



awex[®]
fire system

FIRE
ALARM
SYSTEM

FAS ■

www.awex.eu



Awex

AWEX BRAND

The AWEX brand has existed since 2002, and has been carrying out clearly defined mission: modern products with the highest quality and the satisfaction of customers. We offer the full range of products concerning emergency lighting which meet European standards. Within 15 years of our presence on the market, due to involvement, our knowledge, funds, cooperation with the best specialists, including research facilities, and investments in innovative undertakings we achieved the leader industry position.

AWEX company means the most modern technologies, expert team of designers and engineers, the highest quality, reliability of devices, diversified offer, unique design, unlimited production capacity and flawless reputation confirmed by references. Satisfaction and trust of our customers is our greatest prize. We also enjoy the consideration of independent experts. We were awarded with the title: "Export Leader 2006" ["Lider Eksportu 2006"] for a sales level achieved, and the Puls Biznesu awarded us twice with the „Gazele Biznesu” distinction as one of the most dynamically developing companies.

GUARANTEE OF QUALITY

To follow the mission of our company, we have implemented the Quality Management System according to the EN ISO 9001:2008 standard. We also have certification by TÜV NORD which guarantees the highest quality of design, manufacture, assemble and service of manufactured devices.

INVESTMENTS

We apply the latest world technologies which guarantee quality, precision in production, the optimisation of technological process and work ergonomics. We invest our time and funds to make each stage of manufacture of our products contributing to meet all expectations on the part of our clients.

RESEARCH

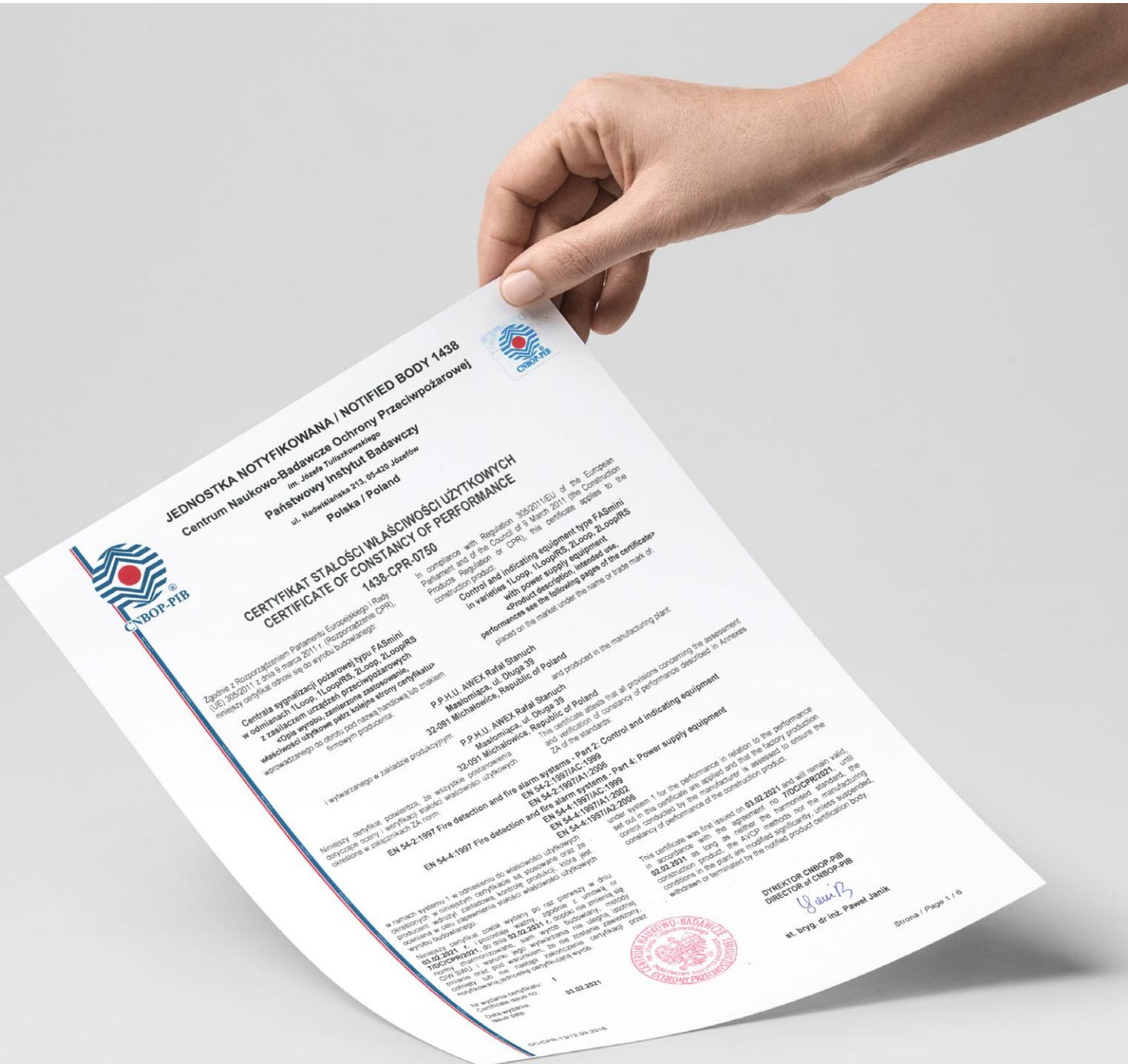
Due to research and development actions we ensure constant update of our offer oriented towards growth of the industry. This let us provide the most modern, multifunctional and technologically advanced products.

PROFESSIONAL CREW

We hire the best specialists in many fields and by dedicated trainings we ensure constant improvement of their qualifications. Our design department provides flexibility adjusted to individual needs. The team of highly qualified engineers guarantees constant technical progress of devices offered by us. Application of modern company information flow methods allows us to ensure constant update of our offer and products. Effective projects management lets us to establish solid relationships with our counterparties, based on trust.

WE CARE ABOUT ENVIRONMENT

We offer products which are friendly for the natural environment, and the technological process meets high standards of the EU.





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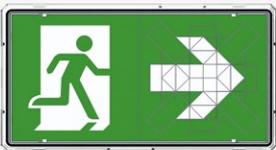
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SMART VISIO

SMART VISIO is an advanced app used for managing latest AWEX systems. It lets you to connect then integrate and visualize each of system in the same time in the single control station. By using BACnet communication protocol, you can use this software in any buliding type.

SMART VISIO is easy to install and gives you full system visualization. This reduces building operation costs. This software is recommended to use for: shopping malls, mid and big size office building, hospitals, stadiums, airport terminals, production facilities and buildings which requires complex operational. System raporting meets EN 50172 standard.



SMART VISIO CHARACTERISTICS

- › intuitive menu
- › uploading floor plans
- › unlimited configuration variants for individual devices and whole system
- › element and system status control
- › damages and system faults real-time verification
- › fast identification of damaged devices
- › simple diagnose of basic parameters visualized in the floor plan
- › system extension possibility
- › no limit of added devices
- › remote management of integrated systems





CONTROL MODULES

CONTROL MODULES IN FIRE ALARM SYSTEM

The control units are intended collect alarm signals from the elements located on supervisory lines. Grouped information are presented on the screens of user panels in the order dependent on their type and priority of display. Due to such application, communications are legible and clear for all users of the system. Seven-inch display connected with a transparent interface gives the possibility of easy and quick configuration of the system. The built-in controller while interpreting introduced settings controls the devices intended to protect a facility against fire.

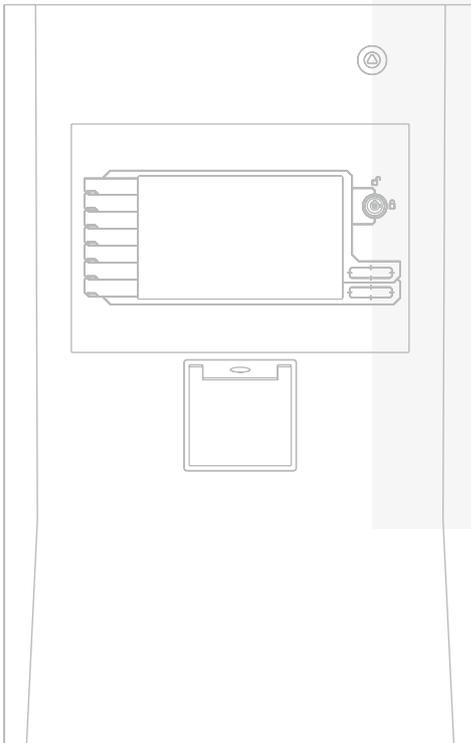




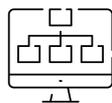
FIRE ALARM CONTROL UNIT FAS

The control unit is manufactured in the module technique which makes it easy to expand and service.

In the basic it has a user's panel, a control module with a detection loop, a power supply unit and a set of batteries. You can expand and adjust the control unit to your own need through installations and programming appropriate expansion cards.



TOUCH PANEL
7 inch touch screen

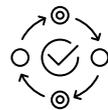


WEB SERVER
usage of any web browser



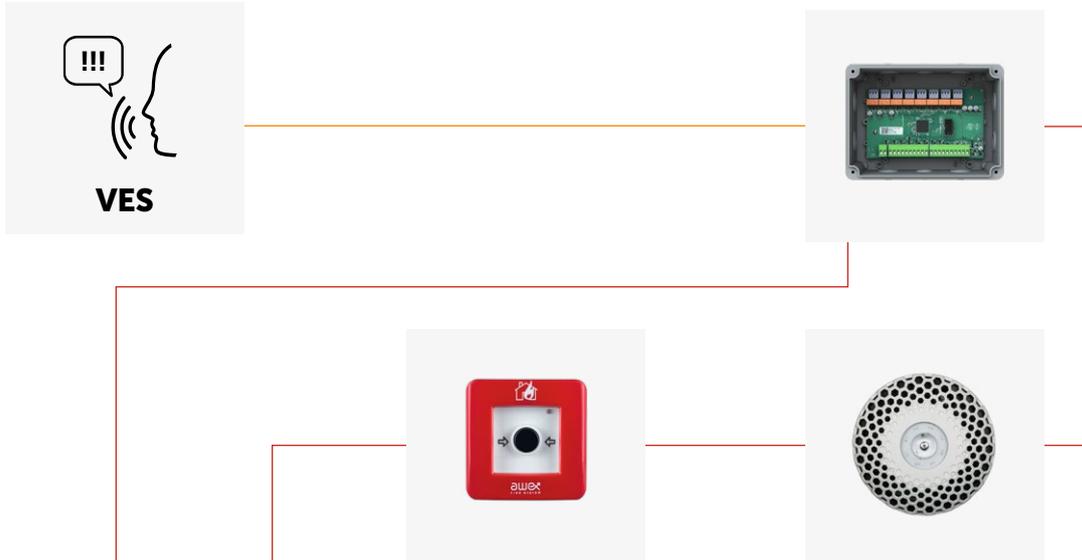
BACnet
ready

BACNET COMPATIBILITY
built in BACnet protocol to communication with BMS



Modbus
ready

MODBUS COMPATIBILITY
built in Modbus protocol to communication with BMS



Optionally, the control units may be monitored through the TCP/IP protocol. Remote access to the system service is available through dedicated software or on the website.

Application of the RJ-45 connector and the IP technology allows to integrate the system and the building management systems (BMS), with the Safety Management Systems (SMS) and the visualisation systems (SMART VISIO).



