awex®

EDITION 25.1



Fire safety systems

awex.eu

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INDUSTRY LEADER

The AWEX brand has existed in the emergency lighting industry since 2002, invariably pursuing a clearly defined mission: modern products of the highest quality and customer satisfaction. We offer a full range of emergency lighting devices meeting the standards of European standards. In the 23 years we have been on the market, thanks to our commitment, knowledge, resources, cooperation with the best specialists, including research centres, and investment in innovative ventures, we have achieved a position of a leader in the industry.

GAZELA BIZNESU DISTINCTION

AWEX stands for state-of-the-art technology, an experienced team of designers and engineers, the highest quality, reliability of equipment, diversity of product range, unique design, unlimited production capacity and an impeccable reputation confirmed by references. The greatest reward is the satisfaction and trust of our customers. We also enjoy the recognition of independent experts. We were awarded the title „Export Leader 2006” for the level of sales realised, and as one of the most dynamically developing companies on the Polish market, Puls Biznesu awarded us twice with the Gazele Biznesu distinction („Business Gazelles”).

QUALITY GUARANTEE

With the company’s mission in mind, we have implemented a quality management system in accordance with EN ISO 9001:2008, and the certificate awarded by TÜV NORD guarantees the highest quality in the design, manufacture, installation and servicing of emergency lighting equipment. In 2016, Awex for its new luminaire and emergency lighting products received the prestigious, internationally recognised BSI certification. Obtaining the certificate involves a lengthy procedure and a series of rigorous tests. It confirms the highest technical quality of the products offered.

INVESTMENTS

We apply the latest global technologies to guarantee quality, precision, process optimisation and work ergonomics. Moreover, to ensure that every stage in the creation of our products contributes to meeting all our customers’ expectations we invest time and resources.

RESEARCH

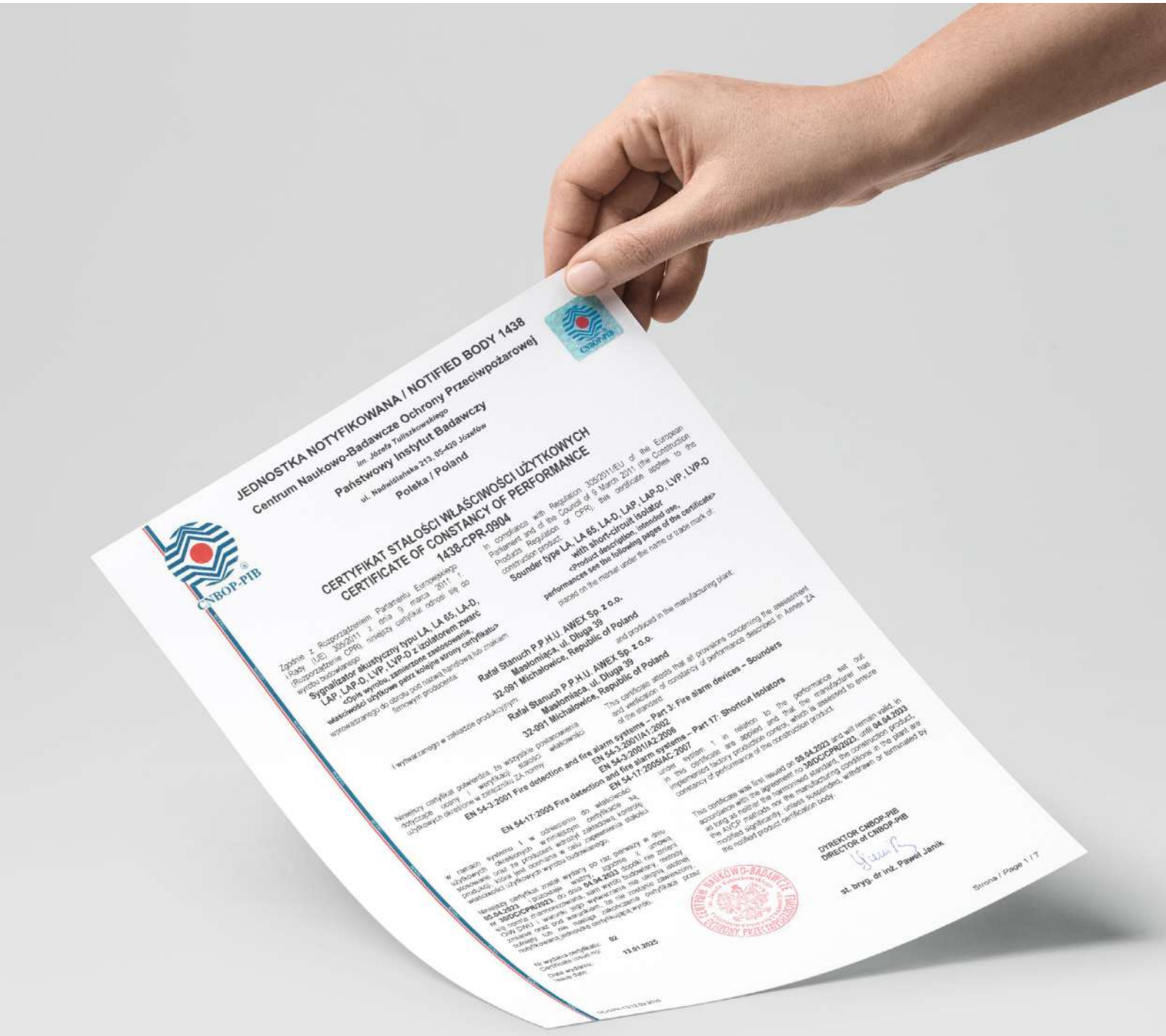
Ongoing research and development work ensures that our offering is constantly updated towards the development of the industry, enabling us to provide the most modern, multifunctional and technologically advanced products.

COMPETENT STAFF

We employ the best specialists in many fields, whom we guarantee constant improvement of their qualifications through specialised training.
The company design department ensures customised flexibility, while a team of highly qualified engineers guarantees the constant technical progress of the equipment on offer. The application of modern methods for information flow within the company enables ongoing updating of the offer and product functionality. Effective project management enables the building of lasting, trust-based relationships with contractors.

WE CARE FOR THE ENVIRONMENT

We offer environmentally friendly products and our technological process meets high EU standards.



SMART VISIO

SMART VISIO is an advanced application for the operation of all systems manufactured by AWEX. Regardless of the chosen solution (FZLV, SPS, LPS, CBS, RUBIC UNA, DES or FAS), SMART VISIO makes it possible to connect, integrate and visualise each system at the same time on a single control station. By using a common BACnet protocol for communication, the software can be implemented in any building.

SMART VISIO is easy to install and offers full system visualisation, saving time and costs on daily monitoring. The software is recommended for use in shopping centres, medium and large office buildings, hospitals, stadiums, airport terminals, production facilities and facilities that require special facilities. System reporting is compliant with EN 50172.













FEATURES OF SMART VISIO

- intuitive menu
- possibility of uploading site plans
- unlimited configuration possibilities for individual components and the entire system
- status monitoring of components and the system
- Immediate verification of all system faults and errors
- rapid identification of faulty devices
- simple diagnostics of basic system parameters visualised in a schematic diagram
- system expandability with any number of connected components
- remote management of integrated systems possible









