

# ACSP-402

## FIRE ALARM CONTROL PANEL

The **ACSP-402** fire alarm control panel is designed to:

- monitor operation of automatic and manual call points,
- control sirens,
- control devices used to transmit fire alarms and failure signals
- control the operation of fire protection devices or systems,
- monitor the operation of fire protection devices or systems,
- monitor the operation of other external devices,
- control other external devices

These features make it possible to detect a fire at its earliest stage and alert the users of the building with acoustic and/or optical signals as well as notify relevant services. This in turn allows one to quickly commence fire-fighting activities. The control panel can also automatically activate fire protection devices.

### System structure

- support for up to 256 zones
- support for up to 32 groups
- possibility to create interlinks between zones, sub-zones and groups
- support for up to 256 call points (detectors / MCPs)
- support for addressable detection circuits of the following types:
  - loop (up to 2 circuits)
  - radial line (up to 4 circuits)
  - loop with a side line / side lines
- support for a printer
- extensive functions for testing the control panel and system

### Inputs

- 4 programmable inputs on the control panel mainboard (NO, NC)
- monitoring of external devices status, e.g. for reporting fire alarms and failures

### Outputs

- 2 control outputs for conventional sirens
- control output for fire alarm transmission devices
- control output for fault signal transmission devices
- 8 programmable relay outputs
  - control of external devices
  - output for controlling automatic fire protection equipment
- 24 V DC power supply output
- dedicated power supply output for **ACSP-ETH** and **ACSP-RSI** modules
- signal delay at outputs

### RS-485 communication buses

- 2 bus ports for connecting
  - **APSP-402** repeater panel
  - **ACSP-ETH** module (for extending the control panel with an Ethernet port)



- **ACSP-RSI** module (for opto-isolation of the bus and connection of a printer)

**E-mail notification (requires connecting the ACSP-ETH module)**

- 4 addresses for notification
- selection of event types for notification
- periodic diagnostic reports

**Setting up**

- setting up with keys on the front panel of the control panel
- free **ACSP Soft** programme for configuring the control panel (USB port)

**Event memory**

- non-volatile memory for up to 9999 fire alarms
- non-volatile memory for 8999 events (including fire alarms)

**Control panel mainboard module**

- LEDs for signalling the status of the control panel and external devices
- LCD display for:
  - setting up the control panel
  - presenting information about fire alarm
  - presenting information about disablement, test or failure conditions
  - viewing the list of current disablement, test or failure conditions
  - viewing the history of alarms and other events
- USB port to connect a computer
- power supply connection
- battery connection
- built-in piezo transducer for acoustic signalling
- real-time clock with battery back-up power

**Power supply**

- switching mode power supply **APS-318** with short circuit protection
- automatic switching to back-up power supply (battery) in case of failure of the main power supply
- battery charging circuit with temperature-compensated charging voltage
- monitoring of the battery status and disconnection of a flat battery

## TECHNICAL DATA

|  |                         |
|--|-------------------------|
| Operating temperature range  | -5...+40 °C             |
| Supply voltage (±15%)  | 230 V AC, 50-60 Hz      |
| Maximum humidity   | 93±3%                   |
| Dimensions   | 324 x 382 x 108 mm      |
| Maximum current consumption from the 230V network  | 300 mA                  |
| Transit temperature range  | -25...+55 °C            |
| Operating duration of the stand-by supply  | 72 h                    |
| Maximum internal apparent resistance of the battery (with cables and terminals in a circuit) | 1,1±10% Ω               |
| Current draw from the battery when detecting   | 220 mA                  |
| Current draw from the battery when emitting an alarm   | 320 mA                  |
| Current draw from an integrated AC power adapter when detecting                              | 200 mA                  |
| Current draw from an integrated AC power adapter when emitting an alarm                      | 300 mA                  |
| Sealing of the casing  | IP30                    |
| Events storage capacity  | 8999                    |
| Alarm counter capacity   | 9999                    |
| Delay time of alarm transmission to the outside  | 0...10 min              |
| Clock battery  | 3 V (CR2032)            |
| Output for communication with PC (service output)  | USB typ B               |
| Terminating resistor on terminals for communication with the remote panel                    | 100 Ω                   |
| Output for communication with remote panel and CSP-ETH module                                | transmisja szeregowa    |
| Supply output +24V   | 24 V DC±15%             |
| Supply output AUX (only for connecting CSP-ETH module): in standard mode                     | 18 V DC +5%, -15%       |
| Alarm resistor on the control input circuit  | 1 kΩ±5%                 |
| Terminating resistor on the control input circuit  | 10 kΩ±5%                |
| Number of programmable control inputs  | 4                       |
| Electrical parameters of relay outputs   | 1A / 30 V DC (NO or NC) |
| Number of alarm transmission circuits  | 1                       |
| Working voltage of the alarm transmission circuit  | 24 V DC±15%             |
| Maximum current of the alarm transmission circuit  | 180 mA                  |
| Terminating resistor on the alarm transmission circuit                                       | 10 kΩ±5%                |
| Number of fault transmission circuits  | 1                       |
| Working voltage of the fault transmission  | 24 V DC±15%             |
| Maximum current of the fault transmission circuit  | 180 mA                  |
| Terminating resistor on the fault transmission circuit                                       | 10 kΩ±5%                |
| Number of programmable relay outputs   | 8                       |
| Stand-by supply: internal acid battery   | 12 V / 17 Ah            |
| Stand-by supply: external acid battery   | 12 V / ≤33 Ah           |
| Supply output AUX (only for connection of CSP-ETH module): with AC power supply failure      | 12 V DC +15%, -20%      |
| Maximum battery charging current   | 1,4 A                   |
| Overcurrent protection of the power supply unit (time-delay fuse)                            | 3,15 A                  |
| Current parameters of the integrated power supply (acc. to EN54-4) - I <sub>max</sub> a      | 1,6 A                   |
| Current parameters of the integrated power supply (acc. to EN54-4) - I <sub>max</sub> b      | 1,6 A                   |
| Battery charging system overcurrent protection (time-delay fuse)                             | 3,5 A                   |
| Maximum number of addressable detection circuits (loop)                                      | 2                       |
| Maximum number of addressable detection circuits (radial line)                               | 4                       |
| Maximum resistance of the addressable detection circuit                                      | 100 (2 x 50) Ω          |
| Maximum number of line elements in an addressable detection circuit                          | 128                     |
| Maximum number of line elements in an addressable detection circuit of the radial line type  | 32                      |
| Maximum number of automatic call points in a conventional detection circuit                  | 32                      |
| Maximum number of manual call points (ROPs) in a conventional detection circuit              | 10                      |
| Maximum current in a detection circuit   | 200 mA                  |
| Maximum resistance of the circuit for alarm and fault signalling devices                     | 75 (2 x 37,5) Ω         |
| Number of external circuits for signalling devices   | 2                       |
| Operating voltage of conventional alarm circuits (±15%)                                      | 24 VDC                  |
| Maximum current of the circuits for conventional signalling devices                          | 180 mA                  |
| Terminating resistor on the conventional signalling devices circuit                          | 10 kΩ±5%                |
| Load capacity of the +24 V supply output   | 200 mA                  |
| Weight without the battery   | 2721 g                  |