FAS CHARACTERISTICS

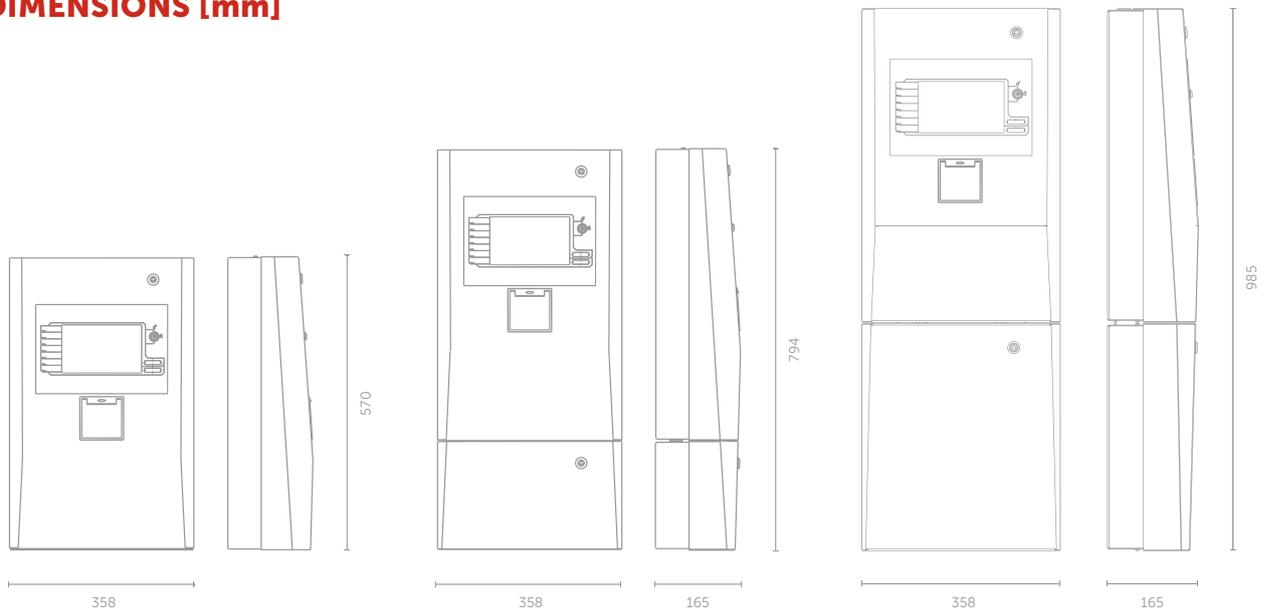
- › up to 10 detection loops
- › up to 250 elements per loop
- › up to 10 000 zones in the system
- › built in outputs:
 - ATE
 - signal lines
 - fault
 - universal relay
- › max loop length up to 2 [km]
- › loop break detection
- › logs counter up to 15 000 rows
- › extension cards
- › EN 54-2, EN 54-4 compliance
- › built in printer
- › SmartVisio integration
- › web browser, BACnet, Modbus interface

TECHNICAL DATA

| NAME | FIRE ALARM CONTROL PANEL |
|--|---|
| TYPE | ADDRESSABLE |
| POWER SUPPLY VOLTAGE | 170-260 [VAC] 50 [Hz] |
| POWER OUTPUT VOLTAGE | 20-30 [VDC] |
| BATTERIES | 26 / 52 / 78 [Ah] |
| WIRES CROSS-SECTIONS | UP TO 2,5 [mm ²] |
| DETECTION LOOPS WIRE CROSS-SECTION | 0,8 – 1,5 [mm ²] |
| LENGTH OF DETECTION LOOP | UP TO 2 [km] * |
| DETECTION CIRCUIT TYPES | DETECTION LOOP, STUB DETECTION CIRCUIT, SIDE STUB DETECTION CIRCUIT |
| MAXIMUM NUMBER OF DETECTION LOOPS | 10 |
| MAXIMUM NUMBER OF STUB DETECTION CIRCUITS | 20 |
| MAXIMUM NUMBER OF DETECTION ZONES | 10000 |
| MAXIMUM NUMBER OF ELEMENTS PER DETECTION LOOP | UP TO 250 * |
| MAXIMUM NUMBER OF ELEMENT PER STUB DETECTION CIRCUIT | 32 |
| NUMBER OF SIGNAL LINES OUTPUTS | 2 |
| ALARMING VARIANTS | UP TO 32 |
| UNIVERSAL INPUTS | UP TO 12 |
| UNIVERSAL RELAY OUTPUT | UP TO 11 |
| EVENTS COUNTER | 15000 |
| ACCESS LEVELS | 4 |
| PRINTER | YES, OPTIONAL |
| LAN CONNECTION | YES |
| HOUSING | POWDER-COATED STEEL, RAL 3000 |
| IP RATING | IP30 |
| WORKING TEMPERATURE | 10 UP TO 40 [°C] |

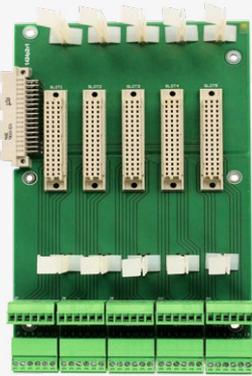
* depends on cable type and number of elements, requires calculation during design process.

DIMENSIONS [mm]



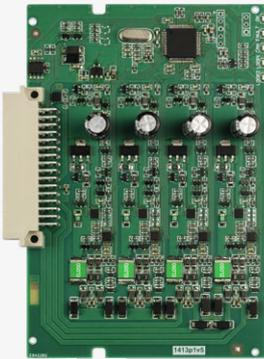
CONTROL UNIT EXTENSION CARDS

EXTENSION CARD SLOT PR3/PR5



| NAME | EXTENSION CARD SLOT PR3 | EXTENSION CARD SLOT PR5 |
|---------------------------------|-------------------------|-------------------------|
| MONTAGE | INSIDE FAS HOUSING | |
| MAKS. ILOŚĆ PANELI WYNIESIONYCH | 3 | 5 |
| PRODUCT CODE | FSC009 | FSC010 |

LOOP DETECTION CARD KPD2



| NAME | LOOP DETECTION CARD KPD2 |
|---------------------------|--|
| MONTAGE | INSIDE FAS HOUSING |
| NUMBER OF DETECTION LOOPS | 2 |
| DETECTION CIRCUIT TYPES | DETECTION LOOP, STUB DETECTION CIRCUIT |
| MAX. NUMBER OF ELEMENTS | UP TO 250 PER LOOP * |
| MAX. LOOP LENGTH | * UP TO 2 [km] |
| MAX. CARDS NUMBER | 5 |
| PRODUCT CODE | FSC004 |

* depends on cable type and number of elements, requires calculation during design process

INPUT/OUTPUT CARD KIO 22



| NAME | INPUT OUTPUT CARD KIO22 |
|----------------------|-------------------------|
| MONTAGE | INSIDE FAS HOUSING |
| NUMBER OF INPUTS | 2 SUPERVISED INPUTS |
| NUMBER OF OUTPUTS | 2 RELAY OUTPUTS |
| MAX. OUTPUT LOAD | 30 [VDC], 0,5 [A] |
| MAX. NUMBER OF CARDS | 5 |
| PRODUCT CODE | FSC005 |

COMMUNICATION CARD KRS 422/KRS 422 FO

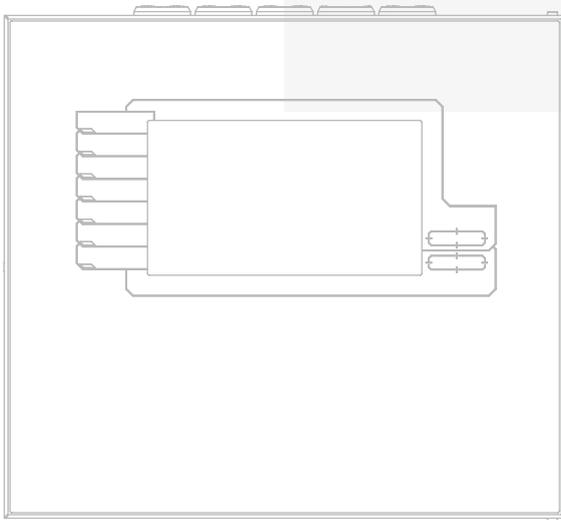


| NAME | COMMUNICATION CARD KRS 422 | COMMUNICATION CARD KRS 422 FO | |
|---|----------------------------|-------------------------------|-----------------------|
| MONTAGE | INSIDE FAS HOUSING | | |
| MAX. NUMBER OF CONTROL UNITS IN NETWORK | 10 | | |
| CABLE TYPE | FTP | HTKSHekw | MULTIMODE FIBER OPTIC |
| MAX.DISTANCE BETWEEN CONTROL UNITS [m] | 500 | 1000 | 5000 |
| MAX. NUMBER OF EXTERNAL SIGNAL PANEL | 10 | - | |
| PRODUCT CODE | FSC006 | FSC007 | |

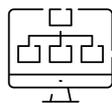


FIRE ALARM CONTROL UNIT FASmini

FASmini control unit is the main element of Fire Alarm System. Its role is to protect human life, secure properties and buildings. Control unit collect and analyse information from connected points. It is also responsible for steering external devices and informing about fire. By connecting to ATE, FASmini can send information to Fire Brigade.



TOUCH PANEL
7 inch touch screen

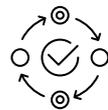


WEB SERVER
usage of any web browser



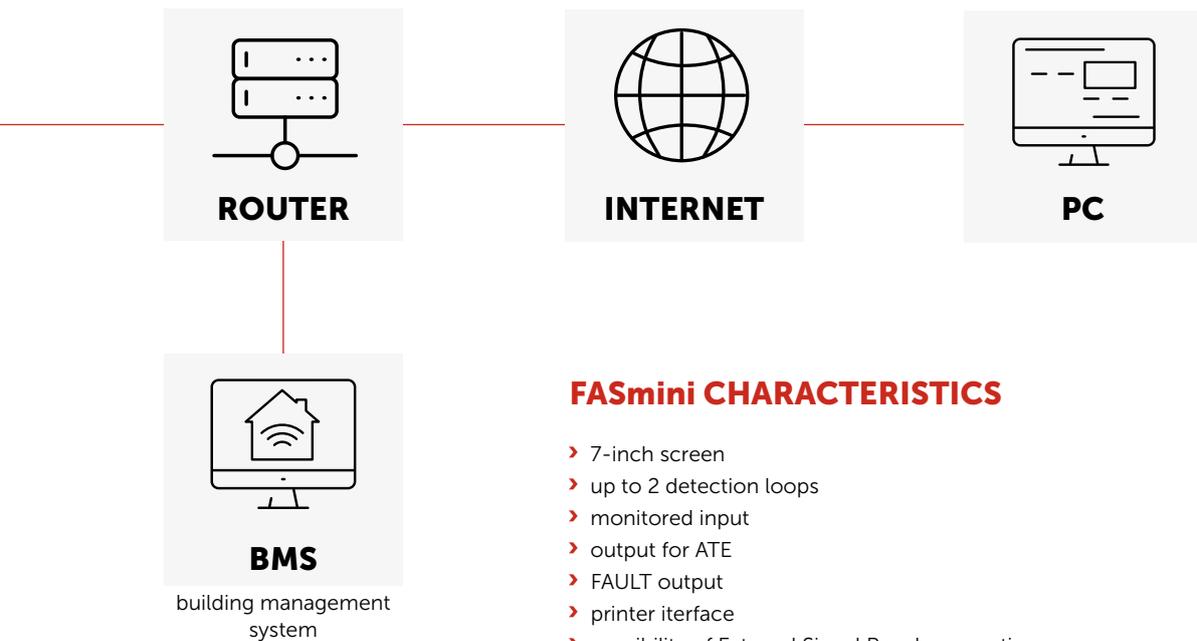
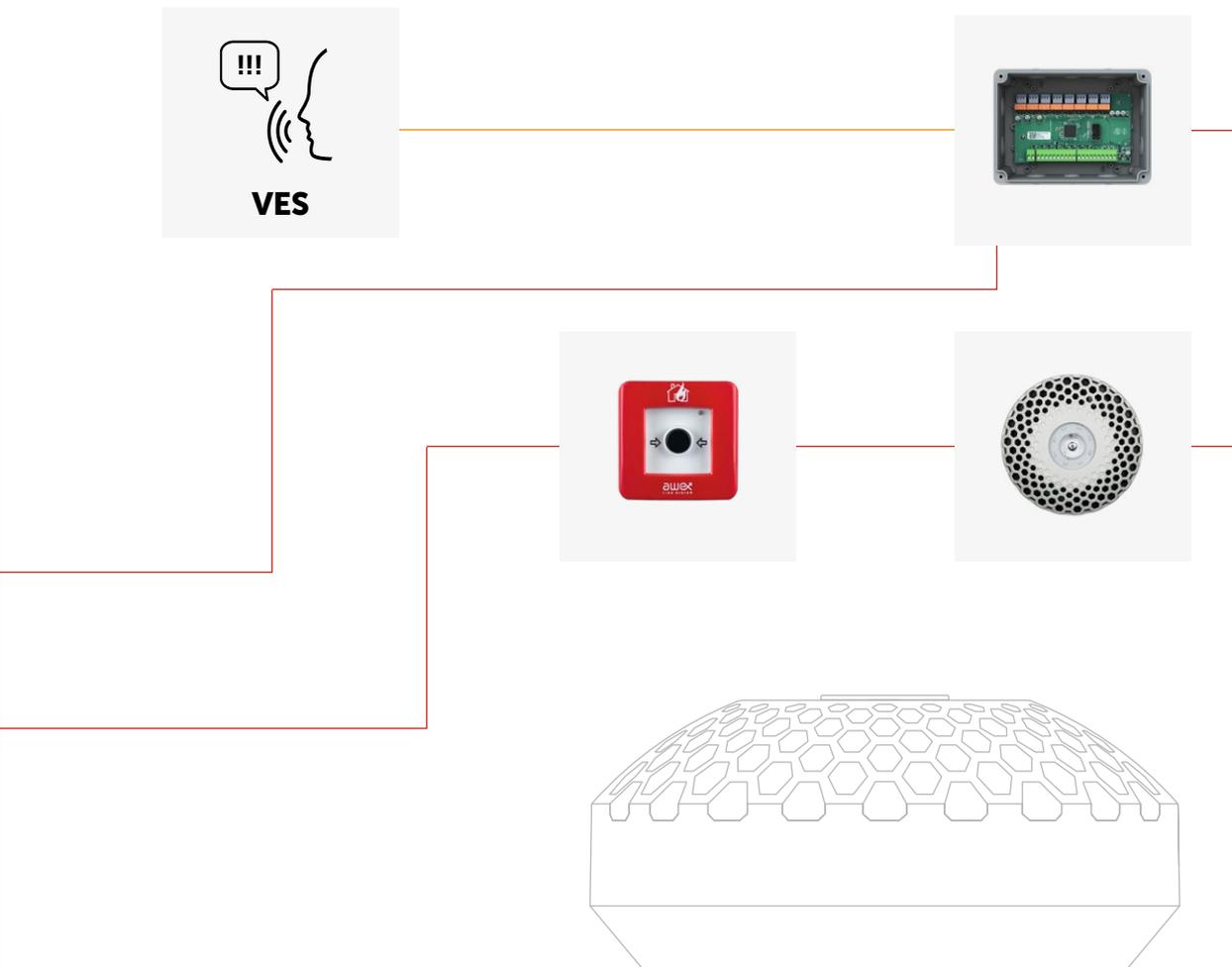
BACnet
ready