SYSTEM INTEGRATION



FAS
FIRE ALARM CONTROL UNIT





















PSU
POWER SUPPLY FOR FIRE
PROTECTION EQUIPMENT



ESP
EXTERNAL SIGNAL PANEL

NETWORK



FASmini
FIRE ALARM CONTROL UNIT















SVS
SMOKE VENTILATION SYSTEM





FRESH AIR
INLET



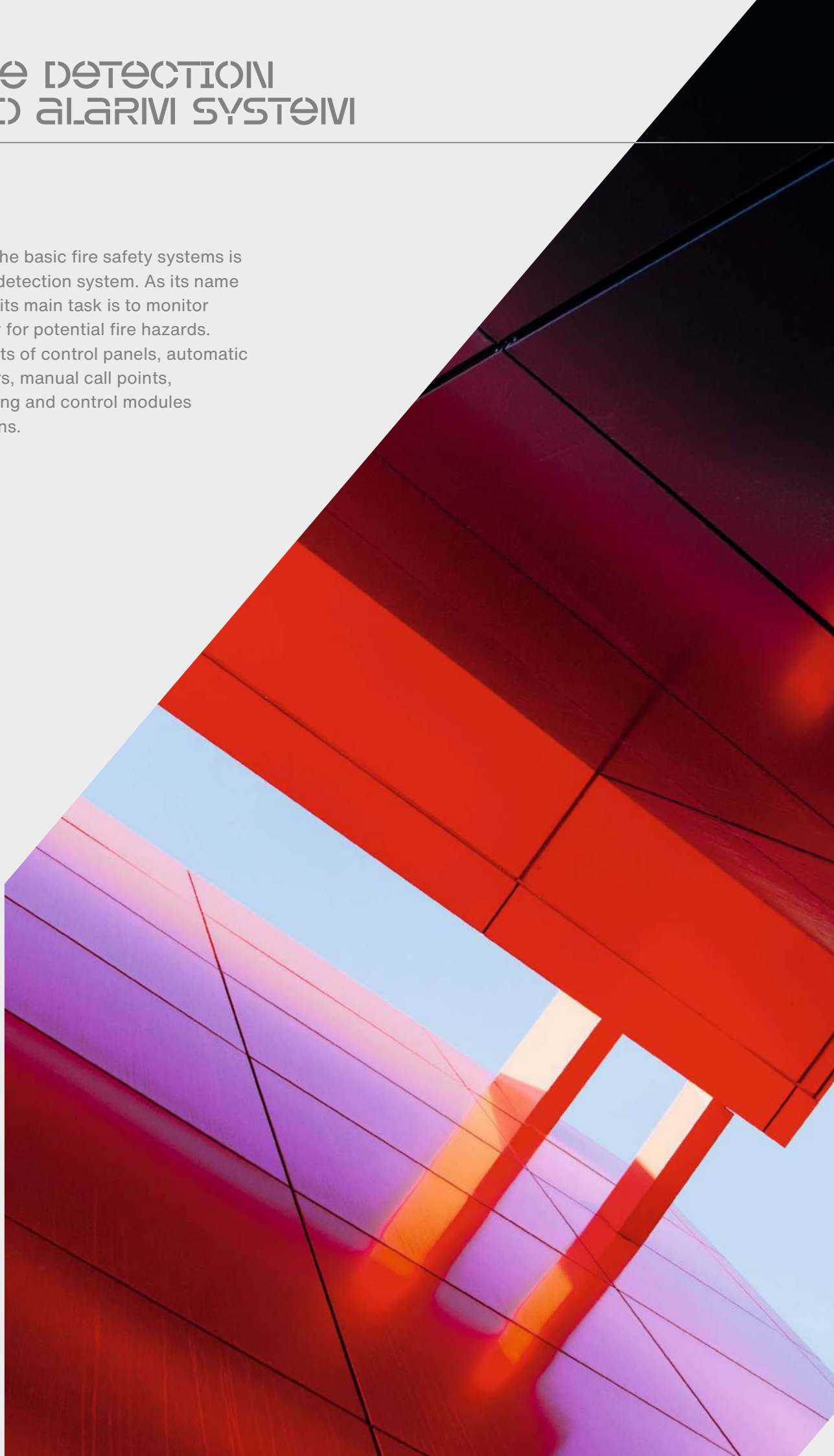
SMOKE
FLAP





FIRE DETECTION AND ALARM SYSTEM

One of the basic fire safety systems is the fire detection system. As its name implies, its main task is to monitor a facility for potential fire hazards. It consists of control panels, automatic detectors, manual call points, monitoring and control modules and sirens.



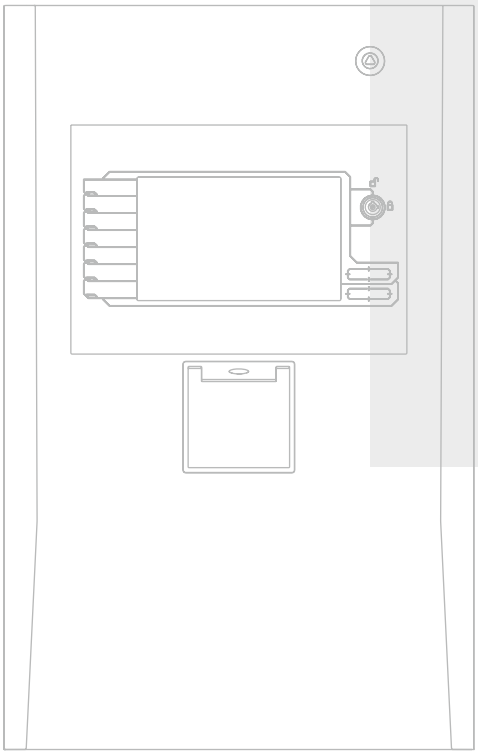


System works automatically using detectors which keeps checking the environment by monitoring the increase in smoke or temperature. Also manual alarm activation is possible by pressing red, manual call point. Fire alarm control unit is responsible for analysing the collected data and implementing the set scenario by activating the outputs of the MIO modules. Another basic device in the system are sirens which main task is to inform about necessity of evacuation.

FAS Fire alarm control unit

The control unit has modular structure, which makes its expanding and servicing easy. In its basic version, it is provided with a user panel, a control module with an integrated supervisory loop, a power supply unit and a set of batteries. Expansion and customisation of the control is achieved by installing appropriate extension cards and configuring the system.





TOUCH SCREEN

7” touch screen with intuitive menu

WEB SERVER

embedded functionality of handling from any internet browser

BACnet ready

COMPATIBLE WITH BACNET

embedded BACnet for communicating with the BMS

Modbus ready

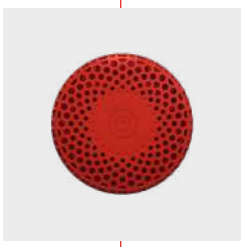
COMPATIBLE WITH MODBUS

embedded Modbus for communicating with the BMS



VAS

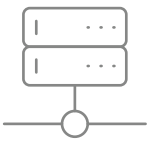








Optionally, the control units can be monitored via TCP / IP protocol. Remote access to system operation may take place via dedicated software or via web browser. The use of RJ-45 connectors and IP technology allows the system to be integrated with building management systems (BMS), security management systems (SMS) and visualisation systems (Smart Visio).



ROUTER



INTERNET



PC



BMS

building management system

FEATURES OF THE FAS CONTROL UNIT

- up to 10 supervised loops
- up to 250 elements per loop
- up to 10 000 zones per system
- built-in outputs:
  - alarm output for Fire Brigade call
  - output of siren lines
  - fault output
  - universal relay output
- maximum loop length up to 2 km
- loop break detection
- event counter up to 15000 entries
- extension cards
- compliance with EN 54-2, EN 54-4
- built-in printer
- compatibility with Smart Visio application
- web interface, BACnet, Modbus

TECHNICAL DATA

FEATURE	FIRE ALARM CONTROL UNIT OF FAS
TYPE	ADDRESSABLE
SUPPLY VOLTAGE	170-260 [V] AC 50 [Hz]
OUTPUT POWER	20-30 [V] DC
BATTERIES	26 / 52 / 78 [Ah]
INPUT/OUTPUT CABLE CROSS SECTIONS	MAX. 2.5 [mm^2]
CROSS-SECTIONS OF WIRES IN THE SUPERVISED LOOPS	0.8 – 1.5 [mm^2]
MAX. CABLE LENGTH OF THE SUPERVISED LOOP	2 [km] *
DETECTION CIRCUIT TYPES	LOOP/ LINE / COMBINATION OF LOOP AND LINE
MAX. NUMBER OF DETECTION LOOPS	10
MAX. NUMBER OF DETECTION LINES	20
MAX. NUMBER OF SUPERVISED ZONES	10000
MAX. NUMBER OF ELEMENTS PER LOOP	250 *
MAX. NUMBER OF ELEMENTS PER LINE	32
NUMBER OF SIREN LINE OUTPUTS	2
ALARMING VARIANTS	UP TO 30
UNIVERSAL INPUTS	UP TO 12
UNIVERSAL RELAY OUTPUTS	UP TO 11
EVENT COUNTER	15000
ACCESS LEVELS	4
PRINTER	YES, OPTIONALLY
LAN CONNECTOR	YES
CASING	POWDER PAINTED STEEL, RAL 3000
CASING TIGHTNESS	IP30
OPERATING TEMPERATURES	10 UP TO 40 [°C]

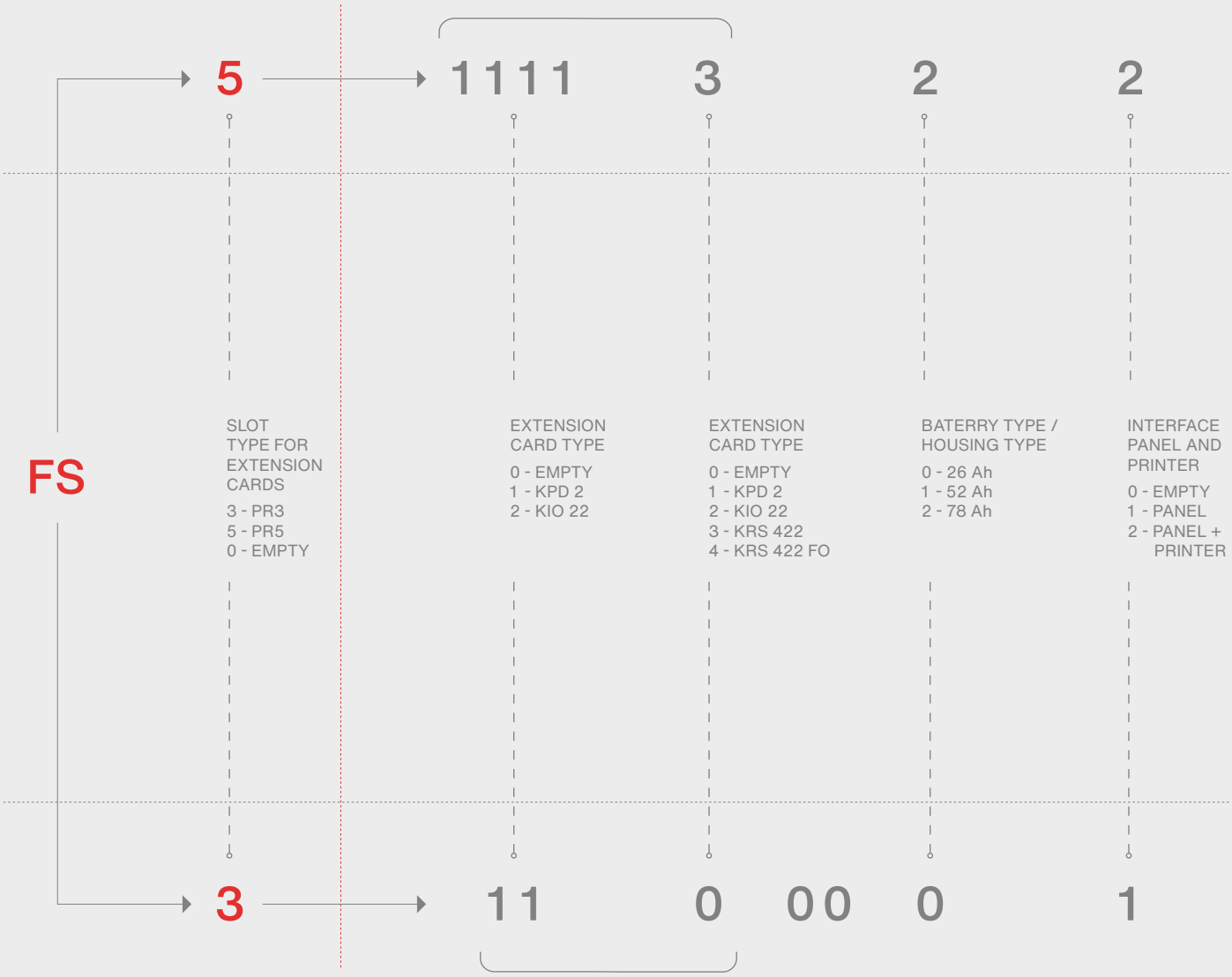
* depends on cable type and number of elements, requires calculation during design process

