POLON-ALFA

FIRE ALARM SYSTEMS

well designed SECURITY

COMPACT

ADDRESSABLE

FIRE ALARM SYSTEM

FIRE ALARM SYSTEM
POLON 3000

Overview

The addressable, compact POLON 3000 fire alarm system is a set of devices designed for detection and signaling the fire, notifying appropriate emergency services, and controlling fire protection devices. It enables the protection of small and medium-sized buildings. It is perfect for use in installations due to the possibility of sending a substantial amount of digital information to integration and supervision systems as well as to fire monitoring systems (thanks to optional communication modules).

POLON 3000 control panels are based on the concept of digital cooperation between all elements. The reliable exchange of information is enabled thanks to the original signal transmission protocol applied in detection loops, as well as the appropriate software of control panels and linear elements.

All line elements in the POLON 3000 system are equipped with built-in short-circuit isolators with the possibility of programmatic activation on and off. Setting the addresses of line elements is done by software, without the use of microswitches. Any data about the element are contained in its non-volatile memory and read out by the control panel after being installed in the detection line.

POLON 3000 system devices meet requirements the latest edition of European Standards of the EN 54 series.
Three versions of POLON 3000 control panel are available: POLON 3064, POLON 3128, POLON 3256, suitable for fire protection of different size of the secured facility.

Functionality

POLON 3000 control panels can create up to 16 zone groups and indicate their status with LED indicators (information about alarm in a specific group of detection zones). There is also a possibility to program your own messages related to fire automation devices that are controlled by the control panel. The large liquid crystal display facilitates communication between the user and the control panel.

One of 13 alarm variants can be selected for each zone. Various alarm variants, corresponding to different detection algorithms, allow for optimal use of the capabilities of the fire detection system in specific, individual conditions in the zone, as well as for the introduction of individual criteria for efficient organization of the facility security system. With extensive software, the control panel enables construction of installation with a flexible physical and logical structure.

Various types of outputs in POLON 3000 control panel enable to control of signalling and fire protection devices (relay outputs and supervised control lines).

Regardless, unlimited control possibilities are offered by new addressable monitoring and control elements of the 3000 series. There is also a possibility of using already available elements of the 6000 and 4000 series, installed on detection loops.
The POLON 3000 panel's outputs can be activated via software according to created operation criteria and assigned Output Group.

USB, RS-485 and Ethernet communication ports allow connection the control panel to the computer digital monitoring system, installation integration and supervision system. States of external devices or circuits can be supervised with control elements of the EKS-3000, 6000 series and 4000, installed on detection lines.

ADDRESSABLE ELEMENTS **POLON 3000**

Smoke detector DUO-3000

- double smoke sensor (IR,UV)
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- EN 54-7, EN 54-17

Smoke and heat detector DOT-3000

- double smoke sensor (IR,UV)
- double heat sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- EN 54-5, EN 54-7, EN 54-17

Beam smoke detector DOP-3000

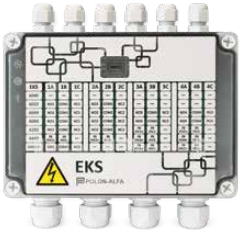
- IR smoke detection
- soft addressing
- automatic drift compensation
- auto-alignment function
- built-in laser pointer
- programmable sensitivity
- low current consumption
- built-in short circuit isolator
- EN 54-12, EN 54-17

Smoke and heat detector DUT-3000AD

- double smoke sensor (IR,UV)
- double heat sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- EN 54-3*, EN 54-5, EN 54-7, EN 54-17

Manual call point ROP-3000(H)

- indoor and outdoor application
- flush mounting
- wall mounting with assembling frame
- soft addressing
- low current consumption
- built-in short circuit isolator
- EN 54-11 (type B)



I/O devices EKS-3000*

- soft addressing
- extensive programming
- capabilities
- IP 66
- built-in short circuit isolator
- EN 54-18, EN 54-17

EKS-3022 - 2 outputs
- (2 A/230 V/62,5 VA)
- 2 inputs (LV)

EKS-3021 - 1 output
- (2 A/230 V/62,5 VA)
- 2 inputs (LV)

EKS-3222P - 2 outputs
- (12 A/230 V/2,76 kVA)
- 2 inputs (LV)
- 2 inputs (HV)

*dedicated for POLON 3000 only

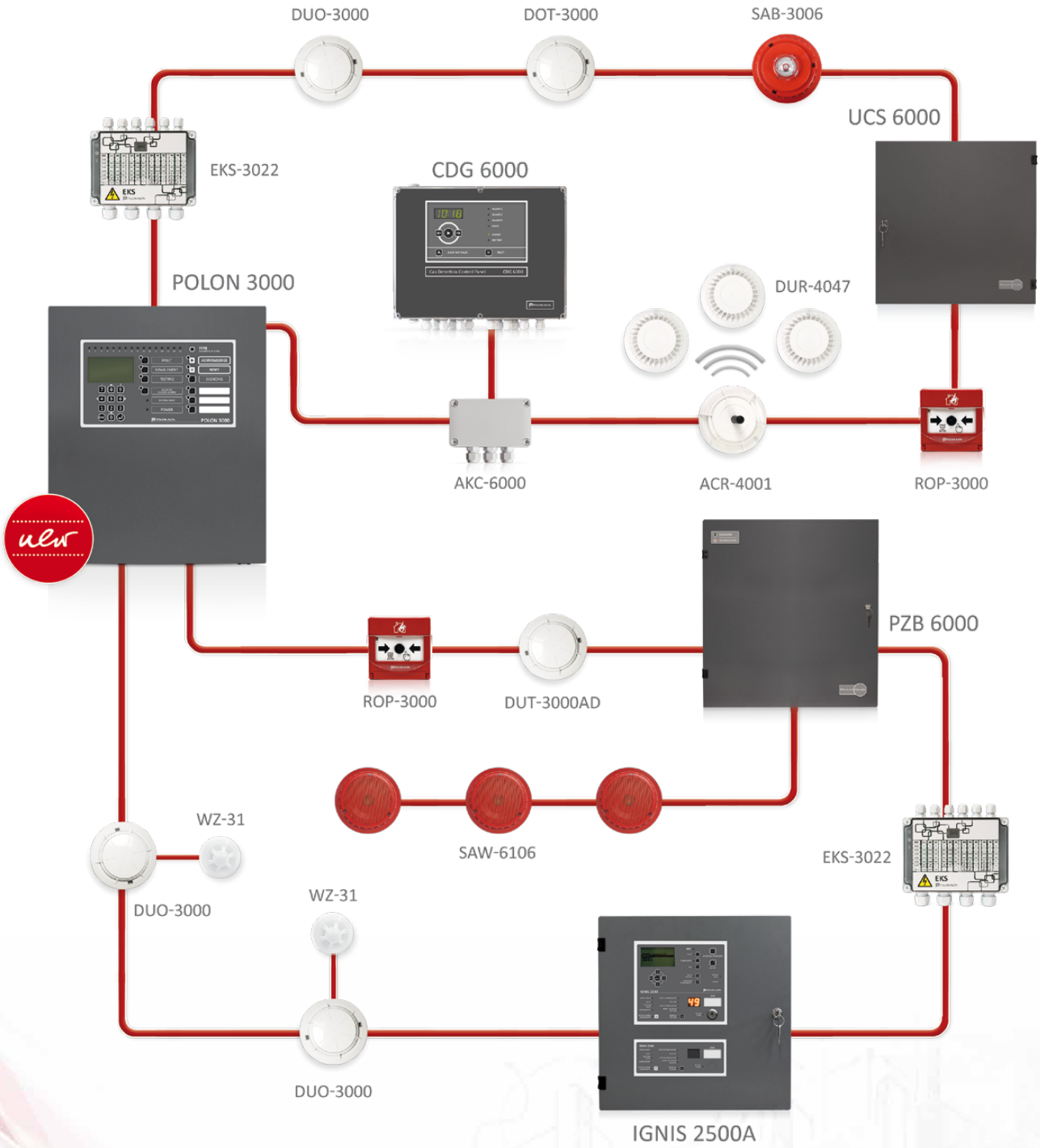
Addressable siren SAW-3000

- SAW-3001 - sound
- SAW-3006 - voice & sound
- soft addressing
- 16 sound patterns - programmable
- 2 power options
- built-in short circuit isolator
- EN 54-3, EN 54-17

Addressable acoustic and optical device SAB-3000

- SAB-3001 - sound & light
- SAB-3006 - voice & sound & light
- soft addressing
- 16 sound patterns - programmable
- 2 power options
- built-in short circuit isolator
- EN 54-3, EN 54-17, EN 54-23

SAMPLE DETECTION LINES **POLON 3000**



- **POLON 3064**
  up to 64 addressable devices
- **POLON 3128**
  up to 128 addressable devices
- **POLON 3256**
  up to 256 addressable devices

- For small and medium applications
- Easy to install
- Simplified and user friendly interface
- Low maintenance costs
- Easy and fast computer programming
- Wide range of compatible devices

DISTRIBUTED
FIRE ALARM PANEL

FIRE ALARM SYSTEM
POLON 6000

Overview

The addressable, interactive POLON 6000 fire alarm system is a set of latest technology equipment, designed for very fast detection and signaling of fire, precise indication of fire origin, control of fire protection safety devices, and information of appropriate intervention services or building guards about fire. It enables protection of mid-size, large and very large facilities, especially so called “intelligent” buildings with huge amount of fire protection safety devices. POLON 6000 can be easily integrated with many existing building management systems. Due to its specific features it enables to arrange perfect set of necessary devices, well-fitted to building conditions.