BACNET COMPATIBILITY
built in BACnet protocol to communication with BMS



Modbus
ready

MODBUS COMPATIBILITY
built in Modbus protocol to communication with BMS



FASmini CHARACTERISTICS

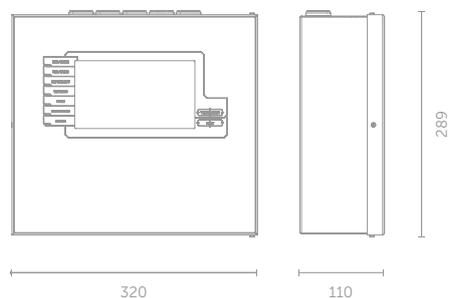
- › 7-inch screen
- › up to 2 detection loops
- › monitored input
- › output for ATE
- › FAULT output
- › printer interface
- › possibility of External Signal Panel connection
- › up to 10 control units in network
- › monitoring of main and backup power supply

TECHNICAL DATA

| NAME | 1 LOOP | | 2 LOOP | | 1 LOOP/RS | | 2 LOOP/RS | |
|--|---|----------|---------|----------|-----------|---------|-----------|---------|
| TYPE | ADDRESABLE | | | | | | | |
| POWER SUPPLY VOLTAGE | 170 – 250 [VAC] 50 [Hz] | | | | | | | |
| POWER OUTPUT VOLTAGE | 20-30 [VDC] | | | | | | | |
| BATTERY | 7,2 [Ah] | 7,2 [Ah] | 12 [Ah] | 7,2 [Ah] | 7,2 [Ah] | 12 [Ah] | 7,2 [Ah] | 12 [Ah] |
| NUMBER OF SIGNAL LINES OUTPUTS | 1 | 2 | | 1 | | 2 | | |
| WIRES CROSS-SECTIONS | UP TO 2,5 [mm ²] | | | | | | | |
| DETECTION LOOPS WIRE CROSS-SECTION | 0,8 – 1,5 [mm ²] | | | | | | | |
| MAX DETECTION LOOP LENGTH | * UP TO 2 [km] | | | | | | | |
| DETECTION CIRCUIT TYPES | DETECTION LOOP, STUB DETECTION CIRCUIT, SIDE STUB DETECTION CIRCUIT | | | | | | | |
| MAX. NUMBER OF DETECTION LOOPS | 1 | 2 | | 1 | | 2 | | |
| MAX. NUMBER OF STUB DETECTION CIRCUITS | 2 | 4 | | 2 | | 4 | | |
| MAX. NUMBER OF DETECTION ZONES | 10 000 | | | | | | | |
| MAX. NUMBER OF ELEMENTS PER DETECTION LOOP | * UP TO 250 | | | | | | | |
| MAX. NUMBER OF ELEMENTS PER STUB DETECTION CIRCUIT | UP TO 32 | | | | | | | |
| ALARMING VARIANTS | UP TO 32 | | | | | | | |
| UNIVERSAL OUTPUTS | 1 | | | | | | | |
| HOUSING | POWDER-COATED STEEL, RAL 3000 | | | | | | | |
| IP RATING | IP30 | | | | | | | |
| LAN CONNECTION | YES | | | | | | | |
| PRODUCT CODE | FSM001 | FSM002 | FSM003 | FSM004 | FSM005 | FSM006 | FSM006 | FSM006 |

* depends on cable type and number of elements, requires calculation during design process

DIMENSIONS [mm]



EXTERNAL SIGNAL PANEL

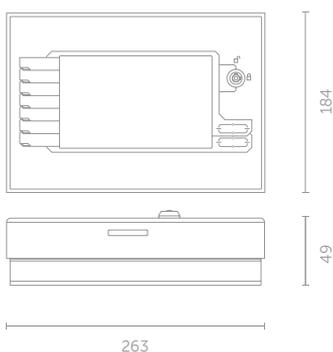


ESP lets to handling Fire Alarm System by operating from the place located far away from Control Unit. These devices have duplicated interface. It shows a.o. alarms, faults, disablements and tests. Control Unit can be installed there where it's best because of system topology. ESP panel should be placed nearby operating crew. Using this device operator can verify and reset alarm. ESP monitors their own circuits and gives a signal when they are damaged. It is possible to test its functionality. Few access levels limits changes made by unauthorized operators.

ESP PANEL CHARACTERISTICS

- › duplicated control unit interface
- › 7-inch touch screen
- › 4 access levels
- › multiple menu languages
- › access lock using key switch
- › compact housing

DIMENSIONS [mm]

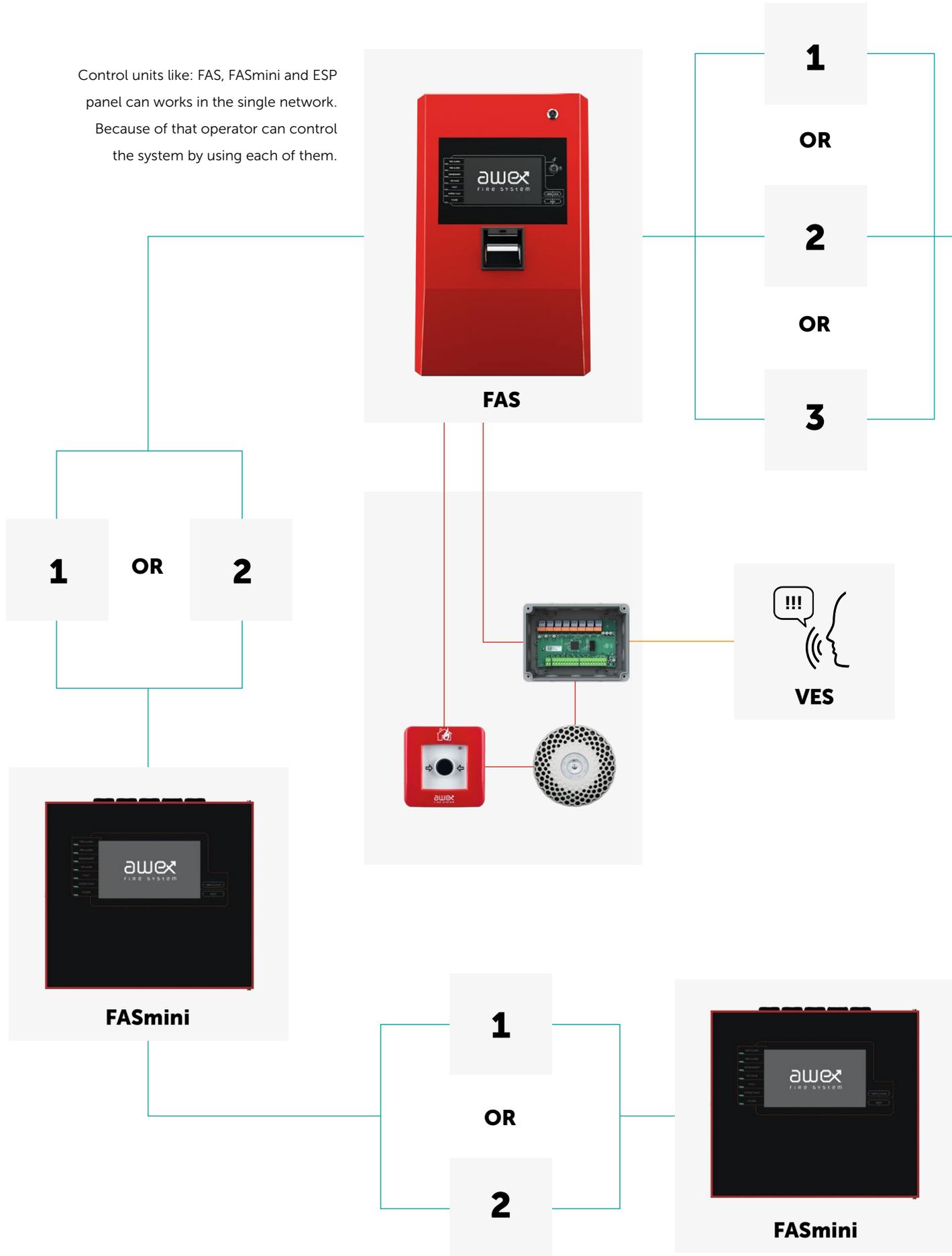


TECHNICAL DATA

| NAME | EXTERNAL SIGNAL PANEL ESP |
|-----------------------|----------------------------------|
| DEVICE TYPE | EXTERNAL FIRE ALARM SIGNAL PANEL |
| IP HOUSING | IP30 |
| WORKING TEMPERATURE | -5 UP TO 40 [°C] |
| DIMENSIONS | 263x184x49 [mm] |
| POWER SUPPLY VOLTAGE | 24 [VDC] |
| CURRENT CONSUMPTION | 150 [mA] |
| MAX NUMBER OF DEVICES | 10 IN NETWORK |
| PRODUCT CODE | ESP001 |

CONTROL UNIT NETWORK

Control units like: FAS, FASmini and ESP panel can work in the single network.
Because of that operator can control the system by using each of them.



LEGEND

1



FTP

2

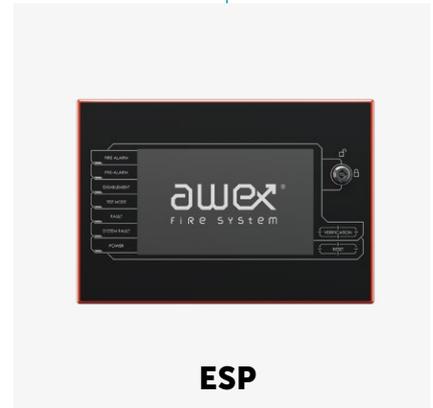
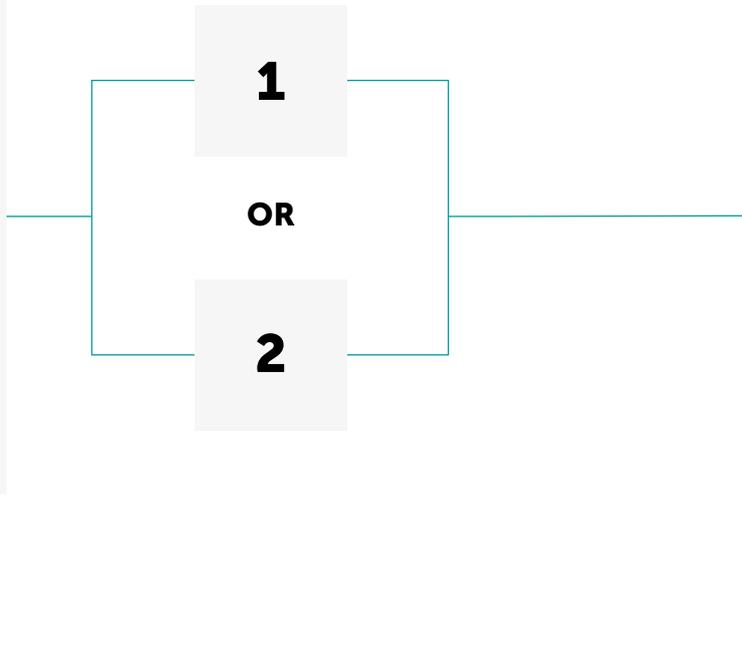


HTKSHekw

3



FIBER OPTIC



DIMENSIONS

| NAME | NETWORK | | |
|--|----------------------|----------|-------------|
| MAX NUMBER OF CONTROL UNITS IN NETWORK | 10 | | |
| CONNECTION TOPOLOGY | RING, INTERDEPENDENT | | |
| MAX DISTANCE BETWEEN CONTROL UNITS | WIRING TYPE | | |
| | FTP | HTKSHekw | FIBER OPTIC |
| | 1 [km] | 500 [m] | 5 [km] |





FIRE ALARM SYSTEM DETECTORS

Fire alarm system detectors are designed for discovering fire in their early stage. These devices have: smoke, temperature or combined smoke and heat sensors. All of these can be equipped with extra flashing power LED. Devices have built-in analyse system which ensure reliability in fire detection. Heat detector measure temperature by 4-termistors system. Smoke detector uses photodiodes system and light dissipation effect.