PRODUCT CODE

EXAMPLE OF PR5 USAGE

FAS CONTROL UNIT,
PR 5, KRS 422, 4xKPD 2,
1xKIO 22, BOX 78,
PRINTER, PANEL

(9 LOOPS)



EXAMPLE OF PR3 USAGE

FAS CONTROL UNIT,
PR 3, 2xKPD 2,
BOX 26, PANEL

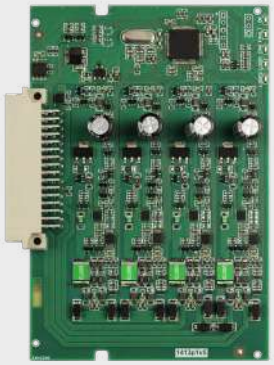
(5 LOOPS)

CONTROL UNIT EXTENSION CARDS

FEATURE	DETECTION LOOP CARD KPD 2
ASSEMBLY	INSIDE THE FAS CASING
NUMBER OF SUPERVISED LOOPS	2
DETECTION CIRCUIT TYPES	LOOP, LINE
MAX. NUMBER OF ELEMENTS	UP TO 250 PER LOOP *
MAX. CABLE LENGTH	UP TO 2 [km] *
MAX. NUMBER OF CARDS	5
PRODUCT CODE	FSC004

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

DETECTION LOOP CARD KPD 2



FEATURE	INPUT / OUTPUT CARD KIO 22
ASSEMBLY	INSIDE THE FAS CASING
NUMBER OF INPUTS	2 SUPERVISED INPUTS
NUMBER OF OUTPUTS	2 RELAY OUTPUTS
MAX. OUTPUT LOAD	30 [V] DC, 0,5 [A]
MAX. NUMBER OF CARDS	5
PRODUCT CODE	FSC005

INPUT / OUTPUT CARD KIO 22



FEATURE	COMMUNICATION CARD KRS 422		COMMUNICATION CARD KRS 422 FO
ASSEMBLY	INSIDE THE FAS CASING		
MAX. NUMBER OF CONTROL UNITS IN NETWORK	10		
CABLE TYPE	FTP	HTKSHekw	MULTI-MODE FIBRE OPTICS
MAX. DISTANCE BETWEEN CONTROL PANELS [m]	1000	500	5000
MAX. NUMBER OF ESP PANELS	10		-
PRODUCT CODE	FSC006		FSC007

COMMUNICATION CARD KRS 422 / KRS 422 FO

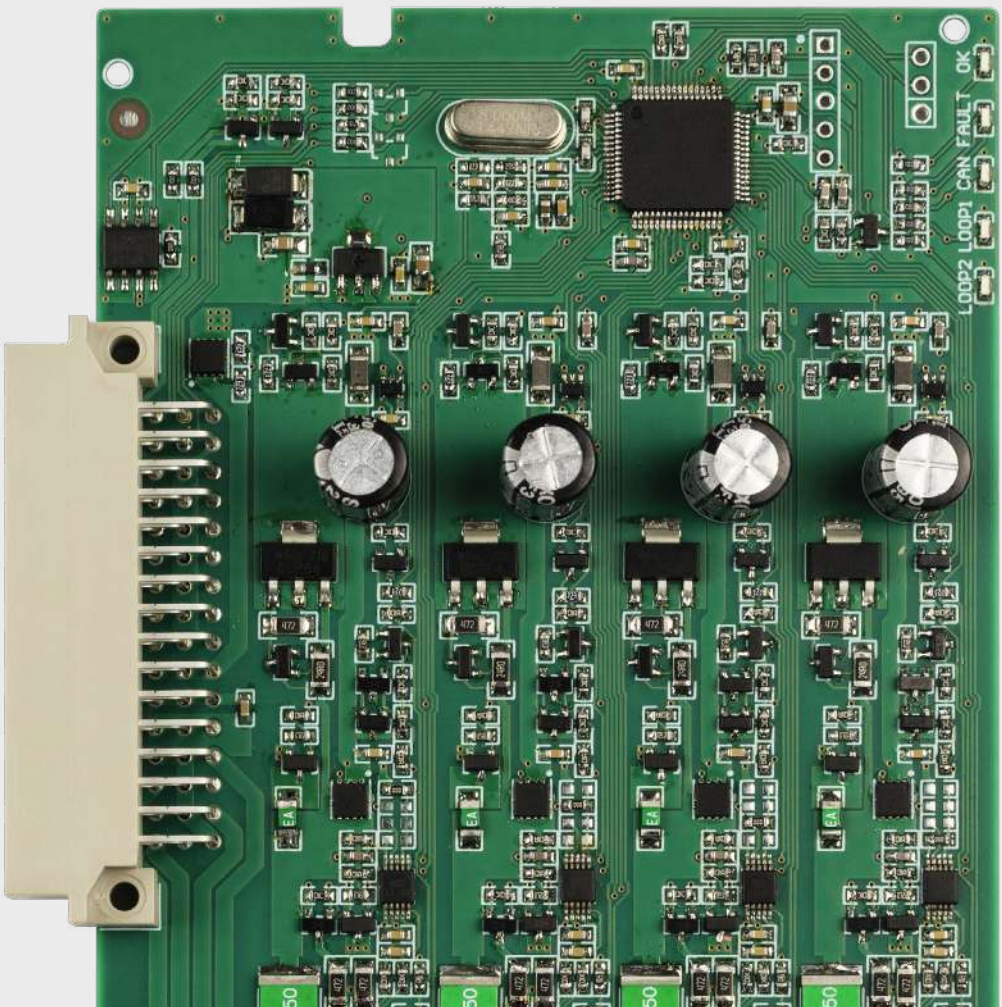


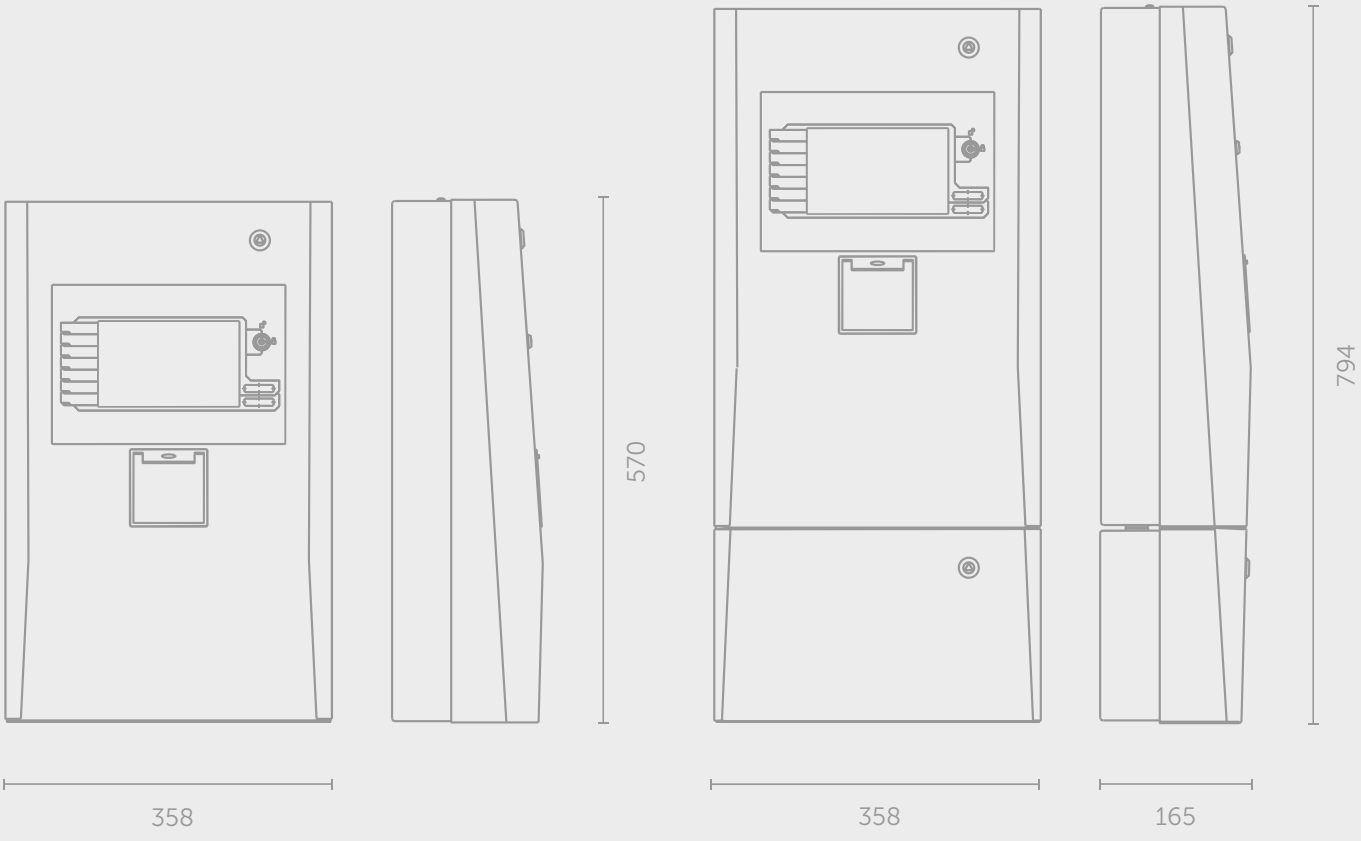
FEATURE	EXTENSION SLOT PR3	EXTENSION SLOT PR5
ASSEMBLY	INSIDE THE FAS CASING	
NUMBER OF CARD SLOTS	3	5
PRODUCT CODE	FSC009	FSC010

