System Maintenance need signalling. It is signalled as a malfunction but the corresponding relay it's not activated
- Power consumption reduction and shut off of all the Control Unit functions if the power supply falls below the 10V level or rises over 15V. The reset has to be manual switching off the board power supply
- Automatic switch off of the display backlighting if the net power supply fails (battery supply on)
- Possible prints: all events, a part of the events, last 50 alarms, zones values(context) and Control Unit configuration
- Electromagnetic Immunity: conforms to the standards EN 50081-1; EN 50082-1; IEC 801-2-3-4.
- Internal battery slot: max 12V-17Ah.
- Painted metal box
- Dimensions: 690x480x250 mm