When detectors uses both sensors - depends on place and conditions, user by using control unit interface, can disable one of sensors. Each device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easy. Moreover detectors constantly measures dirtyness level and control units - if needed - shows information about necessity of their cleaning. Dirtyness level is also take to account of fire detection, makes detection more reliable.





SMOKE DETECTOR S

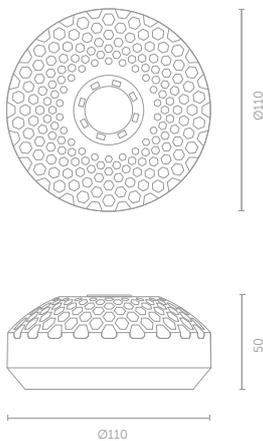
Smoke detector is used for alarming about fire in its early stage. It has optical-dissipation smoke sensor. Air analyse takes place in detection chamber equipped with photo diodes. That ensures fast and reliable fire detection. Detector works only in FAS systems. Device can be installed in addressable loop detection circuits or stub detection circuits.



SMOKE DETECTOR S CHARACTERISTICS

- › sensitivity level accordance with EN54
- › monitoring of dirtyness level
- › adjustable activation level
- › alarm indication by LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low-profile housing
- › working in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SMOKE DETECTOR S | |
|-------------------------------|--|--------|
| SMOKE DETECTION TYPE | OPTICAL, SCATTERING | |
| TEST FIRES DETECTING | ACCORDING TO EN 54-7 | |
| SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <500 [µA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP 20 | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN | |
| DIMENSIONS | ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD002 | FSD009 |

HEAT DETECTOR T



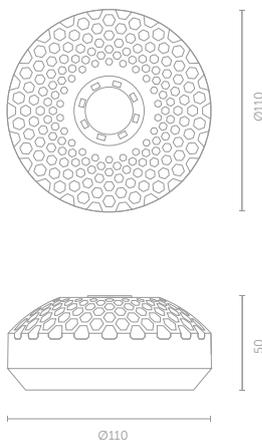
Heat detector is used for discovering early stage of fire. It's system uses thermistors to carry fast and reliable fire detection. Heat detection is carried by 4-termistors temperature sensors. Fire alarm appears when temperature reach seted level or in case of it's fast increase. Microchip recognize type of alarm and drives it trough loop to FAS control unit. Detector works only in FAS systems. Device can be installed in addressable loop detection circuits or stub detection circuits.

TEMPERATURE DETECTOR T CHARACTERISTICS

- › sensitivity level and temperature class accordance with EN54
- › adjustable activation level
- › alarm indication by LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low-profile housing
- › working in addressable systems

TECHNICAL DATA

DIMENSIONS [mm]



| NAME | TEMPERATURE DETECTOR T | |
|-------------------------------|--|--------|
| HEAT DETECTOR CLASS | A1R | |
| TEMPERATURE DETECTION TYPE | OVERLOAD, DIFFERENTIAL | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <500[µA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP20 | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN | |
| DIMENSION | ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD001 | FSD010 |



HEAT AND SMOKE DETECTOR TS

Heat and smoke detector is used for discovering early stage of fire. It has two sensors: heat and smoke. This combinations causes fast and reliable detection all types of fire. Detector works only in FAS systems. Device can be installed in addressable loop detection circuits or stub detection circuits.



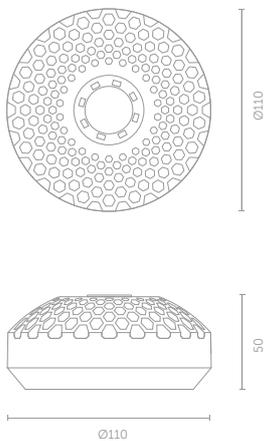
HEAT AND SMOKE DETECTOR TS CHARACTERISTICS

- › sensitivity level and temperature class accordance with EN54
- › monitoring of dirtyness level
- › adjustable activation level
- › smoke and heat analyse
- › possibility of disabling one of sensor
- › alarm identification by LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low-profile housing
- › working in addressable systems

TECHNICAL DATA

| NAME | HEAT AND SMOKE DETECTOR TS | |
|-------------------------------|--|--------|
| TEST FIRES DETECTION | TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9 | |
| SMOKE DETECTION | OPTICAL, SCATTERING | |
| HEAT DETECTOR CLASS | A1R | |
| HEAT DETECTION | OVERLOAD - DIFFERENTIAL | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <500 [µA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP20 | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN | |
| DIMENSION | Ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD003 | FSD012 |

DIMENSIONS [mm]



SMOKE DETECTOR SF WITH OPTICAL FLASHER



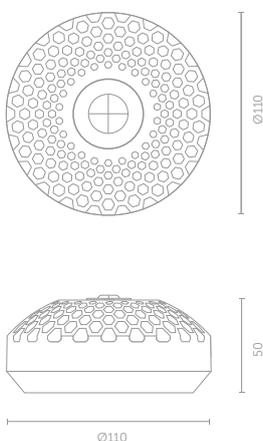
Smoke detector is used for alarming about fire in its early stage. It has optical-dissipation smoke sensor. Air analyse takes place in detection chamber equipped with photo diodes. That ensures fast and reliable fire detection. Detector has built-in optical FLASH LED. This lets recognize it's activation for a long distance. Detector works only in FAS systems. Device can be installed in addressable loop detection circuits or stub detection circuits.

SMOKE DETECTOR SF CHARACTERISTICS

- › sensitivity level accordance with EN54
- › monitoring of dirtyness level
- › adjustable activation level
- › alarm indication by FLASH LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low profile housing
- › working in addressable systems

TECHNICAL DATA

DIMENSIONS [mm]



| NAME | SMOKE DETECTOR SF WITH OPTICAL FLASHER | |
|-------------------------------|--|--------|
| TEST FIRES DETECTION | ACCORDANCE WITH EN 54-7 | |
| SMOKE DETECTION | OPTICAL, SCATTERING | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <2 [mA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP20 | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN, RED FLASH LED | |
| DIMENSION | Ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD005 | FSD014 |

HEAT DETECTOR TF WITH OPTICAL FLASHER

Heat detector is used for discovering early stage of fire. It's system uses thermistors to carry fast and reliable fire detection. Heat detection is carried by 4-thermistors temperature sensors. Fire alarm appears when temperature reach seted level or in case of it's fast increase. Detector has built-in optical FLASH LED. This lets recognize it's activation for a long distance. Microchip recognize type of alarm and drives it trough loop to FAS control unit. Detector works only in FAS systems. Device can be installed in addressable loop detection circuits or stub detection circuits.

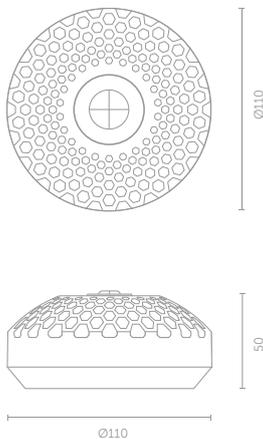


HEAT DETECTOR TF CHARACTERISTICS

- › sensitivity level and temperature class accordance with EN54
- › adjustable activation level
- › alarm indication by FLASH LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low profile housing
- › works in addressable systems

TECHNICAL DATA

DIMENSIONS [mm]



| NAME | HEAT DETECTOR TF WITH OPTICAL FLASHER | |
|-------------------------------|--|--------|
| HEAT DETECTOR CLASS | A1R | |
| HEAT DETECTION | OVERLOAD - DIFFERENTIAL | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <2 [mA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP20 | |
| ACCEPLTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN, RED FLASH LED | |
| DIMENSION | Ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD004 | FSD013 |

HEAT AND SMOKE DETECTOR TSF WITH OPTICAL FLASHER



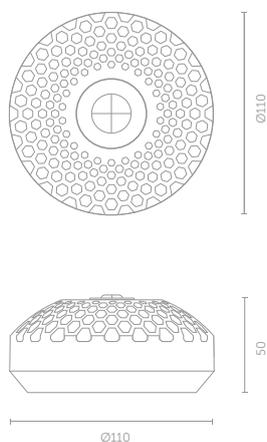
Heat and smoke detector is used for discovering early stage of fire. It has two sensors: heat and smoke. This combinations causes fast and reliable detection all types of fire. Detector works only in FAS systems. It has built-in optical FLASH LED. This lets recognize it's activation for a long distance. Device can be installed in addressable loop detection circuits or stub detection circuits.

SMOKE AND HEAT DETECTOR TSF CHARACTERISTICS

- › sensitivity level and temperature class accordance with EN54
- › monitoring of dirtyness level
- › adjustable activation level
- › alarm indication by FLASH LED
- › additional LEDs for signalling test status
- › external status indicator
- › built-in short-circuit isolator
- › low profile housing
- › works in addressable systems

TECHNICAL DATA

DIMENSIONS [mm]



| NAME | HEAT AND SMOKE DETECTOR TSF WITH OPTICAL FLASHER | |
|-------------------------------|--|--------|
| TEST FIRES DETECTION | TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9 | |
| SMOKE DETECTION | OPTICAL, SCATTERING | |
| HEAT DETECTOR CLASS | A1R | |
| HEAT DETECTION | OVERLOAD - DIFFERENTIAL | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <160 [µA] | |
| ALARM CURRENT CONSUMPTION | <2 [mA] | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| IP RATING | IP20 | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. OF 35 [°C] WITHOUT CONDENSATION | |
| OPTICAL SIGNALLING | LEDs, RED, GREEN, RED FLASH LED | |
| DIMENSION | Ø110 x 50 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSD006 | FSD015 |

SMOKE BEAM DETECTOR FIRERAY 50R/100R

Beam smoke detectors Fireray 50R/100R are designed for securing big spaces, like: production halls, warehouses, museums, shopping malls etc. There are two types differs with range: Fireray 50R: 5 - 50 [m] and Fireray 100R: 50 - 100 [m]. Beam smoke detector consist of transmitter and reciver mounted in the same housing, and mirror. Transmitter sends infrared beam which reflects of the mirror and goes back to the reciver. In case when beam is disturbed by smoke, detector activates alarm.