EXTENSION SLOTS PR3 / PR5

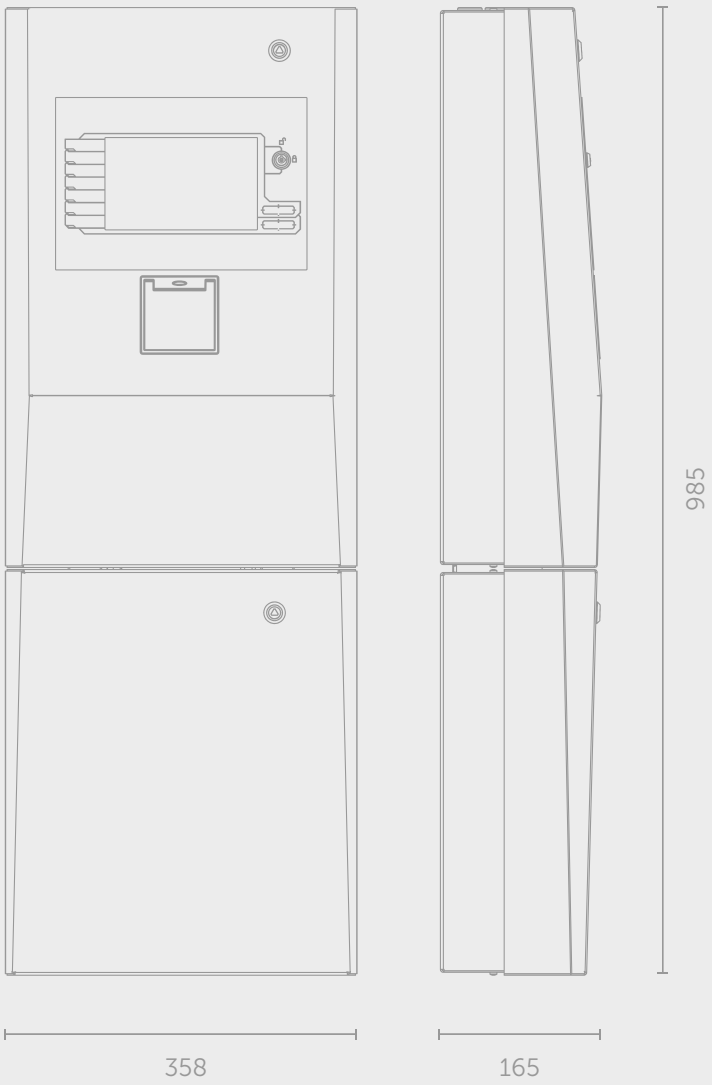



782485/55C
G1428
31CRQGT
ISO35TDW
G4
782485/55C
G1425
31CRQGT
ISO35TDW
G4
111
A
1547
09231486921


LOOP2
LOOP1
CAN
FAULT
OK


570
794
358
358
165

DIMENSIONS [mm]

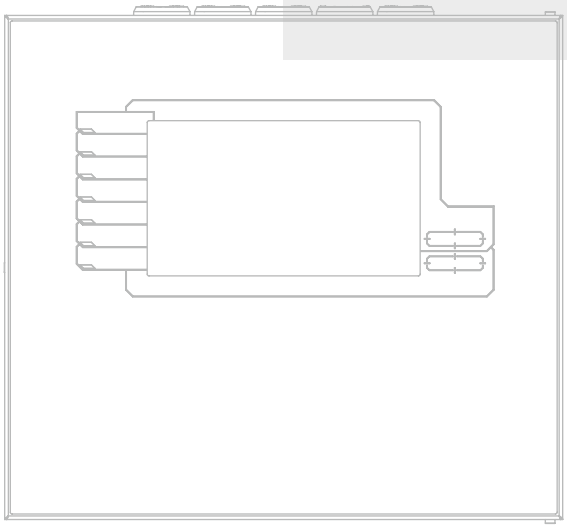


FASmini

Fire alarm control unit

The FASmini control unit is part of a fire alarm system designed to protect human life and safeguard buildings and property. The control unit is responsible for collecting information from the points, controlling the equipment and transmitting information that a fire has broken out. By connecting to ATE, FASmini can send information to Fire Brigade.





TOUCH SCREEN

7” touch screen with intuitive menu

WEB SERVER

embedded functionality of handling from any internet browser

BACnet ready

COMPATIBLE WITH BACNET

embedded BACnet for communicating with the BMS

Modbus ready

COMPATIBLE WITH MODBUS

embedded Modbus for communicating with the BMS



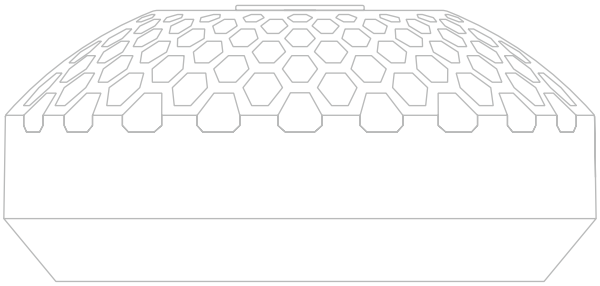
VAS

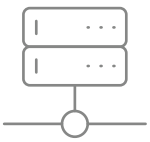












ROUTER



INTERNET



PC



BMS

building management system

FEATURES OF THE FASmini CONTROL UNIT

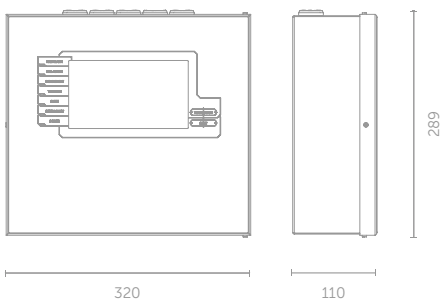
- 7-inch display
- up to 2 detection loops
- supervised input
- output for alarm transmission device
- FAULT output
- printer interface
- possibility of connecting external signal panels
- network of up to 10 control units
- control of main and backup power supply

TECHNICAL DATA

FEATURE	1 LOOP	2 LOOP		1 LOOP /RS	2 LOOP / RS	
TYPE	ADDRESSABLE					
SUPPLY VOLTAGE	170 – 250 [V] AC 50 [Hz]					
OUTPUT POWER	20-30 [V] DC					
BATTERIES	7,2 [Ah]	7,2 [Ah]	12 [Ah]	7,2 [Ah]	7,2 [Ah]	12 [Ah]
NUMBER OF SIREN LINE OUTPUTS	1	2		1	2	
INPUT/OUTPUT CABLE CROSS SECTIONS:	MAX. 2,5 [mm^2]					
SUPERVISED LOOP WIRES CROSS SECTION	0,8 – 1,5 [mm^2]					
MAX. CABLE LENGTH OF THE SUPERVISED LOOP	2 [km] *					
DETECTION CIRCUIT TYPES	LOOP / LINE / COMBINATION OF LOOP AND LINE					
MAX. NUMBER OF DETECTION LOOPS	1	2		1	2	
MAX. NUMBER OF DETECTION LINES	2	4		2	4	
MAX. NUMBER OF ZONES	10 000					
MAX. NUMBER OF ELEMENTS PER LOOP	250 PER LOOP *					
MAX. NUMBER OF ELEMENTS PER LINE	32 PER LINE					
ALARMING VARIANTS	UP TO 30					
UNIVERSAL INPUTS	1					
CASING	POWDER PAINTED STEEL, RAL 3000					
TIGHTNESS OF CASING	IP30					
LAN CONNECTOR	YES					
PRODUCT CODE	FASM01	FASM02	FASM03	FASM04	FASM05	FASM06

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

DIMENSIONS [mm]





ESP External signal panel

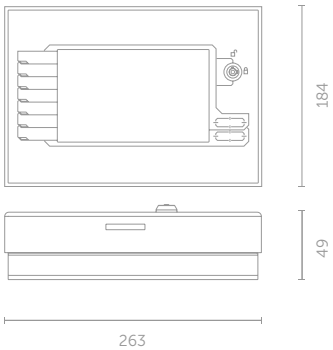


ESP lets to handle Fire Alarm System by operating from the place located far away from Control Unit. These devices have dupliceted interface. It shows a.o. alarms, faults, disablements and tests. Control Unit can be installed their where it's best because of system topology.
ESP panel should be placed 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 it's functionallity. Few access levels limits changes made by unhonorized operators.