The POLON 6000 system is based on newly designed control panels with distributed architecture and new set of line elements (6000 series), supplemented with line elements of series 4000 with changed software version.

All devices of the POLON 6000 system meet requirements of the latest edition of EN 54 European Standards.

The POLON 6000 control panel with a distributed architecture

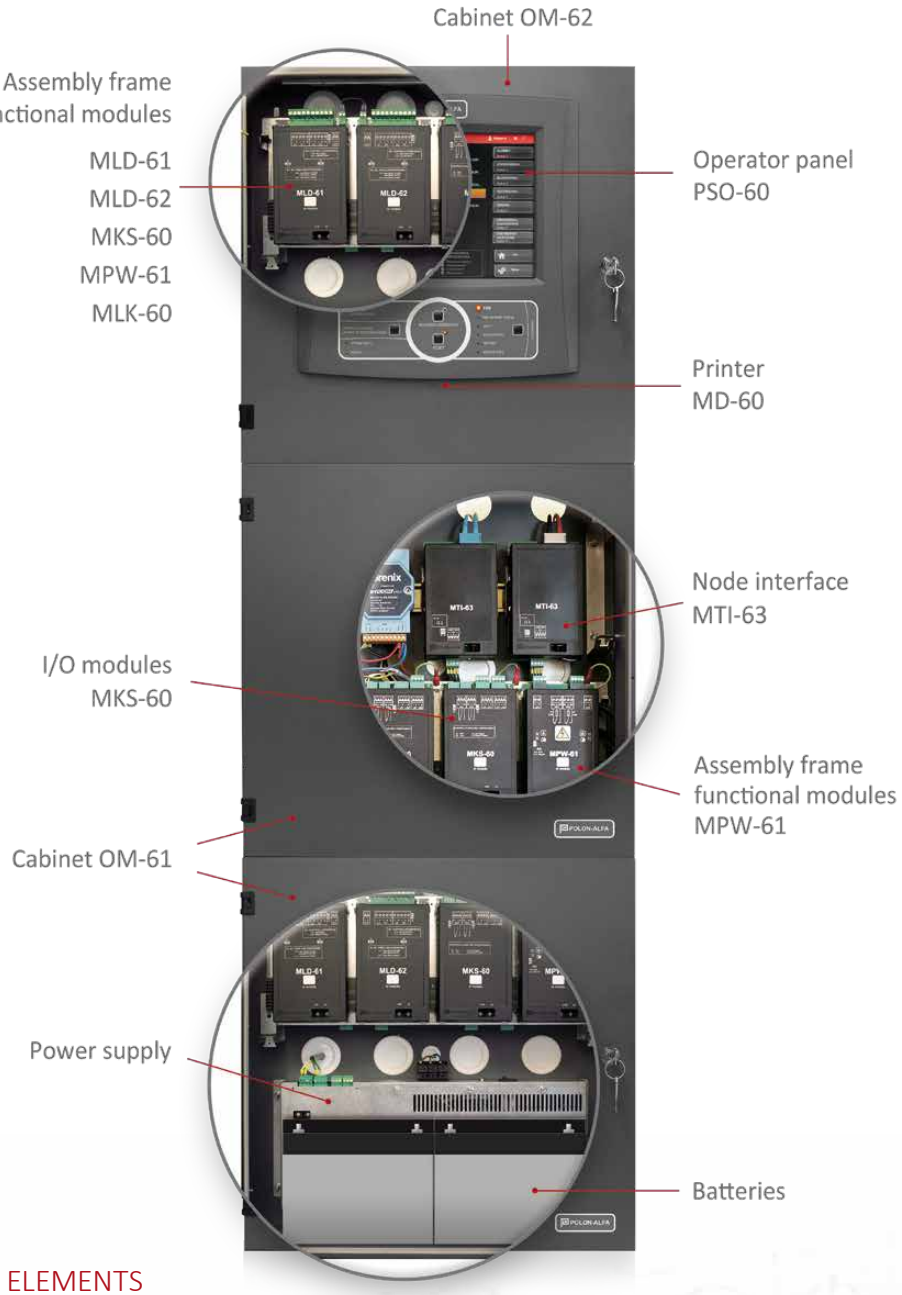
The POLON 6000 control panel was designed based on the idea of a module device with a distributed architecture. It consists of many unified modules of various types, installed inside standardized cabinets. Cabinets can be arranged as separate units or combined in sets (so called nodes) and can be located in different places of protected building, even if those locations are distant. All modules within one node and nodes between themselves are connected with a common, doubled (redundancy) digital communication bus.

Each control panel can be flexibly assembled with modules and nodes well-fitted to individual building requirements. Such solution enables the arrangement of the control panel equipment, installed in required locations. This provides maximum optimization of the system, reduction of cost of installation while the system is still extremely reliable and functional. This is possible due to implementation of doubled main processor controllers, communication buses and cable connections between nodes.

The POLON 6000 control panel consists of the PSO-60 panels with 10’’ touch screen, functional modules: detection lines MLD-61 and MLD-62, input-output modules MKS-60, relay outputs MPK-60, signalling outputs module MWS-60, high current relay outputs MPW- 61, supervision inputs MWK-60, conventional lines module MLK-60, supply modules MZP-60 and transmission modules MTI-61, MTI-62, MTI-63 v2.

PSO panels and modules are installed inside the cabinets with standard dimensions, which can be mechanically connected. A set of such mechanically connected cabinets create a control panel node. The control panel has to have at least one node in which main control panel PSO-60 (having number 1) is installed. This is the “main node” of the control panel. There is always only one “Main node” in the system. The rest of elements (modules) of the control panel is configured in form of external nodes which are connected to the “main node”. The communication between nodes is provided by means of doubled cable connection (RS-485) or doubled fiber optic cables.
Each node shall be equipped – depending on the size of node and expected current consumption – with one or more supply modules. Each node can contain line modules with connected detection lines, input-output modules for direct control or supervision of fire safety devices. In each external node the PSO-60 panel can be implemented, acting as the parallel operation panel.

SAMPLE NODE CONFIGURATION **POLON 6000**



- **1 089**
  ALL MODULES
- **99 000**
  ADDRESSABLE ELEMENTS
- **396**
  ADDRESSABLE LOOPS
- **64 000**
  OUTPUTS OR INPUTS

designed as per needs

For large and very large applications

Distributed architecture and advanced technology

Variety of addresable loop modules, elements and O/I in max configuration

Designed to the most challenging facilities

Integrated with extinguishing and gas detection systems

Wide range of compatible devices

FIRE CONTROL PANEL **POLON 6000**

Operator panel PSO-60

- 10” touch screen (800 x 600 pixels)
- double controller for redundancy purpose
- 2 channels for communication with functional modules
- up to 99 controllers in one distributed fire alarm panel

Detection line modules MLD-61 and MLD-62

- 2 loops with max 250 devices
- including detection line voltage converter (MLD-61)
- without detection line voltage converter (MLD-61)
- A/B loop class

I/O module MKS-60

- 2 potential-free relay outputs (1 A, 30 V)
- 2 potential outputs (0,5 A, 30 V)
- 2 monitoring inputs
- 2- or 3-state monitoring
- programmable fail-safe function

Outputs module MPK-60

- 4 potential-free relay outputs (1 A, 30 V)
- relay output line continuity monitoring
- programmable fail-safe function

Outputs module MWS-60

- 4 potential outputs (0,5 A, 30 V)
- full line monitoring
- programmable fail-safe function