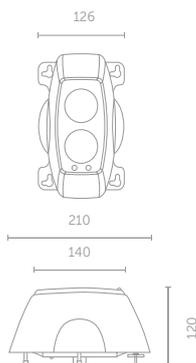
TECHNICAL DATA

| NAME | BEAM SMOKE DETECTOR 50R/1 00R | |
|-------------------------------|-------------------------------|--------------|
| POWER SUPPLY VOLTAGE | 10 - 30 [VDC] | |
| QUIESCENT CURRENT CONSUMPTION | <4 [mA] | |
| ALARM CURRENT CONSUMPTION | <15 [mA] | |
| ALARM RELAY (CONTACT LOAD) | DRY NO (2 [A], 30 [VDC]) | |
| FAULT RELAY (CONTACT LOAD) | DRY NC (2 [A], 30 [VDC]) | |
| IP RATING | IP50 | |
| DETECTOR HOUSING DIMENSION | 12,6 x 21 x 12 [cm] | |
| REFLECTOR DIMENSION | 10 x 10 x 0,95 [cm] | |
| WEIGHT | 670 [g] | |
| PRODUCT CODE | FIRERAY 50R | FIRERAY 100R |
| | FSD027 | FSD028 |

BEAM SMOKE DETECTOR 50R/100R CHARACTERISTICS

- > transmitter and receiver mounted in the same housing
- > automatic detector calibration
- > automatic dirtytness compensation
- > LEDs presents detector status
- > works with input/output module
- > 3 sensivity levels
- > works in adressable systems

DIMENSIONS [mm] ACCESSORIES



**MOUNTING HANDLE
FOR DETECTOR HO-
USING**

CODE: FSD029



**MOUNTING ADAPTER
FOR 1 MIRROR**

CODE: FSD031



**MOUNTING ADAPTER
FOR 4 MIRRORS**

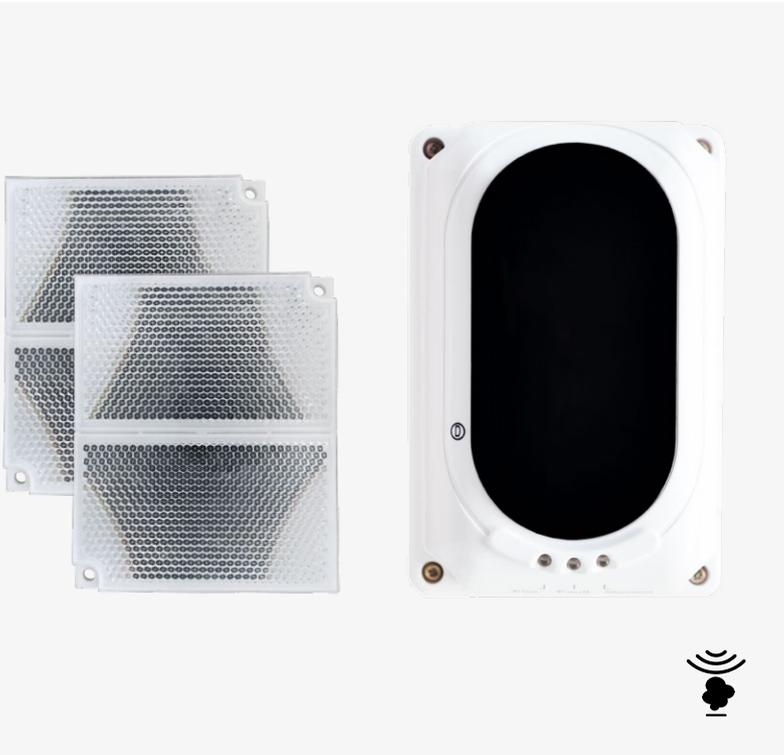
CODE: FSD032



**HANDLE FOR
ADAPTERS**

CODE: FSD030

SMOKE BEAM DETECTOR TX 7130



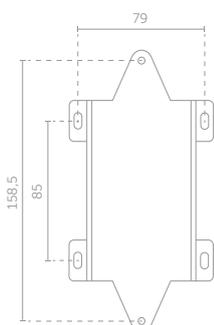
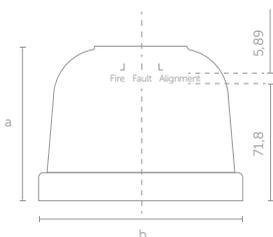
This device is designed for securing big spaces, like: production halls, warehouses, museums, shopping malls etc. Beam smoke detector monitors wide area in the range of 8 - 100 [m].

Device consists of transmitter and receiver mounted in the same housing, and mirror. Transmitter sends infrared beam which reflects off the mirror and goes back to the receiver. In case when beam is disturbed by smoke, detector activates alarm.

BEAM SMOKE DETECTOR TX 7130 CHARACTERISTICS

- › transmitter and receiver mounted in single housing
- › built-in laser and numeric display
- › 4 ranges of monitoring
- › 3 sensitivity levels
- › cooperation with MIO module

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SMOKE BEAM DETECTOR TX7130 | | | |
|--|--|---------|---------|----------|
| SMOKE DETECTION | OPTICAL | | | |
| TEST FIRE DETECTION | ACCORDANCE WITH EN54-12:2002 BS 5839 PART 1:2002 | | | |
| POWER SUPPLY VOLTAGE | 20 UP TO 28 [VDC] | | | |
| CURRENT CONSUMPTION QUIESCENT / ALARM / COMMISSIONING* | 23 / 33 / 56 [mA] | | | |
| OPERATING RANGE [m] | 8-20 | 20 - 40 | 40 - 70 | 70 - 100 |
| NUMBER OF REQUIRED REFLECTORS | 1 | 1 | 4 | 4 |
| RELAY LOAD (ALARM, FAULT) | NO; 2 [A], 30 [VDC] | | | |
| IP RATING | IP30 | | | |
| WORKING TEMPERATURE | -10 UP TO 55 [°C] | | | |
| ACCEPTABLE RELATIVE HUMIDITY | UP TO 95%, WITHOUT CONDENSATION | | | |
| OPTICAL SIGNALLING | LEDs: RED, GREEN, YELLOW | | | |
| DIMENSION | 190,87 x 126,87 x 91,96 [mm] | | | |
| WEIGHT | 440 [g] | | | |
| ACCESSORIES IN SET | MOUNTING HANDLE, 4 REFLECTORS | | | |
| HOUSING MATERIAL / COLOUR | ABS / WHITE | | | |
| PRODUCT CODE | FSD037 | | | |

DUCT SMOKE DETECTOR DS

Duct smoke detector DS is used for discovering early stage of fire in the ventilation ducts. It has optical sensor which ensure fast and reliable fire detection.

Device have double sided built-in short-circuit isoator. These ensure constant loop works, even in case of damage. It also lets you easy find place of that damage.

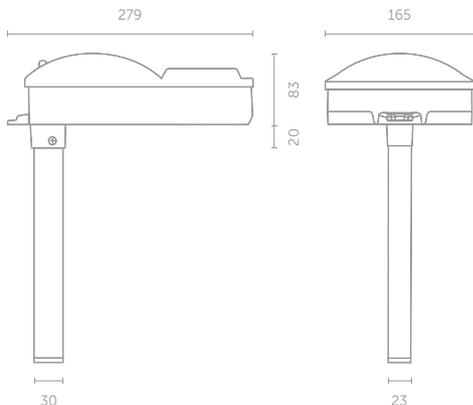
Moreover detectors constantly measures dirtytness level and control units - if needed - shows information about neccesity of their cleening. Dirtytness level is also take to acount of fire detection, makes detection more reliable.



DUCT SMOKE DETECTOR DS CHARACTERISTICS

- › sensitivity level accordance with EN54
- › monitoring of dirtytness level
- › adjustable activation level
- › alarm indication by LED
- › additional LEDs for signalling test status
- › built-in short-circuit isolator

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | DUCT SMOKE DETECTOR DS |
|-------------------------------|------------------------|
| SMOKE DETECTION | OPTICALL, SCATTERING |
| ACCORDANCE TO STANDARD | EN 54-27 |
| POWER SUPPLY VOLTAGE | 24 [VDC] +- 25 % |
| QUIESCENT CURRENT CONSUMPTION | <160 [uA] |
| ALARM CURRENT CONSUMPTION | <500 [uA] |
| AIR VELOCITY IN DUCT | 1 UP TO 20 [m/s] |
| VENTURI PIPES LENGTH | 0,6 DO 2,8 [m] |
| WORKING TEMPERATURE | -20 [°C] UP TO 50 [°C] |
| IP HOUSING | IP54 |
| DIMENSIONS | 279x165x83 [mm] |
| PRODUCT CODE | FSD100 |

MANUAL CALL POINT ROP 21



Manual call point ROP 21 exist in two versions:

A type - direct operation
(activation by pressing)

B type - indirect action activation
(activation by rising cover and pressing).

This device is intended for person who notice fire. By manual pressing, user gives information to the FAS control unit to activate fire alarm. This device can operate on detection loops or stub detection circuits controlled by the FAS alarm control unit only. By ratchet mechanism, after activation, ROP 21 can be rearmed without using any spare parts. The element has a double-sided short circuit isolator.

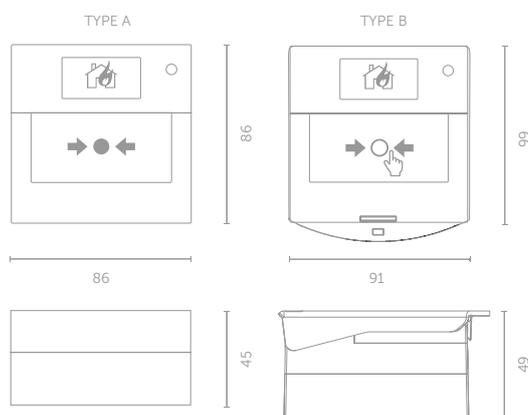
MANUAL CALL POINT ROP 21 CHARACTERISTICS

- › double-sided short-circuit isolator built-in
- › rearmed without spare parts
- › signaling LED
- › two type of activation - type A and type B
- › operation in addressable systems
- › indoor application

TECHNICAL DATA

| NAME | MANUAL CALL POINT ROP 21 | |
|-------------------------------|--------------------------|--------------------|
| | TYPE A | TYPE B |
| TYPE | TYPE A | TYPE B |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | <130 [µA] | |
| ALARM CURRENT CONSUMPTION | <500 [µA] | |
| INSTALLATION | INDOOR | |
| IP RATING | IP21 | |
| WORKING TEMPERATURE | -10 UP TO 55 [°C] | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% WITH 40 [°C] | |
| HOUSING DIMENSION | 86 x 86 x 45 [mm] | 92 x 100 x 51 [mm] |
| ACTIVATION TYPE | A | B |
| WEIGHT | 150 [g] | 180 [g] |
| HOUSING COLOUR | RED | |
| PRODUCT CODE | FSR005 | FSR012 |

DIMENSIONS [mm]



MANUAL CALL POINT ROP 65

Manual call point ROP 65 is intended for person who notice fire. By manual pressing, user gives information to the FAS control unit to activate fire alarm.

This device can operate on detection loops or stub detection circuits controlled by the FAS alarm control unit only.

Device is activated by braking the glass.

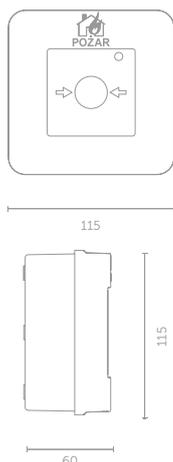
To rearm element, glass need to be replaced. The element has a double-sided short circuit isolator.



MANUAL CALL POINT ROP 65 CHARACTERISTICS

- › built-in short-circuit isolator
- › activation type
- › rearmed by glass replacement
- › operation in addressable systems
- › indoor / outdoor application

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | MANUAL CALL POINT MCP21 |
|-------------------------------|-------------------------|
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% |
| QUIESCENT CURRENT CONSUMPTION | <130 [μA] |
| ALARM CURRENT CONSUMPTION | <500 [μA] |
| INSTALLATION | INDOOR/OUTDOOR |
| IP RATING | IP 65 |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] |
| ACCEPTABLE RELATIVE HUMIDITY | 95% WITH 40 [°C] |
| DIMENSION | 115x115x60 [mm] |
| ACTIVATION TYPE | A |
| WEIGHT | 270 [g] |
| HOUSING COLOUR | RED |
| PRODUCT CODE | FSR003 |

INPUT/OUTPUT MODULE

MIO 22, MIO 44, MIO 88



MIO 22



MIO 44



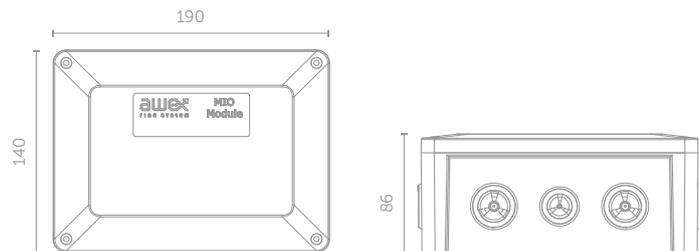
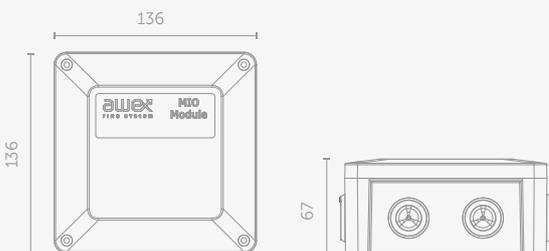
MIO 88

The MIO module is the input/output device intended for the cooperation between fire-fighting devices and the AWEX fire alarm system. It can operate on the detection loops or stub detection circuits. The device can cooperate with emergency exit doors, smoke venting systems, automatic extinguishing systems, and other devices intended for the fire protection. The MIO modules have built-in with 2, 4, or 8 relay outputs, and 2, 4, or 8 monitored potential free inputs, depending on their version. Each device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easy.