FEATURES OF THE ESP PANEL

- duplicated control unit interface
- 7-inch touch screen
- four access levels
- multi-language support
- key access lock
- compact housing

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	ESP EXTERNAL SIGNAL PANEL
TYPE OF DEVICE	REMOTE SIGNALLING AND OPERATING DEVICE
CASING TIGHTNESS	IP30
OPERATING TEMPERATURES	-5 UP TO 40 [°C]
DIMENSIONS	263x184x49 [mm]
SUPPLY VOLTAGE	24 [V] DC
MAX. POWER CONSUMPTION	150 [mA]
MAX. NUMBER OF PANELS IN NETWORK	10
PRODUCT CODE	ESP002

FAS NETWORKING SYSTEM

Control devices such as FAS, ESP remote panels and FASmini can be networked. In this way, it becomes possible to us to control the status of the system in each of these units.

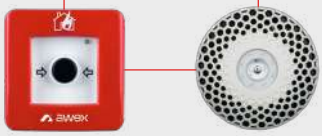


FAS

1 OR 2

1 OR 2 OR 3







VAS



FASmini

1 OR 2



FASmini

LEGEND

1 FTP

2 HTKSHekw

3 OPTICAL FIBRE



FAS

1

OR

2



ESP

TECHNICAL DATA

FEATURE	CONTROL DEVICES NETWORK SYSTEM		
MAX. NUMBER OF CONTROL UNITS IN SYSTEM	10		
CONNECTION TOPOLOGY OF CONTROL PANELS	CIRCUIT, CO-DEPENDENT		
MAX. NUMBER OF ESP IN SYSTEM	10		
MAX. DISTANCES BETWEEN CONTROL DEVICES	TYPE OF CONDUCTOR		
	FTP	HTKSHekw	OPTICAL FIBRE
	1 [km]	500 [m]	5 [km]

1

OR

2



ESP

1

OR

2

Smoke detector

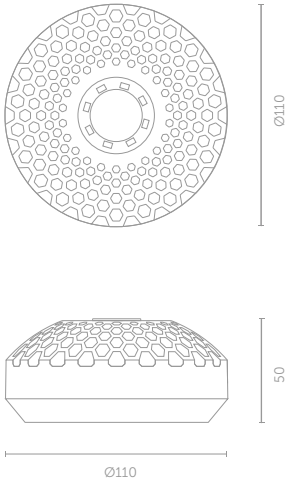
The smoke detector is used to detect a fire in its early stages. It is equipped with an optical diffuse smoke sensor. The use of this type of detector makes it possible to detect a fire in a quick and reliable way. Smoke identification takes place in the device's detection chamber equipped with a diode photoelectric diodes.



FEATURES OF SMOKE DETECTOR S

- sensitivity level according to EN54
- soiling monitoring
- adjustable response threshold to compensate for environmental influences
- LED alarm indication
- additional LEDs for test status
- optional external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	SMOKE DETECTOR S	
SMOKE DETECTION	OPTICAL, SCATTERING	
SUITABILITY FOR DETECTING TEST FIRES	IN LINE WITH EN 54-7	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	550 [µA]	
OPERATING TEMPERATURE	-10 UP TO 55 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	LEDs: RED, GREEN	
DIMENSIONS	ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD002	FSD009

T Heat detector

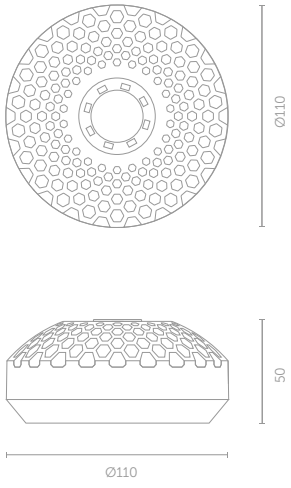


The heat detector is used to detect a fire in the early stages of its development. It is equipped with a thermistor temperature detection system, which enables quick and effective fire detection. The detector operates in the AWEX fire alarm system. The element can be mounted on both loop and line addressable fire detection circuits. Heat detection is carried out by means of a 4-thermistor temperature measurement system. The fire alarm is triggered when the temperature limit is reached or if it rises rapidly. The microprocessor recognises the type of alarm and transmits it via the monitoring line to the control panel.

FEATURES OF HEAT DETECTOR T

- sensitivity and temperature class in accordance with EN54
- adjustable response threshold to compensate for environmental influences
- LED alarm indication
- additional LEDs for test status
- optional external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	HEAT DETECTOR T	
HEAT SENSOR CLASS	A1, A1R, A1S, A2, A2R, A2S, B, BR, BS, C, CR, CS	
HEAT DETECTION	OVERLOAD-DIFFERENTIAL	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	450 [µA]	
OPERATING TEMPERATURE	-10 UP TO 40 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	LEDs: RED, GREEN	
DIMENSIONS	ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD001	FSD010

TS Smoke and heat detector

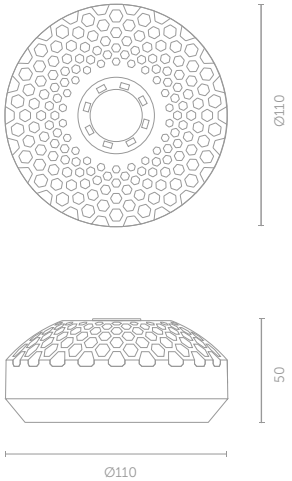
The smoke and heat detector is used to detect a fire in its early stages. The device is furnished with two sensors: for heat and for smoke. The use of two types of sensors makes it possible to detect all types of fires in a quick and reliable way. The detector operates in the AWEX fire alarm system. The element can be installed on addressable monitoring lines, both loop and radial ones. Smoke identification takes place in the detector's detection chamber equipped with photoelectric diodes.



FEATURES OF THE SMOKE AND HEAT DETECTOR TS

- sensitivity and temperature class in accordance with EN54
- monitoring of soiling
- adjustment of the response threshold to compensate for environmental influences
- smoke analysis supported by heat analysis function
- detector isolation possible
- LED alarm indication
- additional LEDs for test status
- optional external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	SMOKE AND HEAT DETECTOR TS	
SUITABILITY FOR THE DETECTION OF TEST FIRES	TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9	
SMOKE DETECTION	OPTICAL, SCATTERING	
HEAT SENSOR CLASS	A1, A1R, A1S, A2, A2R, A2S, B, BR, BS, C, CR, CS	
HEAT DETECTION	OVERLOAD-DIFFERENTIAL	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	550 [µA]	
OPERATING TEMPERATURE	-10 UP TO 80 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	LEDs: RED, GREEN	
DIMENSIONS	Ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD003	FSD012

SF Smoke detector with FLASH LED

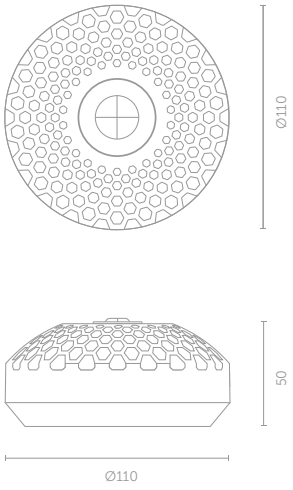


The smoke detector is used to detect a fire in its early stages. It incorporates an optical diffuse smoke sensor. The use of this type of a sensor makes it possible to detect a fire in a quick and reliable way. In addition, the detector has additional optical signalisation, which makes the fire alarm visible from a long distance, The detector operates in the fire alarm system FAS. The element can be mounted on addressable detector lines both loop and radial. Smoke identification takes place in the detector's detection chamber equipped with photoelectric diodes.

FEATURES OF THE SMOKE DETECTOR WITH FLASH LED SF

- sensitivity level and temperature class in accordance with EN54
- soiling monitoring
- adjustment of the response threshold to compensate for environmental influences
- alarm indication by FLASH LED
- additional LEDs for test status
- optional external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	SMOKE DETECTOR WITH FLASH LED SF	
SUITABILITY FOR THE DETECTION OF TEST FIRES	ACCORDANCE WITH EN 54-7	
SMOKE DETECTION	OPTICAL, SCATTERING	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	<2 [mA]	
OPERATING TEMPERATURE	-10 UP TO 55 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	GREEN LED, RED FLASH LED	
DIMENSIONS	Ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD005	FSD014

TF Heat detector with FLASH LED

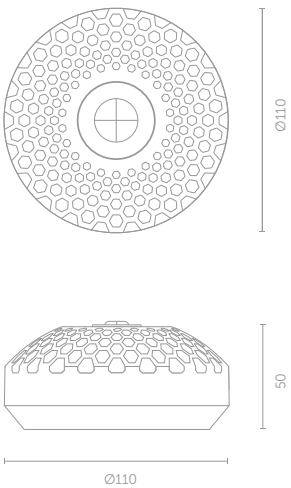
The heat detector is used to detect a fire in the early stages of its development. It incorporates a thermistor temperature detection system, which allows quick and effective detection of a fire. In addition, the detector has an additional optical signalisation, thanks to which the detector's fire alarm becomes visible from a long distance. The device operates in the FAS fire alarm system. This element can be installed on both loop-type and radial addressable monitoring lines. Heat detection is carried out by means of a 4-thermistor temperature measurement system. A fire alarm is triggered when the temperature limit is reached or if it is found to rise rapidly. The microprocessor recognises the type of alarm and transmits it via the surveillance line to the control panel.