Inputs module MWK-60

- 8 monitoring inputs
- 2- or 3-state monitoring

Outputs module MPW-61

- 2 high voltage potential-free relay outputs (5 A, 230 V)
- 2 high voltage monitoring inputs
- 2- or 3-state monitoring
- programmable fail-safe function

FIRE CONTROL PANEL POLON 6000

Conventional lines module MLK-60

- 8 conventional lines
- 32 conventional detectors per line or
- 10 MCPs per line

Cabinets OM-61 | OM-62

elements of the control panel can be installed in several types of cabinets:

- OM-61 - dedicated for installation of functional modules, power suppliers and batteries,
- OM-62 - dedicated for installation of the operator panel PSO-60, printer and other modules or batteries,

Battery containers OA-61 | OA-62

- OA-61 dedicated for batteries up to 134 Ah
- OA-62 dedicated for batteries up to 90 Ah
- cables included

Nodes interfaces MTI

- MTI-61 – max distance 3 m, provides power supply
- MTI-62 – max distance 1200 m, galvanic separation, doesn't provide power supply
- MTI-63v2 – fibre optic communication with single -mode or multi-mode cable

Assembly frame SM-60

- max 4 function modules
- provides power supply and communication
- requires mounting brackets

Brackets WP-61/WL-62 and WP-63/WL-64

- mounting brackets for assembly frames installation

Power supply units MZ-60-150, MZ-60-300

- provides power for all functional modules
- fault and alarm relay
- self-monitoring function

Printer MD-60

- fast thermal printer
- mounted inside main cabinet

Addressable acoustic and optical device SAB-6000

- SAB-6001 - sound & light
- SAB-6006 - voice & sound & light
- soft addressing
- 16 sound patterns - programmable
- 2 power options
- built-in short circuit isolator
- EN 54-3, EN 54-17, EN 54-23

ADDRESSABLE DETECTORS AND MODULES POLON 6000

Smoke detector DUO-6046(AD)*

- double sensor (IR,UV)
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- EN 54-3*, EN 54-7, EN 54-17

* built-in sounder

Smoke and heat detector DUT-6046AD

- double smoke sensor (IR,UV)
- double heat sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- built-in sounder
- EN 54-3, EN 54-5, EN 54-7, EN 54-17

Smoke and heat detector DOT-6046

- double smoke sensor (IR,UV)
- double heat sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- EN 54-5, EN 54-7, EN 54-17

Heat detector TUN-6046

- heat sensor
- soft addressing
- Programmable temperature class
- low current consumption
- built-in short circuit isolator
- EN 54-5, EN 54-17

Beam smoke detector DOP-6001

- IR smoke detection
- soft addressing
- automatic drift compensation
- auto-alignment function
- built-in laser pointer
- programmable sensitivity
- low current consumption
- built-in short circuit isolator
- EN 54-12, EN 54-17

Manual call point ROP-4001M(H)

- indoor and outdoor application
- flush mounting
- wall mounting with assembling frame
- soft addressing
- low current consumption
- built-in short circuit isolator
- EN 54-11 (type B)

Conventional line interface ADC-4001M

- soft addressing
- 6 modes of operation
- built-in short circuit isolator
- EN 54-18

Addressable sounder/sounder - beacon SAW/SAB-6000

- SAW/SAB-6001 sound/sound & light
- SAW/SAB-6006 voice & sound/voice & sound & light
- SAW-6001 - sound
- SAW-6006 - voice & sound
- soft addressing
- 16 sound patterns - programmable
- built-in short circuit isolator
- EN 54-3, EN 54-17, EN 54-23

ADDRESSABLE DETECTORS AND MODULES POLON 6000

Addressable siren SAL-4001

- indoor application
- soft addressing
- 3 sound patterns
- 3 power options
- built-in short circuit isolator
- EN 54-3

Wireless devices adapter ACR-4001

- wireless communication with line elements
- loop powered
- communication with max 16 devices
- soft addressing
- built-in short circuit isolator
- EN 54-18, EN 54-25

Wireless smoke detector DUR-4047

- UV wireless smoke detector
- battery powered (2 x CR123)
- 3 years of operation
- soft addressing
- automatic drift compensation
- built-in short circuit isolator
- EN 54-5, EN 54-25

Wireless manual call point ROP-4007(H)

- UV wireless smoke detector
- battery powered (2 x ER14505V)
- 3 years of operation
- indoor and outdoor application
- flush mounting
- wall mounting with assembling frame
- soft addressing
- EN 54-11 (type B), EN 54-25

I/O devices EKS-6000*

- EKS-6044 - 4 outputs
  - (2 A/230 V/62,5 VA)
  - 4 inputs (LV)
- EKS-6022 - 2 outputs
  - (2 A/230 V/62,5 VA)
  - 2 inputs (LV)
- EKS-6004 - 4 outputs
  - (2 A/230 V/62,5 VA)
- EKS-6040 - 4 inputs (LV)
- EKS-6008 - 8 outputs
  - (2 A/230 V/62,5 VA)
- EKS-6080 - 8 inputs (LV)
- EKS-6202 - 2 outputs
  - (2 A/230 V/62,5 VA)
  - 2 inputs (HV)
- EKS-6400 - 4 inputs (HV)
- EKS-6222P - 2 outputs
  - (12 A/230 V/2,76 kVA)
  - 2 inputs (LV)
  - 2 inputs (HV)

- soft addressing
- extensive programming capabilities
- IP 66
- built-in short circuit isolator
- EN 54-18, EN 54-17

* dedicated for POLON 6000 only

Universal control panel UCS 6000

- smoke extraction controller
- soft addressing
- built-in short circuit isolator (with MKA-60)

more on next page

Detector base G-40

- for all addressable and conventional detectors
- increased tightness
- screwless connection
- shield connector included
- optional assembly ring P-40
- optional base attachment PG-40

INTERACTIVE

INDISPENSABLE

FOR MIDDLE-SIZE OR BIG FACILITIES

FIRE ALARM SYSTEM
POLON 4000

Overview

The interactive, addressable POLON 4000 fire alarm system is a set of devices designed for fire detection and signaling, informing special Rapid Intervention Crew, as well as for controlling the fire protection devices. It enables the protection of small, middle -sized, large, and very large facilities. It is perfect for safety and security systems of “intelligent” buildings due to the possibility of transferring a vast amount of digital data to integration and supervision systems, as well as to fire monitoring system.

The POLON 4000 system is based on the concept of intelligent cooperation between all the elements that create it. Applied original protocol of signals transmission in detector loops and software of centrals and linear elements, enable an interactive cooperation of linear elements with the control panel and of linear elements between them.

The information exchange between fire detectors, which in advance gives information about the events in a protected area, provides an automatic detailed analysis of a situation detected by the system. This process helps to distinguish the fire alarm state from a false alarm. The POLON 4000 fire alarm control panel can work in a hierarchical network with a ring structure. The maximum number of control panels working in the network can be 31. This enables a flexible design of protection system in very large or dispersed facilities. One of the control panels can be selected as a superior (master), in relation to all remining subordinated ones (slave), and so to coordinate the operation of the system.

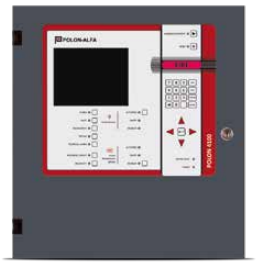
High operation reliability of the POLON 4000 system is guaranteed by doubled processors circuits of control panels (redundancy). All linear elements in the POLON 4000 system have built-in short-circuit isolators. Setting the addresses of linear elements can be also done via software without using microswitches. All information about the elements is placed in its non-volatile memory and is read out by the control panel after the installation of the elements in a detector line. Due to the application of radio detectors, the POLON 4000 system can be installed in places where using detector lines with wires is not possible. The elements of the POLON 4000 system meet requirements of the latest editions of European Standards EN 54 series.

Design and Functionality

The POLON 4000 control panel can be equipped with up to 8 addressable loops with a possibility to address max 127 linear elements in each loop. Hence, it can support over 1000 addressable elements. Network operation of 31 control panels increases this number to over 31 000 elements. Addressable detectors working with any control panel can be assigned to detection zone and named with user’s message that consists of two 32-characters lines of text. Moreover, there is a possibility of programing own messages for, so called technical alarms and non-maskable faults, which refer to supervising functions of different kind of sub-systems or safety devices that the control panel can provide. Large liquid crystal display facilities communication of the user with control panel. One of 17 alarming variants for each detection zone can be selected via software. Different alarming variants, which respond to different detection algorithms, enable an optimal usage of possibilities that are offered by the system for fire detection by considering environmental conditions that exist in particular facilities. Thanks to the extensive software, the control panel enables creating fire detection installation with flexible physical and logical structure.