TECHNICAL DATA

| NAME | INPUT / OUTPUT MODULE | | | | | |
|-------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | MIO 22 | | MIO 44 | | MIO 88 | |
| TYPE | MIO 22 | | MIO 44 | | MIO 88 | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | | | | | |
| QUIESCENT CURRENT CONSUMPTION | 200 [µA] | | | | | |
| ALARM CURRENT CONSUMPTION | 500 [µA] | | | | | |
| SHORT CIRCUIT ISOLATOR | BUILT-IN, DOUBLE-SIDED | | | | | |
| NUMBER OF OUTPUT | 2 | | 4 | | 8 | |
| OUTPUT TYPE | RELAY OUTPUT (NO/NC/COM), MAX. CONTACT LOAD CAPACITY DC: 2 [A] / 30[VDC] / 60 [W] | | | | | |
| NUMBER OF INPUT | 2 | | 4 | | 8 | |
| INPUT FUNCTION | ACTIVE, INACTIVE, SHORT-CIRCUIT, BREAK | | | | | |
| INPUT ACTIVATION | NO/NC CONTACT | | | | | |
| FAIL-SAFE FUNCTION | YES | | | | | |
| HOUSING TYPE | O | S | O | S | O | S |
| IP RATING | IP66 | IP66 | IP66 | IP66 | IP66 | IP66 |
| DIMENSIONS | 114x114x57 [mm] | 136x136x65 [mm] | 150x116x67 [mm] | 140x190x86 [mm] | 190x150x77 [mm] | 140x190x86 [mm] |
| WEIGHT | 200 [g] | 330 [g] | 280 [g] | 530 [g] | 480 [g] | 580 [g] |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] | | | | | |
| PRODUCT CODE | FSM001 | FSM004 | FSM002 | FSM005 | FSM003 | FSM006 |

DIMENSIONS [mm]





INPUT/OUTPUT MODULE

MIO 2n2n, MIO 4n4n

The MIO module is the input/output device intended for the cooperation between fire-fighting devices and the AWEX fire alarm system. It can operate on the detection loops or stub detection circuits. The device can cooperate with emergency exit doors, smoke venting systems, automatic extinguishing systems, and other devices intended for the fire protection. The MIO modules have built-in with 2 or 4 relay outputs, and 2 or, 4 monitored potential free inputs, depending on their version. Each device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easily.

TECHNICAL DATA

| NAME | INPUT / OUTPUT MODULE | | | |
|-------------------------------|--|-----------------|-----------------|-----------------|
| | MIO 2n2n | | MIO 4n4n | |
| TYPE | MIO 2n2n | | MIO 4n4n | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | | | |
| QUIESCENT CURRENT CONSUMPTION | 200 [µA] | | | |
| ALARM CURRENT CONSUMPTION | 500 [µA] | | | |
| SHORT CIRCUIT ISOLATOR | BUILT-IN, DOUBLE-SIDED | | | |
| NUMBER OF OUTPUT | 2 | | 4 | |
| TYPE OF OUTPUT | RELAY OUTPUT (NO/NC/COM), MAX. CONTACT LOAD CAPACITY DC: 2[A] / 30[VDC] / 60[W] | | | |
| OUTPUT MONITORING RANGE | LO: 9 - 30 [VDC] | | | |
| NUMBER OF INPUTS | 2 | | 4 | |
| INPUT FUNCTION | ACTIVE, INACTIVE | | | |
| INPUT ACTIVATION | VOLTAGE IN RANGE: LO: 9 - 220 [VDC] HI 77 - 220 [VDC] HI 60 - 250 [VAC] | | | |
| FAIL-SAFE FUNCTION | YES | | | |
| HOUSING TYPE | O | S | O | S |
| IP RATING | IP66 | IP66 | IP66 | IP66 |
| DIMENSIONS | 190x150x77 [mm] | 140x190x86 [mm] | 190x150x77 [mm] | 140x190x86 [mm] |
| WEIGHT | 400 [g] | 540 [g] | 420 [g] | 560 [g] |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] | | | |
| PRODUCT CODE | FSM009 | FSM010 | FSM011 | FSM012 |

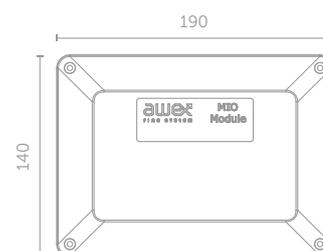


MIO 2n2n



MIO 4n4n

DIMENSIONS [mm]



INPUT/OUTPUT MODULE

MIO 22n, MIO 44n



MIO 22n

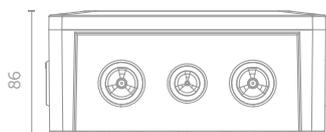


MIO 44n

The MIO module is the input/output device intended for the cooperation between fire-fighting devices and the AWEX fire alarm system. It can operate on the detection loops or stub detection circuits. The device can cooperate with emergency exit doors, smoke venting systems, automatic extinguishing systems, and other devices intended for the fire protection. The MIO modules have built-in with 2 or 4 relay outputs, and 2 or 4 monitored potential free inputs, depending on their version. Each device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easily.

TECHNICAL DATA

| NAME | INPUT / OUTPUT MODULE | | | |
|-------------------------------|--|-----------------|-----------------|-----------------|
| | MIO 22n | | MIO 44n | |
| TYPE | MIO 22n | | MIO 44n | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | | | |
| QUIESCENT CURRENT CONSUMPTION | 200 [µA] | | | |
| ALARM CURRENT CONSUMPTION | 500 [µA] | | | |
| SHORT CIRCUIT ISOLATOR | BUILT-IN, DOUBLE-SIDED | | | |
| NUMBER OF OUTPUT | 2 | | 4 | |
| OUTPUT TYPE | RELAY OUTPUT (NO/NC/COM), AC CONTACT LOAD: 8[A], 250[V] DC CONTACT LOAD: 8[A], 220[V] | | | |
| RANGE OF OUTPUT MONITORING | LO: 9 - 220 [VDC] HI 77 - 220 [VDC] HI 60 - 250 [VAC] | | | |
| NUMBER OF INPUT | 2 | | 4 | |
| INPUT FUNCTION | ACTIVE, INACTIVE | | | |
| INPUT ACTIVATION | NO/NC DRY CONTACT | | | |
| FAIL-SAFE FUNCTION | YES | | | |
| HOUSING TYPE | O | S | O | S |
| IP RATING | IP66 | IP66 | IP66 | IP66 |
| DIMENSIONS | 190x150x77 [mm] | 140x190x86 [mm] | 190x150x77 [mm] | 140x190x86 [mm] |
| WEIGHT | 450 [g] | 570 [g] | 490 [g] | 610 [g] |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] | | | |
| PRODUCT CODE | FSM013 | FSM014 | FSM015 | FSM016 |





INPUT/OUTPUT MODULE MIO 22LS

The MIO module is the input/output device intended for the co-operation with alarm devices.

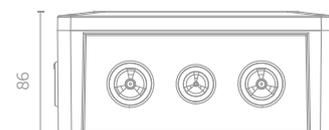
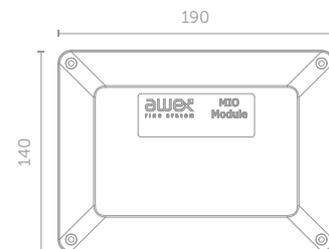
It can operate on the detection loops or stub detection circuits. The MIO22LS can work with acoustic, optical, acoustic-optical, voice and other types of alarm devices. The MIO modules have built-in with 2 voltage outputs with monitoring, and 2 monitored potential free inputs. Device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easily.

TECHNICAL DATA

| NAME | INPUT/OUTPUT MODULE | |
|-------------------------------|---|-----------------|
| TYPE | MIO 22LS | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | 200 [µA] | |
| ALARM CURRENT CONSUMPTION | 200 [µA] | |
| SHORT CIRCUIT ISOLATOR | BUILT-IN, DOUBLE-SIDED | |
| NUMBER OF OUTPUT | 2 | |
| RELAY CONTROLS OUTPUT | POWERED OUTPUT DC RELAY LOAD CAPACITY: 6[A], 30[V], 180[W] | |
| OUTPUT MONITORING TYPE | RESISTANCE MEASUREMENT | |
| NUMBER OF INPUT | 2 | |
| INPUT FUNCTION | ACTIVE, INACTIVE | |
| INPUT ACTIVATION | DRY CONTACT NO/NC | |
| FAIL-SAFE FUNCTION | YES | |
| HOUSING TYPE | O | S |
| IP RATING | IP66 | IP66 |
| DIMENSIONS | 150x116x67 [mm] | 140x190x86 [mm] |
| WEIGHT | 250 [g] | 560 [g] |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] | |
| PRODUCT CODE | FSM007 | FSM008 |



DIMENSIONS [mm]



INPUT/OUTPUT MODULE

MIO 22CD

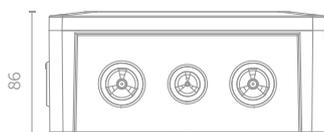
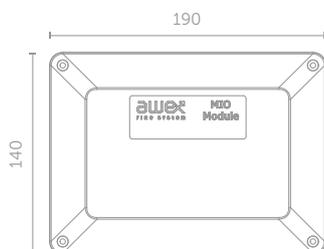
The MIO module is the input/output device intended for the co-operation between conventional fire detectors and FAS control unit. It can operate on the detection loops or stub detection circuits. The MIO22CD can work with conventional optical smoke detectors, conventional multisensor detector and conventional manual call points. The MIO module have built-in 2 output for conventional devices and 2 potential-free inputs for monitoring. Device is equipped with double-sided short-circuit isolator. These ensure constant loop working, even in case of damage. It also lets you find place of that damage easily.



TECHNICAL DATA

| NAME | INPUT/OUTPUT MODULE | |
|-------------------------------|------------------------|-----------------|
| TYPE | MIO 22CD | |
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 25% | |
| QUIESCENT CURRENT CONSUMPTION | 200 [µA] | |
| ALARM CURRENT CONSUMPTION | 200 [µA] | |
| SHORT CIRCUIT ISOLATOR | BUILT-IN, DOUBLE-SIDED | |
| NUMBER OF OUTPUT | 2 | |
| RELAY CONTROLS OUTPUT | NONE | |
| OUTPUT MONITORING TYPE | RESISTANCE MEASUREMENT | |
| NUMBER OF INPUT | 2 | |
| INPUT FUNCTION | ACTIVE, INACTIVE | |
| INPUT ACTIVATION | DRY CONTACT NO/NC | |
| FAIL-SAFE FUNCTION | NOT APPLICABLE | |
| HOUSING TYPE | O | S |
| IP RATING | IP66 | |
| DIMENSIONS | 150x116x67 [mm] | 140x190x86 [mm] |
| WEIGHT | 230 [g] | 530 [g] |
| WORKING TEMPERATURE | -25 UP TO 70 [°C] | |
| PRODUCT CODE | FS015 | FSM016 |

DIMENSIONS [mm]



ADDRESSABLE ACOUSTIC ALARM SIREN LA

Siren is designed for alarming people when fire hazard is detected to let them evacuate.

LA is a loop acoustic siren which can work without any external power supply. It can work on addressable loop circuits/stub circuits of AWEX FAS system only.

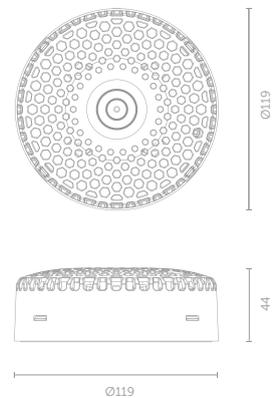
Maximum number of devices per loop depends on: wire type, other loop elements.