FEATURES OF HEAT DETECTOR TF

- sensitivity and temperature class in accordance with EN54
- adjustable response threshold to compensate for environmental influences
- alarm indication by FLASH LED
- additional LEDs for indicating test status
- accessory external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	HEAT DETECTOR WITH POWER LED TF	
HEAT SENSOR CLASS	A1, A1R, A1S, A2, A2R, A2S, B, BR, BS, C, CR, CS	
HEAT DETECTION	OVERLOAD-DIFFERENTIAL	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	<2 [mA]	
OPERATING TEMPERATURE	-10 UP TO 40 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	GREEN LED, RED FLASH LED	
DIMENSIONS	Ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD004	FSD013

TSF

Smoke and heat detector with FLASH LED

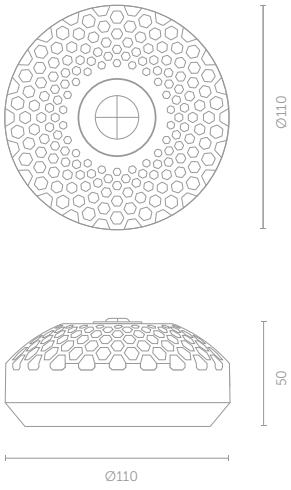


The smoke and heat detector is used to detect fires in their early stages. The device incorporates two sensors: of heat and of smoke. The use of two types of sensors makes it possible to detect all types of fires in a quick and reliable way. Moreover, the detector has an additional optical signalisation so that the detector's fire alarm can be seen from a distance. The detector operates in the AWEX fire alarm system. The element can be mounted on addressable monitoring lines, both loop type, as well as radial.

FEATURES OF THE SMOKE AND HEAT DETECTOR TSF

- sensitivity and temperature class in accordance with EN54
- monitoring of the soiling level
- adjustable response threshold to compensate for environmental influences
- alarm indication by FLASH LED
- additional LEDs for indicating test status
- accessory external status indicator
- integrated short-circuit isolator
- low-profile housing
- operation in addressable systems

DIMENSIONS [mm]

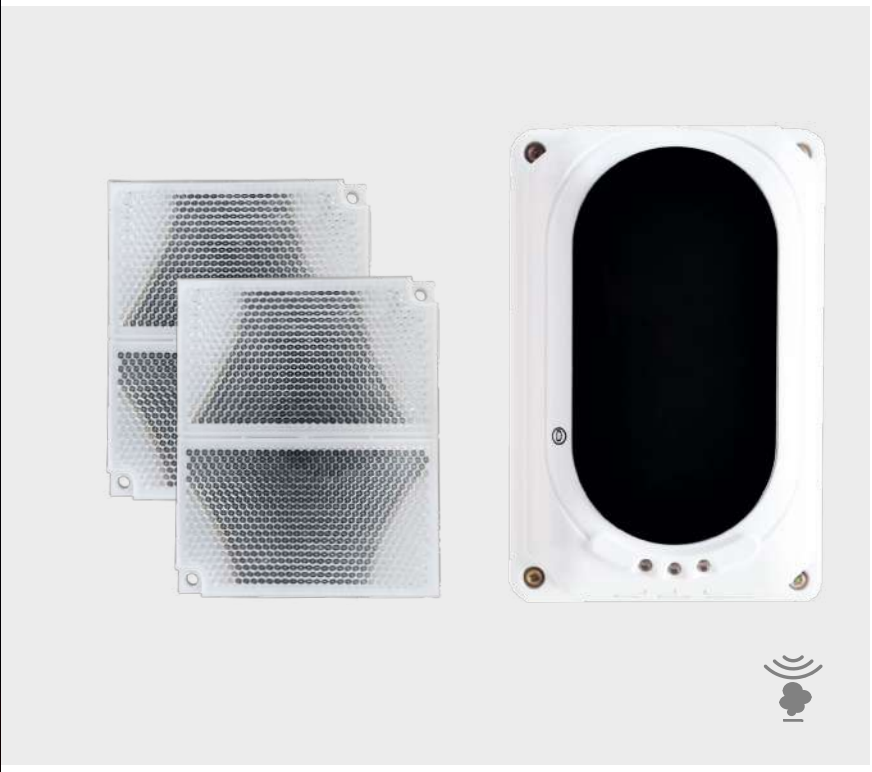


TECHNICAL DATA

FEATURE	SMOKE AND HEAT DETECTOR WITH FLASH LED TSF	
SUITABILITY FOR THE DETECTION OF TEST FIRES	TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9	
SMOKE DETECTION	OPTICAL, SCATTERING	
HEAT SENSOR CLASS	A1, A1R, A1S, A2, A2R, A2S, B, BR, BS, C, CR, CS	
HEAT DETECTION	OVERLOAD-DIFFERENTIAL	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	<160 [µA]	
ALARM CURRENT CONSUMPTION	<2 [mA]	
OPERATING TEMPERATURE	-10 UP TO 80 [°C]	
CASING TIGHTNESS	IP20	
ADMISSIBLE RELATIVE HUMIDITY	95% AT TEMP. 35 [°C] WITHOUT CONDENSATION	
OPTICAL SIGNALLING	GREEN LED, RED FLASH LED	
DIMENSIONS	Ø110x50 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSD006	FSD015



TX 7130 Beam smoke detector

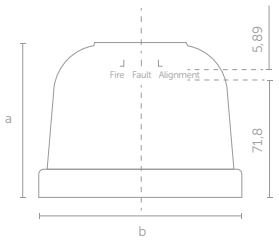


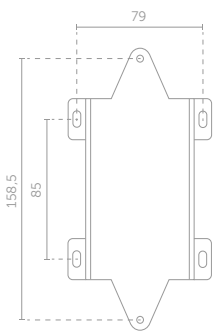
This type of device is designed to secure large-scale premises such as production halls, warehouses, museums, churches, shopping malls, etc. The detector provides a wide variety of monitored space ranging from 8 - 100 metres. The beam detector comprises a transmitter and a receiver (in a single housing) as well as a prism reflector. The transmitter sends out an infrared beam which, after being reflected by the prism reflector at an angle of 180°, returns to the receiver. If the beam is obscured by smoke, the unit activates an alarm condition.

FEATURES OF THE TX 7130 BEAM SMOKE DETECTOR

- transmitter and receiver in a single housing
- built-in laser and display for easy calibration
- 4 monitoring ranges (configurable)
- 3 sensitivity levels
- connection to MIO module

DIMENSIONS [mm]





TECHNICAL DATA

FEATURE	BEAM SMOKE DETECTOR TX7130			
SMOKE DETECTION	OPTICAL			
SUITABILITY FOR THE DETECTION OF TEST FIRES	ACCORDANCE WITH EN54-12:2002 BS 5839 PART 1:2002			
SUPPLY VOLTAGE	20 UP TO 28 [V] DC			
POWER CONSUMPTION MONITORING / ALARM / CALIBRATION	23 / 33 / 56 [mA]			
MONITORING RANGES [M]	8-20	20 - 40	40 – 70	70 - 100
NUMBER OF REQUIRED REFLECTORS	1	1	4	4
LOAD CAPACITY OF RELAYS (ALARM, FAULT)	NO; 2 [A], 30 [VDC]			
CASING TIGHTNESS	IP30			
OPERATING TEMPERATURE	-10 UP TO 55 [°C]			
ADMISSIBLE RELATIVE HUMIDITY	UP TO 95%, WITHOUT CONDENSATION			
OPTICAL SIGNALLING	LEDS: RED, GREEN, YELLOW			
DIMENSIONS	190.87x126.87x91.96 [mm]			
WEIGHT	440 [g]			
ACCESSORIES IN SET	MOUNTING BRACKET, 4 REFLECTORS			
MATERIAL / OLOUR OF CASING	ABS / WHITE			
PRODUCT CODE	FSD037			

DS Duct smoke detector

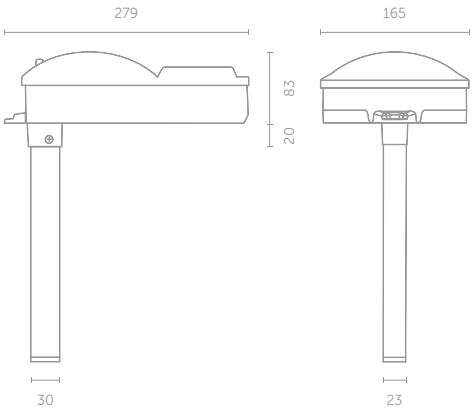
Duct smoke detector DS is used for discovering early stage of fire in the ventilation ducts. It has optical sensor which ensure fast and reliable fire detection. Device have double sided built-in shortcircuit isloator. These ensure constant loop works, even in case of damage. It also lets you easy find place of that damage. Moreover detectors constantly measures dirtyness level and control units - if needed shows information about neccesity of their cleening. Dirtyness level is also take to acount of fire detection, makes detection more reliable.