The POLON 4000 control panels can control the signaling and fire protection devices by using potential free relay outputs, 24 V outputs and monitoring inputs. Apart from this, unlimited possibilities of control give input/output EKS-4001 module and EWS-4001 control module with 8 outputs, which are installed in detection loop. RS-232 and RS-422 serial interfaces make a possible connection to the control panel of computer keyboard that identifies linear elements, digital monitoring system, integration and installation supervising system.
Memory records and stores 2000 of last and 9999 alarms, which can be printed out on a paper, in the order of date and time, by the built-in printer or shown on the control panel display, as well as downloaded to the computer.

FIRE ALARM CONTROL PANELS **POLON 4000**



POLON 4100 - fire control panel

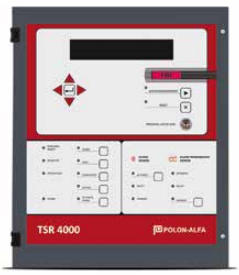
- 2 loops with 64 addresses
- 3 supervised relay outputs
- 2 monitoring inputs
- supervised signalling line
- EN 54-2, EN 54-4

POLON 4200 - fire control panel

- 4 loops with 64 addresses
- 8 supervised relay outputs
- 2 monitoring inputs
- 2 supervised signalling lines
- built-in printer
- EN 54-2, EN 54-4

POLON 4900 - fire control panel

- 4 loops with 127 addresses
- optional 4 loops card
- network operation - MSI-48 required (up to 31 panels)
- 16 supervised relay outputs
- 8 monitoring inputs
- 8 supervised signalling lines
- redundancy „on board”
- built-in printer
- EN 54-2, EN 54-4



TSR 4000 - remote operator panel

- up to 16 TSRs connected to one FACP
- relay output
- signalling line
- LCD display

Smoke detector DOR-4046

- IR smoke sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator
- DOR-4043 for POLON 4100 and POLON 4200
- EN 54-7

Smoke and flame detector DPR-4046

- IR smoke sensor
- flame sensor
- soft addressing
- programmable parameters
- low current consumption
- automatic drift compensation
- built-in short circuit isolator

I/O devices EKS-4001

- 1 relay output (2 A, 30 V)
- 2 monitoring inputs
- 3 types of enclosures
- IP 65
- built-in short circuit isolator
- EN 54-18, EN 54-17

I/O devices EKS-4001W

- 1 relay output (2 A, 230 V, 60 W)
- 2 monitoring inputs
- integrated enclosure
- IP 66
- built-in short circuit isolator
- EN 54-18, EN 54-17

FIRE CONTROL PANEL **POLON 4000**

Multi-output device EWS-4001

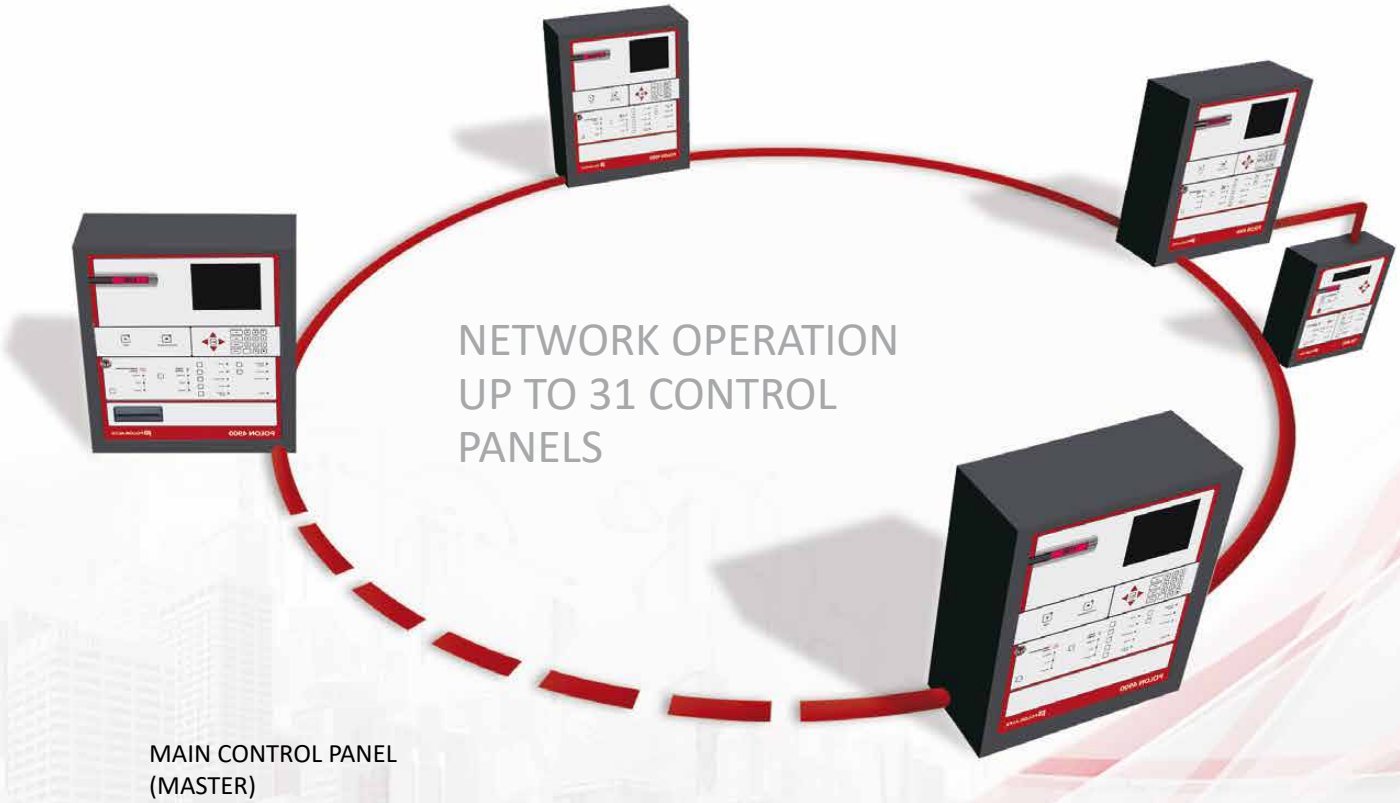
- 8 relay output (2 A, 30 V)
- integrated enclosure
- IP 65
- built-in short circuit isolator
- EN 54-18, EN 54-17

Multi-input device EWK-4001

- 8 monitoring inputs
- integrated enclosure
- IP 65
- built-in short circuit isolator
- EN 54-17