TECHNICAL DATA

| NAME | LA | |
|-------------------------------|---|--------|
| TYPE | ACOUSTIC, ADDRESSABLE | |
| POWER SUPPLY | 24 [VDC] ± 25% | |
| MAX SOUND LEVEL | 104 [dB] | |
| NUMBER OF SOUND VARIANTS | 32 | |
| SYNCHRONIZATION | YES | |
| QUIESCENT CURRENT CONSUMPTION | 0,2 [mA] | |
| ALARM CURRENT CONSUMPTION | 14,1 [mA] | |
| IP RATING | IP21C | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION | |
| DIMENSIONS | Ø119x44 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOR | WHITE | RED |
| PRODUCT CODE | FSS003 | FSS010 |

DIMENSIONS [mm]

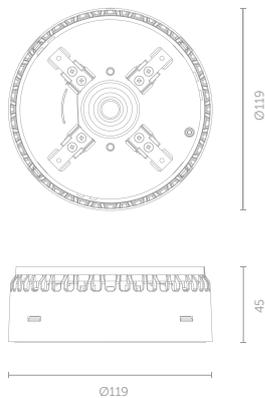


ADDRESSABLE ACOUSTIC ALARM SIREN LA-D



Siren is designed for alarming people when fire hazard is detected to let them evacuate. LA-D is a loop acoustic siren which can work without any external power supply. It can work on addressable loop circuits / stub circuits of AWEX FAS system only. Maximum number of devices per loop depends on: wire type, other loop elements. LA-D siren have built-in detector base which lets use this device as sounder and detector at once.

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | LA-D |
|-------------------------------|---|
| TYPE | ACOUSTIC, ADDRESSABLE WITH DETECTOR BASE |
| POWER SUPPLY | 24 [VDC] ± 25% |
| MAX SOUND LEVEL | 95 [dB] |
| NUMBER OF SOUND VARIANTS | 32 |
| SYNCHRONIZATION | YES |
| QUIESCENT CURRENT CONSUMPTION | 0,2 [mA] |
| ALARM CURRENT CONSUMPTION | 14,1 [mA] |
| IP RATING | IP21C |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION |
| DIMENSIONS | Ø119x45 [mm] |
| WEIGHT | 200 [g] |
| HOUSING COLOR | WHITE RED |
| PRODUCT CODE | FSS005 FSS012 |

ADDRESSABLE ACOUSTIC ALARM SIREN WITH EXTERNAL POWER SUPPLY LAP

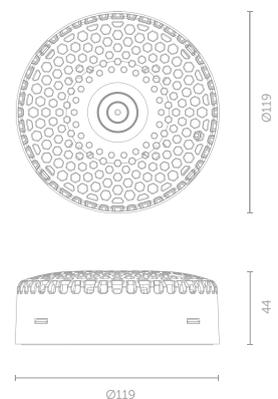
Siren is designed for alarming people when fire hazard is detected to let them evacuate. LAP is a loop acoustic siren which is powered by external power supply. It can work on addressable loop circuits / stub circuits of AWEX FAS system only. Connection of power wires are mandatory.



TECHNICAL DATA

| NAME | LAP | |
|-------------------------------------|---|--------|
| TYPE | ACOUSTIC, ADDRESSABLE, EXTERNAL POWERED | |
| POWER SUPPLY | 24 [VDC] ± 25% | |
| MAX SOUND LEVEL | 104 [dB] | |
| NUMBER OF SOUND VARIANTS | 32 | |
| SYNCHRONIZATION | YES | |
| QUIESCENT CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| ALARM CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| QUIESCENT CURRENT CONSUMPTION (PSU) | 10 [mA] | |
| ALARM CURRENT CONSUMPTION (PSU) | 45 [mA] | |
| IP RATING | IP21C | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION | |
| DIMENSIONS | Ø119x44 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOR | WHITE | RED |
| PRODUCT CODE | FSS004 | FSS011 |

DIMENSIONS [mm]



ADDRESSABLE ACOUSTIC ALARM SIREN WITH EXTERNAL POWER SUPPLY LAP-D

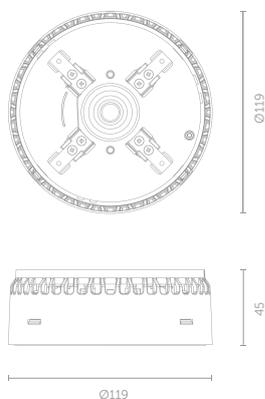


Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LAP-D is a loop acoustic sounder which is powered by external power supply. It can work on addressable loop circuits / stub circuits of AWEX FAS system only. Connection of power wires are mandatory. LAP-D siren have built-in detector base which lets use this device as sounder and detector at once.

TECHNICAL DATA

| NAME | LAP-D | |
|-------------------------------------|--|--------|
| TYPE | ACOUSTIC, ADDRESSABLE, EXTERNAL POWERED WITH DETECTOR BASE | |
| POWER SUPPLY | 24 [VDC] ± 25% | |
| MAX SOUND LEVEL | 95 [dB] | |
| NUMBER OF SOUND VARIANTS | 32 | |
| SYNCHRONIZATION | YES | |
| QUIESCENT CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| ALARM CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| QUIESCENT CURRENT CONSUMPTION (PSU) | 10 [mA] | |
| ALARM CURRENT CONSUMPTION (PSU) | 45 [mA] | |
| IP RATING | IP21C | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION | |
| DIMENSIONS | Ø119x45 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOR | WHITE | RED |
| PRODUCT CODE | FSS006 | FSS013 |

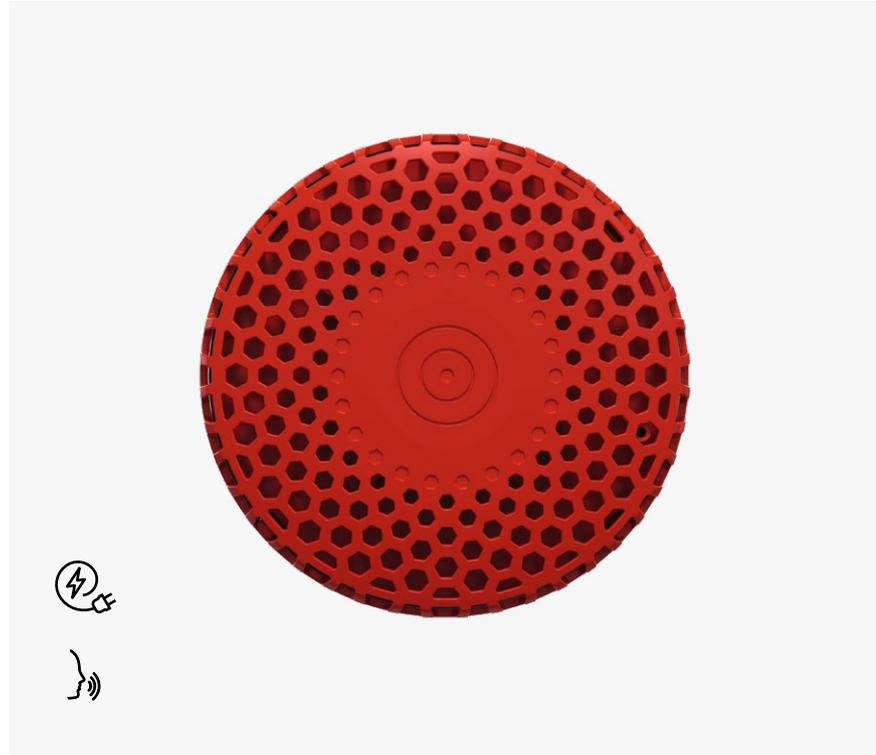
DIMENSIONS [mm]



ADDRESSABLE VOICE ALARM SIREN WITH EXTERNAL POWER SUPPLY LVP

Siren is designed for alarming people when fire hazard is detected to let them evacuate. LVP is a loop voice siren which is powered by external power supply.

After activation acoustic sound starts and then voice announcement. Depends on configuration these devices can activate 3 different communicates. It can work on addressable loop circuits/stub circuits of AWEX FAS system only. Connection of power wires are mandatory.



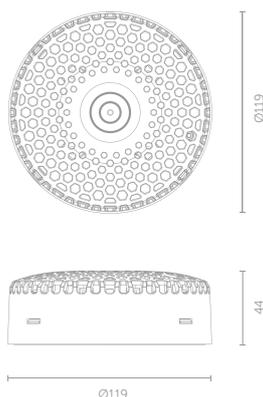
ANNOUNCEMENTS

| VARIANT | COMMUNICATE | MAX. SOUND LEVEL [DB] |
|---------|--|-----------------------|
| 1 | „ATTENTION! ATTENTION! FIRE HAZARD DETECTED IN THE BUILDING. PLEASE PREPARE TO EVACUATION!“ | 79 |
| 2 | „ATTENTION! ATTENTION! THERE IS FIRE IN THE BUILDING. PLEASE LEAVE BUILDING IMMEDIATELY USING NEAREST EMERGENCY EXIT!“ | 79 |
| 3 | „ATTENTION! ATTENTION! EVACUATION IS OVER, YOU CAN SAFELY GO BACK TO THE BUILDING!“ | 79 |

TECHNICAL DATA

| NAME | LVP |
|-------------------------------------|---|
| TYPE | VOICE, ADDRESSABLE, EXTERNAL POWERED |
| POWER SUPPLY | 24 [VDC] ± 25% |
| MAX SOUND LEVEL | 79 [dB] |
| NUMBER OF SOUND VARIANTS | 3 COMMUNICATES |
| SYNCHRONIZATION | YES |
| QUIESCENT CURRENT CONSUMPTION (FAS) | 0,2 [mA] |
| ALARM CURRENT CONSUMPTION (FAS) | 0,2 [mA] |
| QUIESCENT CURRENT CONSUMPTION (PSU) | 15 [mA] |
| ALARM CURRENT CONSUMPTION (PSU) | 60 [mA] |
| IP RATING | IP21C |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION |
| DIMENSIONS | Ø119x44 [mm] |
| WEIGHT | 200 [g] |
| HOUSING COLOR | WHITE RED |
| PRODUCT CODE | FSS007 FSS014 |

DIMENSIONS [mm]



ADDRESSABLE VOICE ALARM SIREN WITH EXTERNAL POWER SUPPLY LVP-D



Siren is designed for alarming people when fire hazard is detected to let them evacuate. LVP-D is a loop voice siren which is powered by external power supply. After activation acoustic sound starts and then voice announcement. Depends on configuration these devices can activate 3 different communicates. It can work on addressable loop circuits/stub circuits of AWEX FAS system only. Connection of power wires are mandatory. LVP-D siren have built-in detector base which lets use this device as sounder and detector at once.

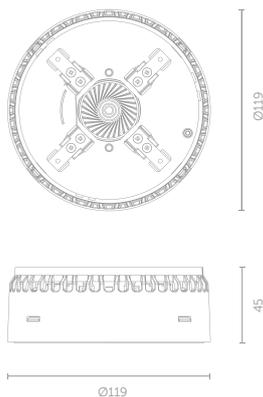
ANNOUNCEMENTS

| VARIANT | COMMUNICATE | MAX. SOUND LEVEL [DB] |
|---------|--|-----------------------|
| 1 | „ATTENTION! ATTENTION! FIRE HAZARD DETECTED IN THE BUILDING. PLEASE PREPARE TO EVACUATION!“ | 79 |
| 2 | „ATTENTION! ATTENTION! THERE IS FIRE IN THE BUILDING. PLEASE LEAVE BUILDING IMMEDIATELY USING NEAREST EMERGENCY EXIT!“ | 79 |
| 3 | „ATTENTION! ATTENTION! EVACUATION IS OVER, YOU CAN SAFELY GO BACK TO THE BUILDING!“ | 79 |

TECHNICAL DATA

| NAME | LVP-D | |
|-------------------------------------|---|--------|
| TYPE | VOICE, ADDRESSABLE, EXTERNAL POWERED WITH DETECTOR BASE | |
| POWER SUPPLY | 24 [VDC] ± 25% | |
| MAX SOUND LEVEL | 78 [dB] | |
| NUMBER OF SOUND VARIANTS | 3 COMMUNICATES | |
| SYNCHRONIZATION | YES | |
| QUIESCENT CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| ALARM CURRENT CONSUMPTION (FAS) | 0,2 [mA] | |
| QUIESCENT CURRENT CONSUMPTION (PSU) | 15 [mA] | |
| ALARM CURRENT CONSUMPTION (PSU) | 60 [mA] | |
| IP RATING | IP21C | |
| WORKING TEMPERATURE | -25 UP TO 55 [°C] | |
| ACCEPTABLE RELATIVE HUMIDITY | 95% AT THE TEMP. 35 [°C] WITHOUT CONDENSATION | |
| DIMENSIONS | Ø119x45 [mm] | |
| WEIGHT | 200 [g] | |
| HOUSING COLOR | WHITE | RED |
| PRODUCT CODE | FSS008 | FSS015 |

DIMENSIONS [mm]





ACOUSTIC ALARM SIREN SA-K5N

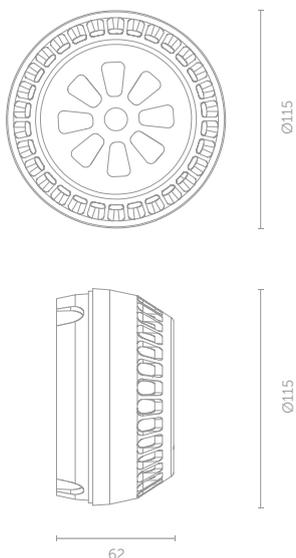


The acoustic fire signalling device SA-K5N is intended for signalling of fire inside buildings. The device allows you to adjust the volume of sound in range from 70 dB to > 100 dB from a distance of 1 meter and the type of acoustic signal. The signalling device is equipped with housing made of non-combustible material, enclosing electronic components. Additionally SA-K5N enables creation of synchronously operating signalling devices network.