FEATURES OF THE DUCT SMOKE DETECTOR DS

- sensitivity according to EN54
- dirt level monitoring
- LED alarm indication
- accessory external status indicator
- integrated short-circuit isolator
- operation in addressable systems

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	DUCT SMOKE DETECTOR DS		
SMOKE DETECTION	OPTICAL, SCATTERING		
TEST FIRES DETECTING	ACCORDING TO EN54-7		
SUPPLY VOLTAGE	24 [V] DC ± 25 %		
QUIESCENT CURRENT CONSUMPTION	<160 [uA]		
ALARM CURRENT CONSUMPTION	<550 [uA]		
AIR VELOCITY IN THE DUCT	1 UP TO 20 [m/s]		
VENTURI TUBE LENGTH	0.6 UP TO 2.8 [m]		
OPERATING TEMPERATURE	-20 [°C] DO 50 [°C]		
IP HOUSING	IP54		
DIMENSIONS	279x165x83 [mm]		
PRODUCT CODE	FSD100	FSD101	FSD102
SAMPLING TUBE LENGTH [m]	0,6	1,5	2,8

WZ 4 Status indicator

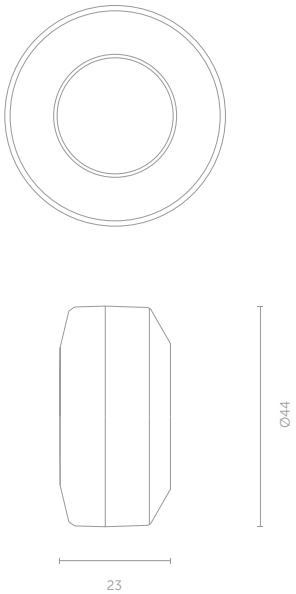


The WZ 4 status indicator is intended for optical repetition of the signalling alarming state of the detector or a group of detectors in the fire alarm systems. It can be added to the detector or a group of detectors. The indicator is applied when installed detector is invisible or there is limited access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

FEATURES OF STATUS INDICATOR WZ 4

- additional visual signalling
- small dimensions
- 4 visual signalling LEDs
- max. power intake <4 [mA]

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	STATUS INDICATOR WZ 4	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	0 [mA]	
MAX. ALARM CURRENT CONSUMPTION	0,5 [mA]	
DIMENSIONS	44x23 [mm]	
WEIGHT	18 [g]	
CASING COLOUR	WHITE	BLACK
PRODUCT CODE	FSS001	FSS041

ROP 65 Manual call point

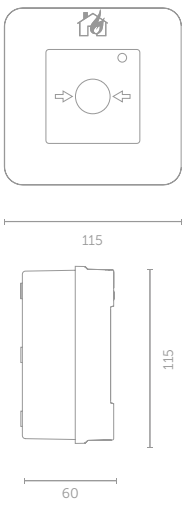
Manual call point ROP 65 is intended for person who notice fire. By manual pressing, user gives information to the FAS control unit to activate fire alarm. This device can operate on detection loops or stub detection circuits controlled by the FAS alarm control unit only. Device is activated by braking the glass. To rearm element, glass need to be replaced. The element has a double-sided short circuit isolator.



FEATURES OF MANUAL CALL POINT ROP 65

- integrated short-circuit isolator on both sides
- type of call point activation - A
- restoration of supervisory state by changing the glass panel
- operation in addressable systems
- status light
- indoor and outdoor use

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	MANUAL CALL POINT ROP 65
SUPPLY VOLTAGE	24 [V] DC ± 25%
QUIESCENT CURRENT CONSUMPTION	<130 [µA]
ALARM CURRENT CONSUMPTION	<500 [µA]
ENVIRONMENTAL CATEGORY	INTERNAL / EXTERNAL
IP HOUSING	IP65
OPERATING TEMPERATURE	-25 UP TO 70 [°C]
ADMISSIBLE RELATIVE HUMIDITY	95% AT 40 [°C]
DIMENSIONS	115x115x60 [mm]
ACTIVATION TYPE	A
WEIGHT	270 [g]
CASING COLOUR	RED
PRODUCT CODE	FSR003

ROP 21 Manual call point



Manual call point ROP 21 exist in two versions:

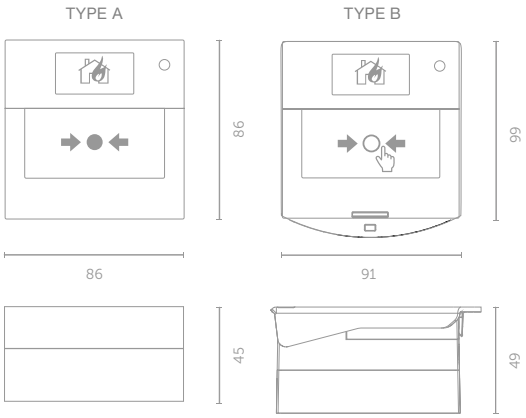
A type - direct operation (activation by pressing)
B type - indirect action activation (activation by rising cover and pressing).

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 retchet mechanism, after activation, ROP 21 can be rearmed witout using any spare parts. The element has a double-sided short circuit isolator.

FEATURES OF THE MANUAL CALL POINT ROP 21

- integrated short-circuit isolator on both sides
- type of call point activation - A or B
- restorable surveillance state
- operation in addressable systems
- signalling diode
- to be used inside buildings

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	MANUAL CALL POINT ROP 21	
TYPE	TYPE A	TYPE B
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRNT CONSUMPTION	<130 [µA]	
ALARM CURRENT CONSUMPTION	<500 [µA]	
INSTALLATION	INDOOR	
IP HOUSING	IP21	
OPERATING TEMPERATURE	-10 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT 40 [°C]	
CALL POINT DIMENSIONS WITH CASING	86x86x45 [mm]	91x99x49 [mm]
ACTIVATION TYPE	A	B
WEIGHT	150 [g]	180 [g]
HOUSING COLOUR	RED	
PRODUCT CODE	FSR005	FSR012




RoHS



MIO 22, MIO 44, MIO 88 Input / output module



MIO 22



MIO 44



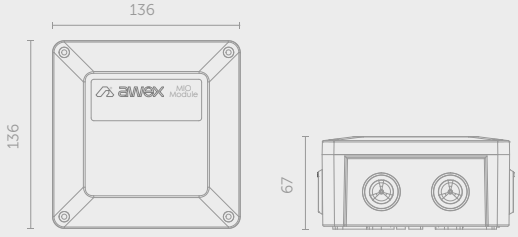
MIO 88

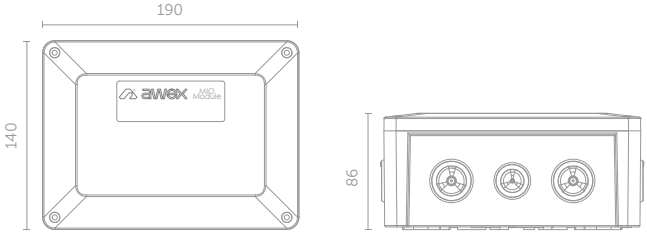
The MIO module is an input / output device which is responsible for the interaction between the fire protection equipment and the FAS fire alarm system. It is designed to operate on both loop and stub addressable supervisory lines. Device can work with evacuation doors, smoke extraction systems, automatic fire extinguishing systems and other fire protection equipment. Depending on the version, the MIO modules are fitted with 2, 4 or 8 relay outputs and 2, 4, or 8 supervised potential-free inputs. The component has an integrated short-circuit isolator, which allows rapid fault location and correct operation of the supervised loops even in case of a fault.

TECHNICAL DATA

FEATURE	INPUT / OUTPUT MODULE					
TYPE	MIO 22		MIO 44		MIO 88	
SUPPLY VOLTAGE	24 [V] DC ± 25%					
QUIESCENT CURRENT CONSUMPTION	200 [µA]					
ALARM CURRENT CONSUMPTION	500 [µA]					
SHORT CIRCUIT INSULATOR	BUILT-IN, DOUBLE-SIDED					
NUMBER OF OUTPUTS	2		4		8	
OUTPUT TYPE	RELAY OUTPUT (NO / NC / COM), MAX. DC CONTACT LOAD VALUES: 2 [A] / 30 [V] DC / 60 [W]					
NUMBER OF INPUTS	2		4		8	
INPUT FUNCTION	ACTIVE, INACTIVE, SHORT CIRCUIT, INTERRUPTION					
INPUT ACTIVATION	CONTACT NO / NC					
FAIL-SAFE FUNCTION	YES					
HOUSING TYPE	O	S	O	S	O	S
IP HOUSING	IP66					
DIMENSIONS	114x114x57 [mm]	136x136x65 [mm]	150x116x67 [mm]	140x190x86 [mm]	190x150x77 [mm]	140x190x86 [mm]
WEIGHT	200 [g]	280 [g]	300 [g]	450 [g]	500 [g]	530 [g]
OPERATING TEMPERATURE	-10 UP TO 55 [°C]					
PRODUCT CODE	FSM001	FSM004	FSM002	FSM005	FSM003	FSM006

DIMENSIONS [mm]





MIO 2N2N, MIO 4N4N Input / output module

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 equiped 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.

MIO 2n2n



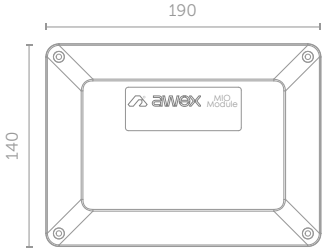
MIO 4n4n



TECHNICAL DATA

FEATURE	INPUT / OUTPUT MODULE			
TYPE	MIO 2n2n		MIO 4n4n	
SUPPLY VOLTAGE	24 [V] DC ± 25%			
QUIESCENT CURRENT CONSUMPTION	200 [µA]			
ALARM CURRENT CONSUMPTION	500 [µA]			
SHORT CIRCUIT INSULATOR	BUILT-IN, DOUBLE-SIDED			
NUMBER OF OUTPUTS	2		4	
TYPE OF OUTPUT	RELAY OUTPUT (NO / NC / COM), MAX. DC CONTACT LOAD VALUES: 2 [A] / 30 [V] DC / 60 [W]			
RANGE OF MONITORED OUTPUT VOLTAGE	LO: 9 - 30 [V] DC			
NUMBER OF INPUTS	2		4	
INPUT FUNCTION	ACTIVE, INACTIVE			
INPUT ACTIVATION	VOLTAGE RANGE: LO: 9 - 220 [V] DC HI 77 - 220 [V] DC HI 60 - 250 [V] AC			
FAIL-SAFE FUNCTION	YES			
TYPE OF CASING	O	S	O	S
HOUSING IP	IP66			
DIMENSIONS	190x150x77 [mm]	140x190x86 [mm]	190x150x77 [mm]	140x190x86 [mm]
WEIGHT	400 [g]	490 [g]	400 [g]	510 [g]
OPERATING TEMPERATURE	-10 UP TO 55 [°C]			
PRODUCT CODE	FSM009	FSM010	FSM011	FSM012