PARALLEL INDICATION TERMINAL

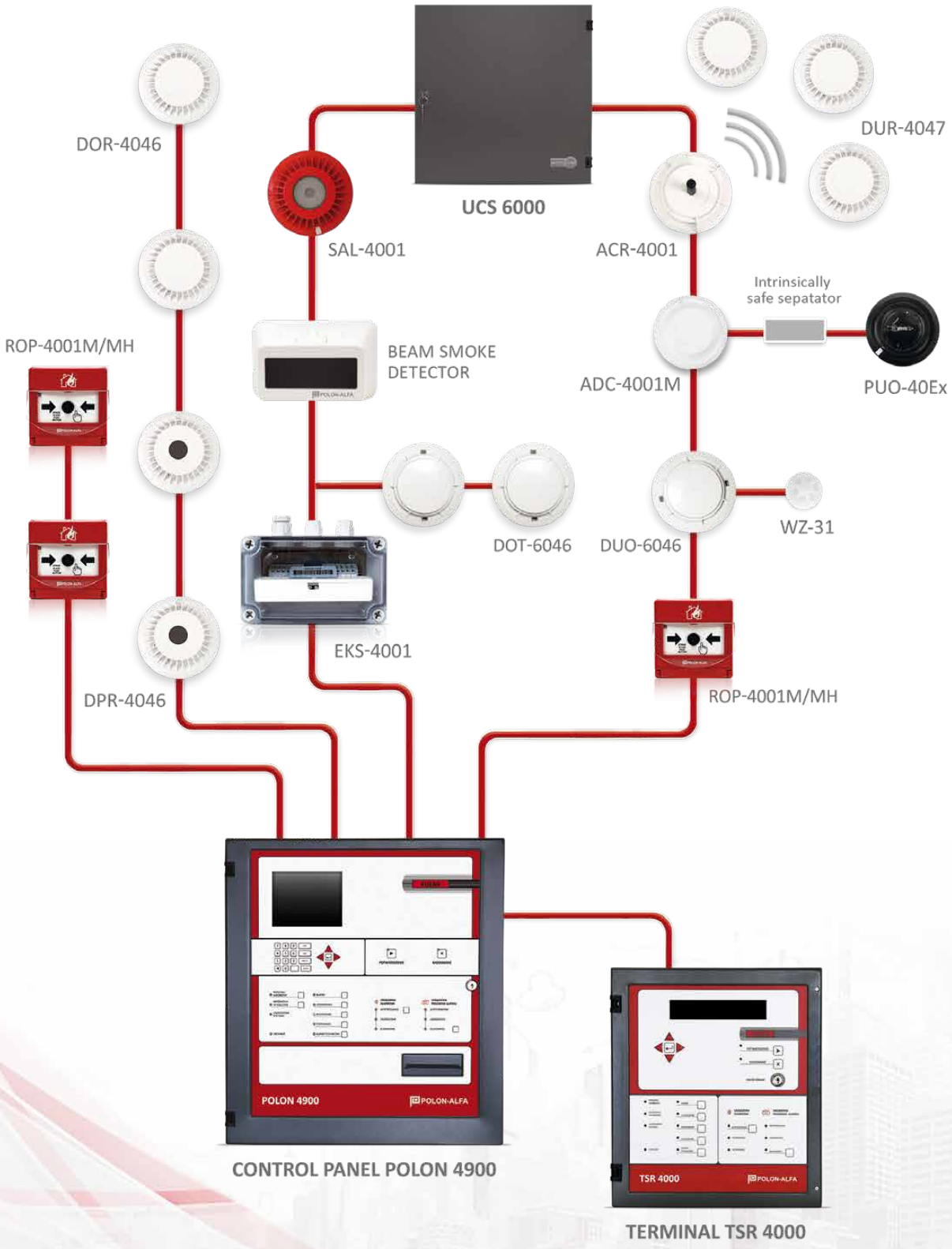
SLAVE CONTROL PANEL (SLAVE)



MAIN CONTROL PANEL (MASTER)

RS 422 TRANSMISSION
FIBER OPTIC OR COPPER CABLES

FIRE CONTROL PANEL **POLON 4000**



POLON 4000 SAMPLE DETECTION LINES

CONVENTIONAL

THE BEST
FOR SMALL FACILITIES

FIRE ALARM SYSTEM **IGNIS 2040**
FIRE EXTINGUISHING SYSTEM **IGNIS 2500**

Overview

Small hotels or office buildings, middle-size stores and other – all these buildings are exposed to fire. They don't need, usually, extended and expensive fire alarm systems. That's why protection of these premises with the IGNIS 2000 system is very good solution.

The system consists of three control panels, with different number of detector lines. In connection with wide range of series 40 fire detectors such system can be used not only for fire detection but, in connection with the special IGNIS 2500 control panel, can give the possibility to control the automatic extinguishing process. Together with the extinguish panels POLON-ALFA offers dedicated buttons for extinguishing procedure activation or stopping and sirens. Localisation of fire origin is possible with accuracy to the detector line number, on which fire detectors or manual call points report fire.

Apart from standard point detectors, the system can be expanded with intrinsically safe detectors dedicated to the explosive zones.

The newest IGNIS 2000 control panel brings a new feature which is the possibility to change the detection line functionality from detection to signalling lines what makes the panel more flexible.

System specification

- number of detection lines/zones – 4 to 6
- wide assortment of co-operating fire detectors:
  - point smoke detector (IR)
  - point smoke detector (UV)
  - beam smoke detector
  - heat detector
  - flame detector (UV)
  - multi-sensor smoke-heat detector
  - multi-sensor heat-flame detector
  - intrinsically safe detectors
- manual call point indoor and outdoor version
- supervised lines for activation of signalling devices
- programmable relay outputs
- power supply unit with automatic charging and battery internal
- supervising functions
- real time clock
- events memory and alarms counter
- RS 232/USB port for computer connection
- possibility for detection lines programming according to different variants
- possibility to disable zones
- possibility to test zones
- LCD display

CONVENTIONAL FIRE ALARM SYSTEM IGNIS 2000

IGNIS 2040

- max 6 detection zones
- max 2 signalling lines
- fault relay
- alarm relay
- 6 zone relays
- EN 54-2

IGNIS 2500

- 1 or 2 extinguishing zones (MSG-25 modules)
- MGS-25 module parameters:
  - 6 relays
  - 6 inputs
  - 4 potential outputs
  - 6 conventional detecion lines
- optional modules: MKS-60, MWS-60, MPK-60 (see page 4)
- optional MKA-25 module for communication with POLON 6000 panel
- EN 54-2, EN 54-4, EN 12094-1

Smoke detector DOR-40

- IR smoke sensor
- low current consumption
- automatic drift compensation
- EN 54-5

Smoke detector DUR-40

- UV smoke sensor
- low current consumption
- automatic drift compensation
- EN 54-5

Heat detector TUP-40

- heat sensor (A1R)
- low current consumption
- EN 54-7

Smoke and heat detector DOT-40

- IR smoke sensor
- heat sensor (A1R)
- low current consumption
- automatic drift compensation
- EN 54-5, EN 54-7

Heat and flame detector TOP-40

- heat sensor (A1R)
- flame sensor
- low current consumption

Manual call point ROP-63(H)

- indoor and outdoor application
- flush mounting
- wall mounting with assembling frame
- EN 54-11 (type B)

CONVENTIONAL FIRE ALARM SYSTEM IGNIS 2000

Remote alarm indicator WZ-31

- additional optical alarm notification
- small dimensions
- powered from the connected detector

START/STOP extinguishing buttons PU-61, PW-61

- activation or stooping the extinguishing process
- works with IGNIS 2500
- flush mounting
- wall mounting with assembling frame
- EN 12094-3

Warning devices SG-1, SG-2

- SG-1-001, SG-2-001 warning device – alerts to enter to the extinguishing area
- SG-1-002, SG-2-002 evacuation warning device – inform about the need to leave extinguishing area
- powered from the extinguishing panel
- built-in buzzer and flasher

Intrinsically safe heat detector TUN-38Ex

- programmable temperature class
- no base required
- low current consumption
- dedicated to the explosive zones
- II 2G EEx ib IIC T5/T6
- EN 54-5, ATEX

Intrinsically safe smoke detector DUR-40Ex

- UV smoke sensor
- low current consumption
- automatic drift compensation
- dedicated to the explosive zones
- II 2G Ex ib II C T6 Gb
- EN 54-7, ATEX