LOW CURRENT SOUNDER SA-K5N CHARACTERISTICS

- › low current consumption <20mA
- › adjusting volume of sound
- › possible to increase the volume linearly
- › working in synchronously operating signalling devices network

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SOUNDER SA-K5N |
|-------------------------------|----------------|
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 30% |
| QUIESCENT CURRENT CONSUMPTION | 0 [mA] |
| ALARM CURRENT CONSUMPTION | <20 [mA] |
| SOUND LEVEL IN 1 [m] DISTANCE | >100 [dB] |
| DIMENSIONS | Ø115x62 [mm] |
| WEIGHT | 185 [g] |
| PRODUCT CODE | FSS002 |

ACOUSTIC-OPTICAL ALARM SIREN SA-K7N

The acoustic-optical fire signalling device SA-K7N is intended for signalling of fire inside buildings. SA-K7N is made in three variants: 9m, 6m, 3m. Depending on version of signalling device, optical coverage area changes. The signalling device is equipped with housing made of non-combustible material, enclosing electronic components.

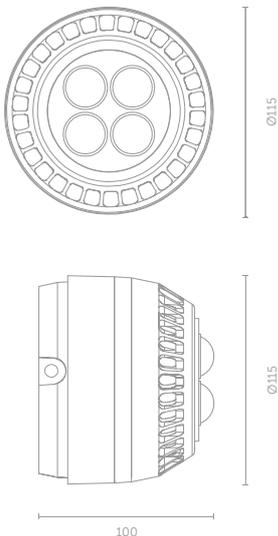
The acoustic part of signalling device enables volume adjustment and use of linear volume increase option. Additionally SA-K7N enables creation of synchronously operating signalling devices network.



ACOUSTIC-OPTICAL DEVICE SA-K7N CHARACTERISTICS

- › adjusting volume of sound
- › up to 16 patterns of acoustic signals
- › 3 variants of devices: 3m, 6m, 9m
- › working in synchronously operating signalling devices network

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SOUNDER SA-K7N | | |
|-------------------------------|-----------------|-----------------|------------------|
| POWER SUPPLY INPUT | 24 [VDC] ± 30% | | |
| QUIESCENT CURRENT CONSUMPTION | 0 [mA] | | |
| ALARM CURRENT CONSUMPTION | 3 [m] - 75 [mA] | 6 [m] - 75 [mA] | 9 [m] - 110 [mA] |
| SOUND LEVEL IN 1 [m] DISTANCE | >100 [dB] | | |
| DIMENSIONS | Ø115x100 [mm] | | |
| WEIGHT | 3 [m] - 300 [g] | 6 [m] - 300 [g] | 9 [m] - 350 [g] |
| PRODUCT CODE | 3 [m] FSS003 | 6 [m] FSS004 | 9 [m] FSS005 |

VOICE SOUNDER SG-Pgw3

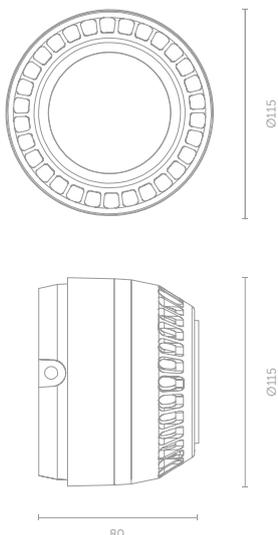


Voice alarm device is designed for alarming people. It's using alternately acoustic sound (up to 18 types) and voice announcements (accordance with EN 54-3). Device can be mounted inside buildings. Auto-update function makes auto copy of announcements for all devices in the line.

VOICE ALARM DEVICE SG-Pgw3 CHARACTERISTICS

- › sound level set by built-in potentiometer
- › up to 18 sound types
- › copying announcements from PC to device storage
- › devices synchronization

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SOUNDER SG-PGW3 |
|-------------------------------|-----------------|
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 30% |
| QUIESCENT CURRENT CONSUMPTION | 0 [mA] |
| ALARM CURRENT CONSUMPTION | 300 [mA] |
| SOUND LEVEL IN 1 [m] DISTANCE | >90 [dB] |
| DIMENSIONS | Ø115x80 [mm] |
| WEIGHT | 350 [g] |
| PRODUCT CODE | FSS009 |

ACOUSTIC-OPTICAL EXTERNAL ALARM SIREN SAOZ-PK2

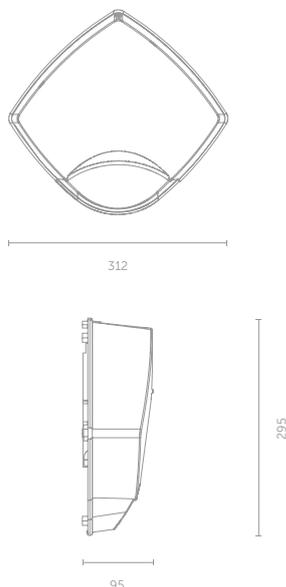
The SAOZ-Pk optical-acoustic alarm device is designed to emit fire alarm warning, alternately with an acoustic signal and an optical (visual) signal, both in outdoor and indoor (internal and external) fire alarm systems. The alarm device consists of a cover made of non-combustible material, an electronic circuit and a lamp with xenon flash tubes. The alarm device generates an acoustic signal simultaneously with an optical signal. The device has a four-position microswitch which permits to select the device operating mode (as „master“ or „slave“), the sound pattern (1 of 4) and to reduce the sound volume by about 10dB. In addition, the signaling device also allows to build networks of alarm devices operating synchronously.



ACOUSTIC-OPTICAL EXTERNAL ALARM SIREN SAOZ-PK2 CHARACTERISTICS

- › internal and external usage
- › adjustable sound level
- › 4 sound types
- › devices synchronization

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | SOUNDER SAOZ-PK2 |
|-------------------------------|------------------|
| POWER SUPPLY VOLTAGE | 24 [VDC] ± 30% |
| QUIESCENT CURRENT CONSUMPTION | 0 [mA] |
| ALARM CURRENT CONSUMPTION | <100 [mA] |
| SOUND LEVEL IN 1 [m] DISTANCE | >110 [dB] |
| DIMENSIONS | 312x295x95 [mm] |
| WEIGHT | 960 [g] |
| PRODUCT CODE | FSS016 |

STATUS INDICATOR WZ 4

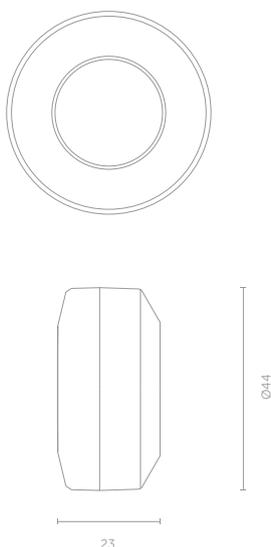


The WZ 4 status indicator is intended for optical repetition of the signalling alarming state of the detector or a group of detectors in the fire alarm systems. It can be added to the detector or a group of detectors. The indicator is applied when installed detector is invisible or there is limited access to a room supervised by detectors, for example, it is installed in spaces above ceiling, in cable passages, technical rooms, hotel rooms, etc.

STATUS INDICATOR WZ 4 CHARACTERISTICS

- › extra optical indication
- › compact housing
- › 4 signalling LEDs
- › current consumption up to 4 [mA]

DIMENSIONS [mm]



TECHNICAL DATA

| NAME | STATUS INDICATOR WZ 4 | |
|-------------------------------|-----------------------|--------|
| POWER SUPPLY VOLTAGE | 24 [VDC] \pm 25% | |
| QUIESCENT CURRENT CONSUMPTION | 0 [mA] | |
| ALARM CURRENT CONSUMPTION | <4 [mA] | |
| DIMENSION | 44x23 [mm] | |
| WEIGHT | 18 [g] | |
| HOUSING COLOUR | WHITE | BLACK |
| PRODUCT CODE | FSS001 | FSS041 |



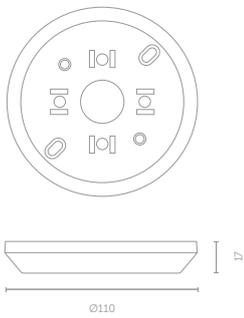
ACCESSORIES



DETECTOR BASE

CODE: FSD007 **WHITE HOUSING**
CODE: FSD011 **RED HOUSING**

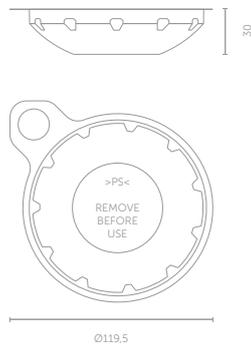
DIMENSIONS [mm]



DUST COVER

CODE: FSD008

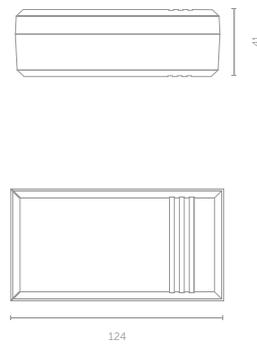
DIMENSIONS [mm]



MIO MODULES TESTER

CODE: FSA001

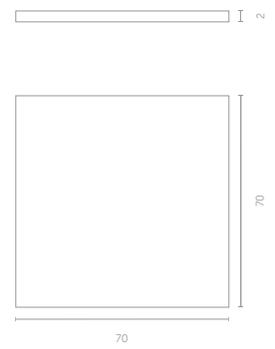
DIMENSIONS [mm]

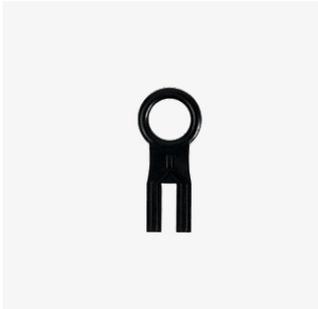


GLASS KIT FOR MCP 65

CODE: FSR004

DIMENSIONS [mm]

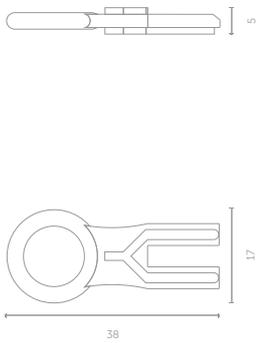




KEY KIT FOR MCP21

CODE: FSR006

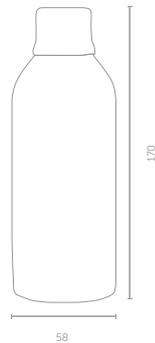
DIMENSIONS [mm]



TEST GAS

CODE: FSA002

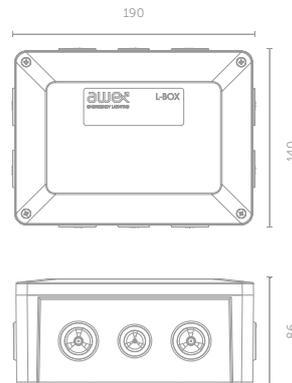
DIMENSIONS [mm]



FIRE RESISTANT ELECTRICAL JUNCTION L-BOX

CODE: FSB009

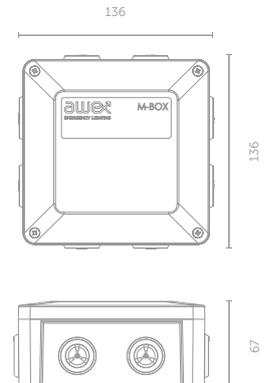
DIMENSIONS [mm]



FIRE RESISTANT ELECTRICAL JUNCTION M-BOX

CODE: FSB001

DIMENSIONS [mm]





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FIRE SYSTEM

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