UV flame detector PUO-40

- UV flame sensor
- low current consumption
- requires G-40 base
- EN 54-10

Intrinsically safe flame detector PUO-40Ex

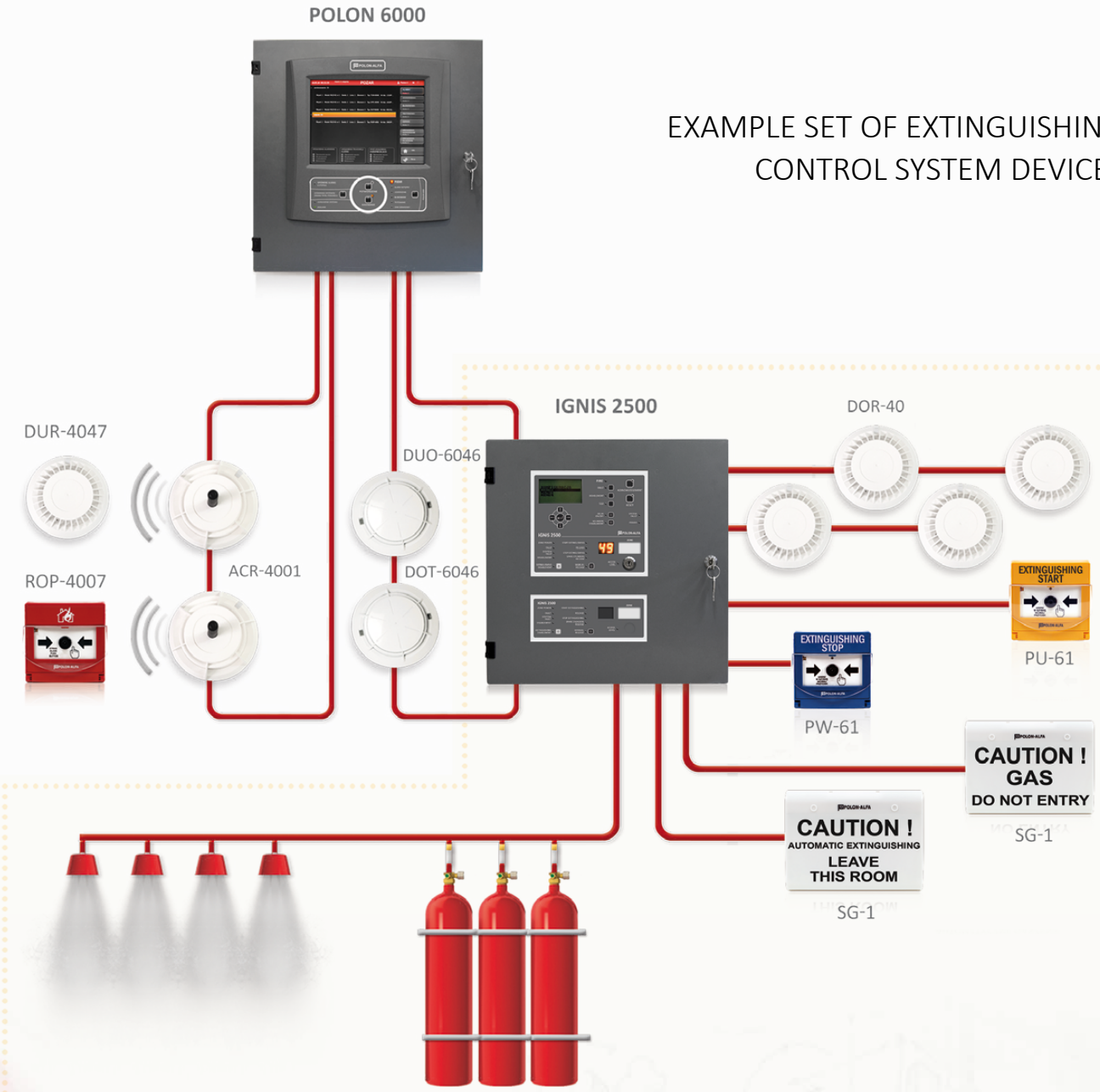
- UV flame sensor
- low current consumption
- dedicated to the explosive zones
- II 2G EEx ib IIC T6
- requires G-40 base
- standard version available
- EN 54-10, ATEX

Multi-band flame detector PPW-40REx

- flame detection based on three independent flame sensors
- unique self-test feature
- built-in event log
- fire and fault relays
- current loop output 4-20 mA
- RS-485 for digital communication and programming
- II 2G Ex ib II C T6 Gb
- II 1D Ex ta IIIC T85°C
- EN 54-10 (class 1) ATEX

INDIVIDUAL OPERATION OF THE PANEL **IGNIS 2500**

EXAMPLE SET OF EXTINGUISHING CONTROL SYSTEM DEVICES



- Max number of IGNIS 2500 extinguishing panels on single loop: 16 pcs.*
- Max number of IGNIS 2500 extinguishing panels in the system: 6336 pcs.*
- Max number of extinguishing zones in the system: 12672*

*depending on IGNIS 2500 variant

INNOVATION FUNCTION

ACOM 6.0

UNIVERSAL CONTROL PANEL
UCS 6000

Overview

The UCS 6000 universal control panel is designed for activation of fire protection devices, used for mechanical or gravitation smoke ventilation (fire dampers, smoke exhaust dampers etc.) and enables the following:

- detection of fire (smoke, heat, flame);
- automatic or manual actuation of fire protection devices installed in smoke exhaust systems;
- acoustic and optical notification about the state of devices (alarm, fault condition);
- automatic monitoring of activation of fire protection devices (servomotors, electromagnets, ventilators etc.) of smoke exhaust systems;
- automatic monitoring of its own modules/circuits;
- transmission of main information to other FAP (e.g. POLON 6000, POLON 4000, POLON 3000 system, IGNIS 2000 system or other not manufactured by POLON-ALFA) about alarm condition, faults, present state of fire protection devices.

The UCS 6000 control panel can operate as an independent, multizone universal smoke exhaust controller or as an addressable device, which is installed in the addressable loop of the POLON 6000 POLON 4000 or POLON 3000 system control panels.

Functions

The primary purpose of the UCS 6000 control panel, except fire detection, is to control and power fire protection devices such as various types of fire/smoke dampers, fire protection windows (equipped with electric servomotors), and fire zones separators (electromagnets), etc.

USC 6000 control panel has got the innovative **ACOM 6.0** function implement. It's allows for digital integration between the panel and POLON 4000 or POLON 6000 fire alarm control panels.

Due to a variety of power supply options and control methods of servomotors and electric fire prevention devices, the possibility to control of two-directional servomotors with double- or triple- wires has been implemented. For fire detection there is a dedicated conventional detection line.

Activation of fire protection devices controlled by the smoke exhaust control panel is possible thanks to the following:

- detection of fire by conventional detection line (detectors),
- activation of PO-6x manual call point (ventilation button),
- receiving signal from external fire alarm control panel, e.g. from IGNIS 2000,
- receiving commands from the POLON 6000, POLON 4000 or POLON 3000 system control panel.

In case of receiving an alarm signal, smoke exhaust procedure is commenced. It is conducted in accordance with the fire scenario applied to the facility. During the fire alarm condition all daily ventilation buttons and signals from rain and/or wind sensor are disabled. In quiescent mode it is possible to activate daily ventilation function using dedicated buttons.

UCS 6000 control panel modules are equipped with universal inputs and outputs. Dedicated computer application is used for programming the UCS 6000 control panels.
The control panel is connected to a computer using USB interface.

Design

The UCS 6000 control panel is modular based panel. Depends on the configuration – number of output modules and total current load, one out of three different size cabinets can be use:

from 4 A to 16 A | from 4 A to 32 A | from 32 A to 64 A.

Apart from a number of output modules, the panel is equipped with the main controller, power supply unit, power supervising module.

SMOKE VENTILATION SYSTEM CONTROLLER **UCS 6000**

Main controller MGS-60

- main controller for managing the panel
- rain&wind sensor power supply output and signal input
- supervised alarm and fault relays
- MGL-60

Control module MGL-60

- supervised output to power fire protection devices (4 or 8 A/30 V DC)
- conventional detection line
- conventional line for manual activation buttons
- limit switches input
- daily ventilation buttons input

Power supply supervising module MZU-60

- battery charging and buffering
- fault relay
- supervised potential output for auxiliary devices

I/O module MPW-60

- 2 HV programmable relays (5 A/230 V)
- 2 LV monitoring inputs

Manual activation buttons PO-60

- manual activation of fire protection devices
- flush mounting
- wall mounting with assembling frame
- activation LED (PO-61)
- activation LED and reset button (PO-62)
- activation, fault and quiescent LED and reset button (PO-63)
- optional daily ventilation buttons PP-61 and PP-62

I/O module MPD-60

- 2 LV programmable relays (1 A/30 V DC)
- 2 LV monitoring inputs

Addressable interface MKA-60

- digital communication with POLON 4000 or POLON 6000 fire alarm panel

Power supply unit

- powers section of modules
- 150 W
- 240 W
- 600 W

UNIVERSAL BEAM SMOKE DETECTOR **DOP-6001R**

EN 54
CERTIFIED

ALARM AND
FAULT RELAYS

LARGE COVERAGE
AREA: 5-100 M
OPERATION RANGE

EASY OPTICAL
PATH ALIGNING WITH
LASER POINTER

TRANSMITTER
AND RECEIVER
MOUNTED IN ONE HOUSING
- SIGNIFICANT ECONOMY
IN WIRING

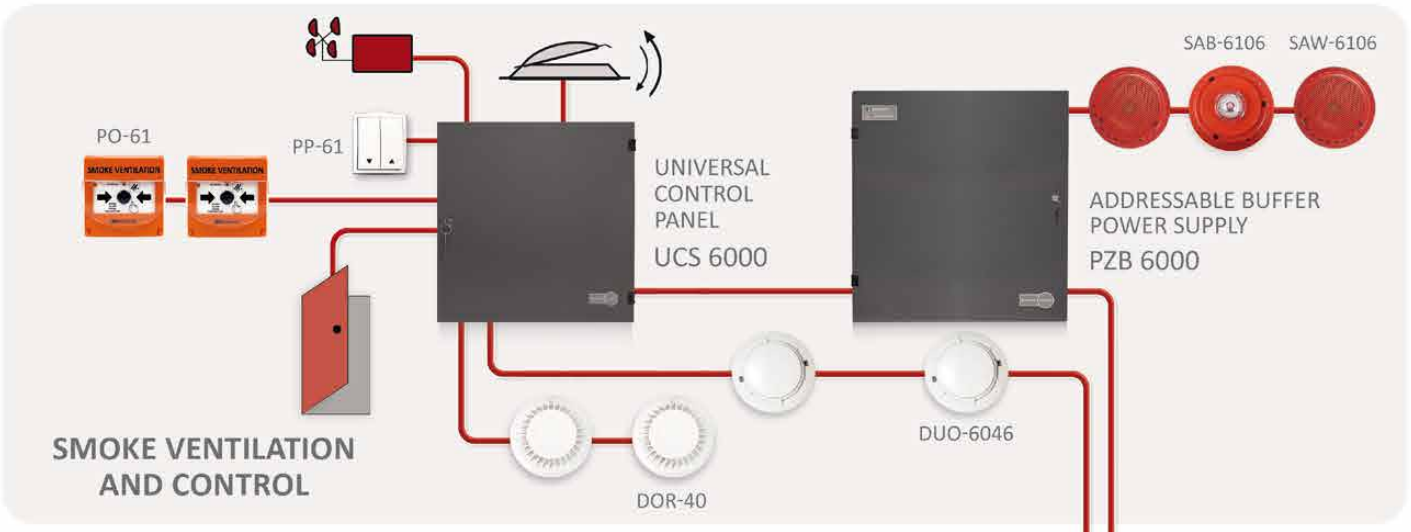
UNIQUELY SUITABLE
FOR SMOKE DETECTING

OPTIONALLY
AVAILABLE IN BLACK

ADJUSTABLE SENSITIVITY
THRESHOLD LEVELS

**OPERATES WITH ANY
FIRE ALARM SYSTEM**

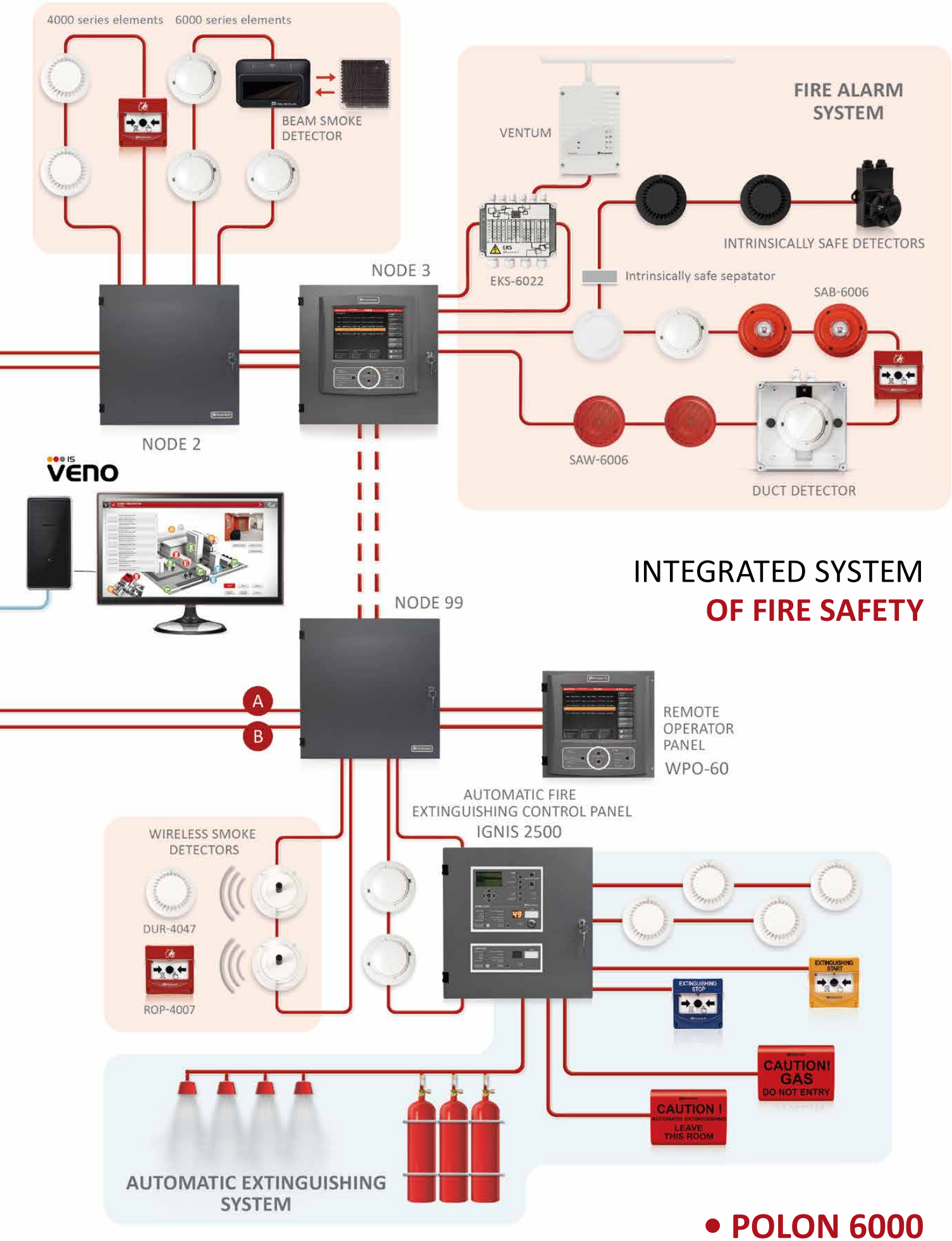
LOSS PREVENTION CERTIFICATION BOARD
LPCB
EN 54-12:2002
Cert/LPCB ref. 1283a


SAB-6106
SAW-6106
PO-61
PP-61
UNIVERSAL CONTROL PANEL
UCS 6000
ADDRESSABLE BUFFER POWER SUPPLY
PZB 6000
DUO-6046
DOR-40
SMOKE VENTILATION AND CONTROL


CNBOP-PIB
PA|VENO
CERTIFIED SYSTEM INTEGRATING FIRE PROTECTION DEVICES
FOR VISUALIZATION AND CONTROL

CONTROL PANEL WITH DISTRIBUTED ARCHITECTURE
POLON 6000
MULTI-BAND FLAME DETECTOR
PPW-40RExx
SAW-6106
ADC-4001M
EKS
EKS-6222P
NODE 1

GAS DETECTION SYSTEM
PSG-6001
PSG-6002
DO NOT ENTER!
EXCESS FUMES
TO-6000
GAS DETECTION CONTROL PANEL
CDG 6000
PSG-6103



INTEGRATED SYSTEM
OF FIRE SAFETY

• POLON 6000

DISTRIBUTED FIRE DETECTION AND ALARM SYSTEM

CONFIGURATION
SOFTWARE
FOR POLON 3000
and POLON 6000 SYSTEMS

POLON STUDIO

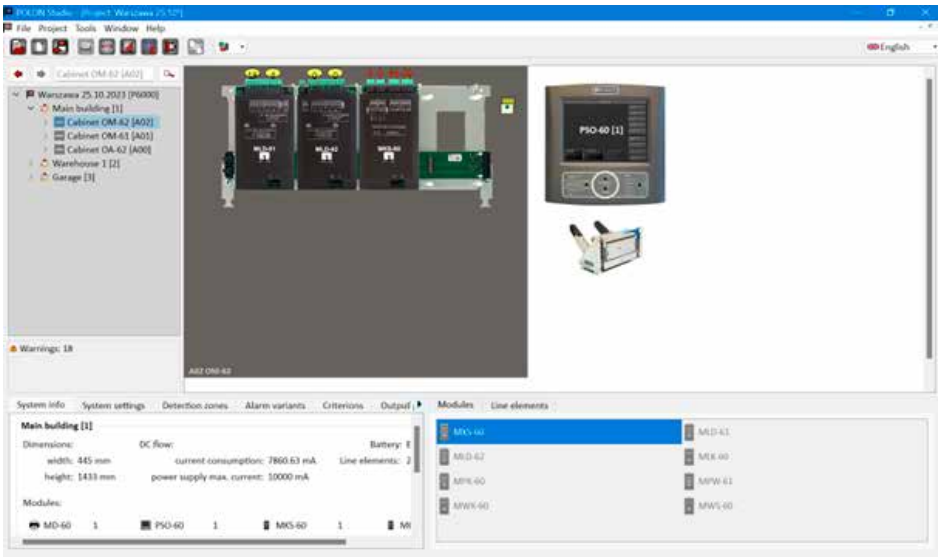
Overview

The POLON Studio software is intended for the assembly, configuration and programming of the POLON 3000 and POLON 6000 fire alarm systems.

The software enables individual programming of the configuration of the mentioned systems in accordance with the installation design, as well as it allows to modification of the existing configuration, read from the POLON 3000 and POLON 6000 control panels.

Using the POLON Studio program gives you the opportunity to:

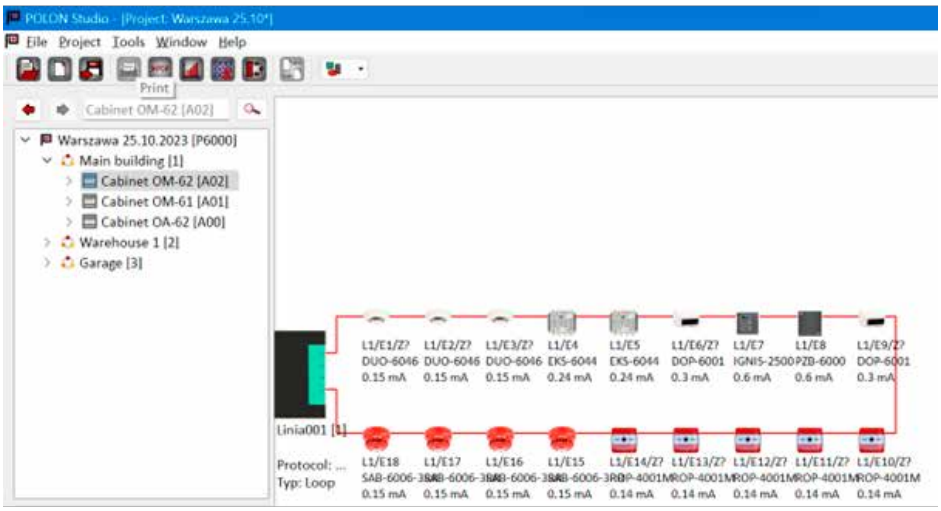
- easy assembly of modules and elements with verification of its correctness,
- graphical presentation of the completion of POLON 6000 control panel nodes and POLON 3000 control panel equipment,
- step by step creation of the control panel file and expanding it with subsequent detection lines (applies to POLON 6000), using the TLD-6000 service tool,
- use of the tool with extensive input and output filters,
- conversion of the configuration of older fire alarm control panels from a file format, e.g. POLON 4000, to the POLON 6000 file format,
- configuration comparisons, e.g. changes compared to the last version,
- handling event log files,
- exporting the view of POLON 6000 control panel nodes to a PDF file, e.g. for installers,
- printing reports.



Filters

Thanks to the use of an extensive filter mechanism, a user-friendly interface, tools supporting configuration and a clear graphical representation of the view of real devices, programming the control panel, using the POLON Studio program is more effective and safe.

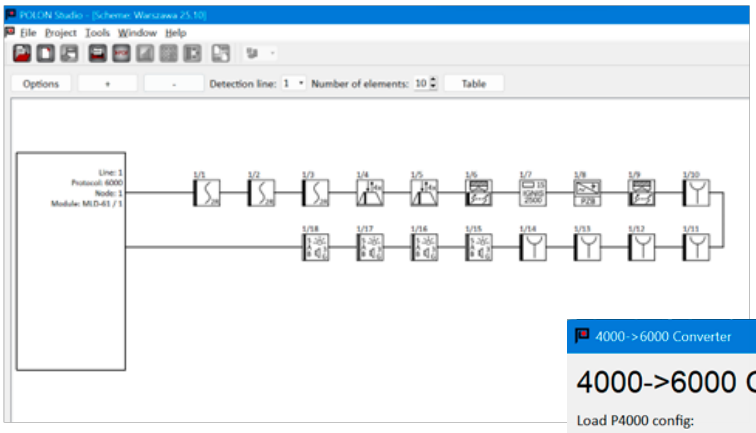
Due to the fact that there is no need to make many changes in the configuration, directly on the registers and memory of the control panel, this makes programming even safer, and the software itself verifies the entered data. After programming the system, the capacity values of the reserve batteries needed for the period of operation without the main power supply of the control panels are also automatically selected.

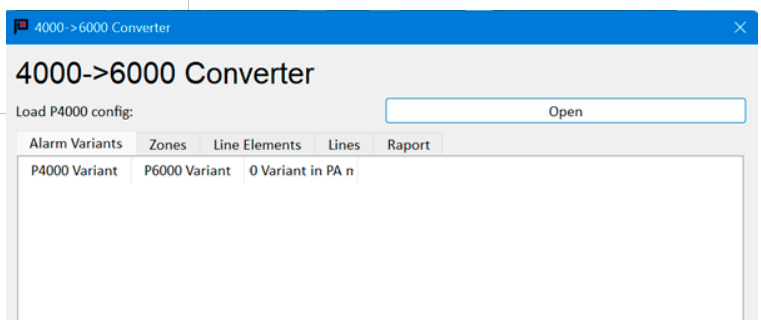


Additional software tools

In addition to the main functions, the POLON Studio software also includes additional tools, such as a parser (converter) from the POLON 4000 to POLON 6000 configuration, as well as a tool for indicating differences in projects, enabling easy verification of changes made by handling changes in the system.

The installer can also print a report with an inventory of the system's modules and addressable line elements.





VISUALIZATION AND INTEGRATION SOFTWARE FOR SECURITY SYSTEMS

IS VENO

Overview

Each security system installed in a facility, provides different kinds of information about its condition. A complete picture of the situation can be achieved only after the merger of the information, coming from all systems. Summarizing and synchronizing such a large amount of data is often very difficult, especially in the case of advanced systems.

The VENO software integrates fire alarm systems (POLON-ALFA units), CCTV, intruder alarm, access control and other systems, thus ensuring a higher degree of protection in the facility than each system separately.

Alarm notification

VENO enables the verification and control of alarms incoming from all systems, therefore allows faster response to events that require intervention. An alarm notification appears in the top bar with the detailed information of which system and which device it came from.

The operator can scroll or filter the alarms by devices, priorities, time or items. To exclude a situation when the operator misses notification, it disappears only after alarm is confirmed.
If necessary, the operator can add his comment to each alarm. The alarm is also indicated by a proper panel activation and changing colours and flickering of an appropriate icon on the visualization.

One common interface for all systems

One management software guarantees higher efficiency of the safety management within the facility. The operator, who receives data from all devices and systems at the same time, can precisely identify the cause of the alarm and take actions appropriate to the situation. One common interface and standardized alarm notification allow people responsible for the building safety to make the right decisions faster.

Interface of the VENO software is clear and visually polished. It is designed to maximize ease of use to the operator. Convenient „drag and drop" operation allows to easily set up VENO in edit mode. Additionally, large icons make working on touch screen more efficient. It is also possible to work on multiple monitors simultaneously.

Facility visualisation

Working with VENO software starts with implementation of a multi-level visualization of the monitored facility by an administrator. The software enables to add maps, 2D plans, 3D views or facility photos.

It is possible to upload a picture of the entire complex of buildings, as well as particular buildings, floors and rooms. The level of visualization detail is determined by administrator's needs and preferences - VENO does not impose any restrictions. Navigating on the facility visualization is easy thanks to full screen preview and possible zooming in and out of selected screen parts in the same panel.

Depending on the privileges set by the administrator, the operator can have an access to all or selected facilities within the whole installation.

The next step in VENO configuration is to assign interactive icons to all devices operating in the facility and placing them on the previously implemented visualizations. The operator can see all the devices working in CCTV, fire alarm, intruder alarm, access control systems and others, on one visualization, so his work becomes easier.

About us

POLON-ALFA S.A.

is a European based manufacturer that has been engaged in research, development and production activity in

THE FIRE ALARM SYSTEM SECTOR

for over

70 years.

POLON-ALFA is the main manufacturer of fire alarm devices in Poland and one of the leading ones in Europe.

- Fully integrated solutions for every kind of building
- Global reach and technical support online/onsite
- Highest quality and long-term reliability
- Modern 10.000 m^2 production facility located in the EU
- EN54, AQAP, ISO, ATEX certified

EN54 CERTIFIED PRODUCTS AQAP ISO

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