DIMENSIONS [mm]



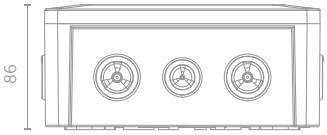
MIO 22N, MIO 44N Input / output module



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 equiped 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

FEATURE	INPUT / OUTPUT MODULE			
TYPE	MIO 22n		MIO 44n	
SUPPLY VOLTAGE	24 [V] DC ± 25%			
QUIESCENT CURRENT CONSUMPTION	200 [µA]			
ALARM CURRENT CONSUMPTION	500 [µA]			
SHORT CIRCUIT INSULATOR	BUILT-IN, DOUBLE-SIDED			
NUMBER OF OUTPUTS	2		4	
TYPE OF OUTPUT	RELAY OUTPUT (NO / NC / COM), AC CONTACT RATINGS: 8 [A], 250 [V] DC CONTACT RATINGS: 8 [A], 30 [V]			
RANGE OF MONITORED OUTPUT VOLTAGE	LO: 9 - 220 [V] DC HI 77 - 220 [V] DC HI 60 - 250 [V] AC			
NUBER OF INPUTS	2		4	
INPUT FUNCTION	TIVE, INACTIVE, SHORT CIRCUIT, INTERRUPTION			
INPUT ACTIVATION	POTENTIAL-FREE CONTACT NO / NC			
FAIL-SAFE FUNCTION	YES			
TYPE OF CASING	O	S	O	S
HOUSING IP	IP66			
DIMENSIONS	190x150x77 [mm]	140x190x86 [mm]	190x150x77 [mm]	140x190x86 [mm]
WEIGHT	450 [g]	510 [g]	450 [g]	550 [g]
OPERATING TEMPERATURE	-10 UP TO 55 [°C]			
PRODUCT CODE	FSM013	FSM014	FSM015	FSM016

MIO 22LS Input / output module

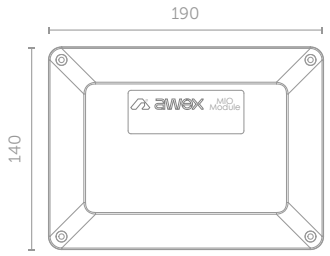
The MIO module is the input / output device intended for the co-operation with alarm devices. It can operate on the detection loops or stub detection circuits. The MIO22LS can work with acoustic, optical, acoustic-optical, voice and other types of alarm devices. The MIO modules have built-in with 2 voltage outputs with monitoring, and 2 monitored potential free inputs. Device is equiped 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.

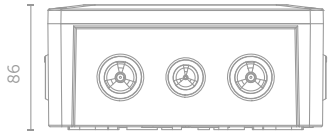


TECHNICAL DATA

FEATURE	INPUT / OUTPUT MODULE	
TYPE	MIO 22LS	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
ALARM CURRENT CONSUMPTION	200 [µA]	
POWER CONSUMPTION IN ALARM	500 [µA]	
SHORT CIRCUIT INSULATOR	BUILT-IN, DOUBLE-SIDED	
NUMBER OF OUTPUTS	2	
TYPE OF OUTPUTS	VOLTAGE OUTPUT: CONTACT RATINGS FOR DC: 6 [A], 30 [V], 180 [W]	
OUTPUT MONITORING TYPE	RESISTANCE MEASUREMENT	
NUBER OF INPUTS	2	
INPUT FUNCTION	ACTIVE, INACTIVE	
INPUT ACTIVATION	POTENTIAL-FREE CONTACT NO / NC	
FAIL-SAFE FUNCTION	YES	
TYPE OF CASING	O	S
HOUSING IP	IP66	
DIMENSIONS	150x116x67 [mm]	140x190x86 [mm]
WEIGHT	250 [g]	440 [g]
OPERATING TEMPERATURE	-10 UP TO 55 [°C]	
PRODUCT CODE	FSM007	FSM008

DIMENSIONS [mm]





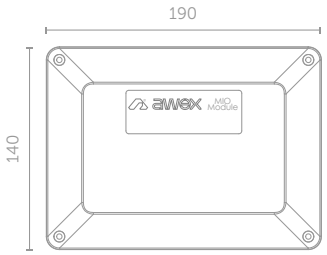
MIO 22CD

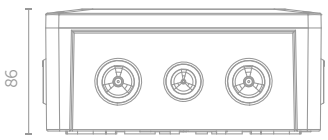
Input / output module



The MIO module is the input/output device intended for the co-operation between conventional detectors and AWEX Fire Alarm Control Unit. It can operate on the detection loops or stub detection circuits. Module can work with conventional smoke detectors, conventional multisensor detectors and conventional manual call points. MIO22 CD has 2 outputs dedicated for conventional lines and 2 monitoring inputs (NO/NC contact). Device is equiped 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.

DIMENSIONS [mm]





TECHNICAL DATA

FEATURE	INPUT / OUTPUT MODULE	
TYPE	MIO 22CD	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION	200 [µA]	
ALARM CURRENT CONSUMPTION	500 [µA]	
SHORT CIRCUIT INSULATOR	BUILT-IN, DOUBLE-SIDED	
NUMBER OF OUTPUTS	2	
RELAY CONTROL OUTPUTS	NONE	
LINE CONTINUITY MONITORING TYPE	MEASUREMENT OF RESISTANCE	
NUBER OF INPUTS	2	
INPUT FUNCTION	ACTIVE, INACTIVE	
INPUT ACTIVATION	POTENTIAL-FREE CONTACT NO / NC	
FAIL-SAFE FUNCTION	NOT APPLICABLE	
TYPE OF CASING	O	S
HOUSING IP	IP66	
DIMENSIONS	150x116x67 [mm]	140x190x86 [mm]
WEIGHT	230 [g]	530 [g]
OPERATING TEMPERATURE	-10 UP TO 55 [°C]	
PRODUCT CODE	FSM024	FSM023

LA Addressable loop powered sounder

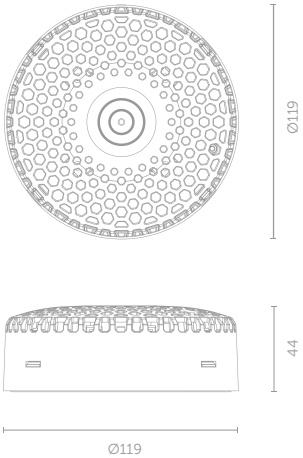
Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LA is a loop acoustic sounder which can work without any external power supply. It can work on addressable loop circuits / stub circuits of AWEX FAS system only. Maximum number of devices per loop depends on: wire type, other loop elements.



TECHNICAL DATA

FEATURE	LA	
TYPE	ACOUSTIC, ADDRESSABLE	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND LEVEL	102 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONISATION	YES	
QUIESCENT CURRENT CONSUMPTION	0,2 [mA]	
ALARM CURRENT CONSUMPTION	16 [mA]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x44 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS303	FSS310

DIMENSIONS [mm]



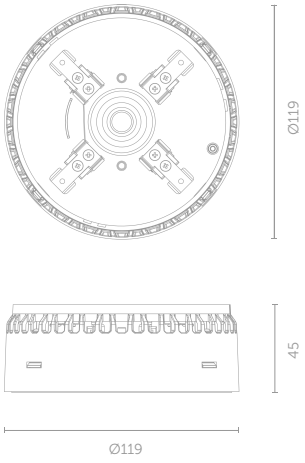
LA-D

Addressable loop powered sounder base



Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LA-D is a loop acoustic sounder 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 sounder have built-in detector base which lets use this device as sounder and detector at once.

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	LA-D	
TYPE	ACOUSTIC, ADDRESSABLE WITH DETECTOR BASE	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND LEVEL	95 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONISATION	YES	
QUIESCENT CURRENT CONSUMPTION	0,2 [mA]	
ALARM CURRENT CONSUMPTION	16 [mA]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x45 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS305	FSS312

LAP

Addressable sounder with external powering

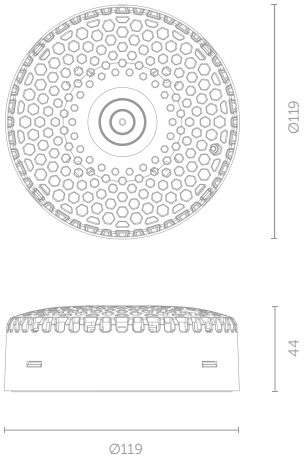
Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LAP is a loop acoustic sounder which is powered by external power supply. It can work on addressable loop circuits / stub circuits of AWEX FAS system only. Connection of power wires are mandatory.



TECHNICAL DATA

FEATURE	LAP	
TYPE	ACOUSTIC, ADDRESSABLE, EXTERNALLY POWERED	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND LEVEL	100 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONISATION	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]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x44 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS304	FSS311

DIMENSIONS [mm]



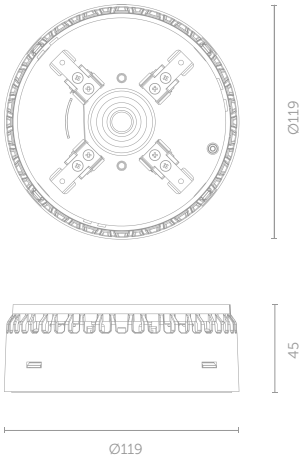
LAP-D

Addressable sounder base with external powering



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.

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	LAP-D	
TYPE	ACOUSTIC, ADDRESSABLE, EXTERNALLY POWERED WITH DETECTOR BASE	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND LEVEL	96 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONISATION	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]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x45 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS306	FSS313

LVP

Addressable voice alarm sounder with external powering

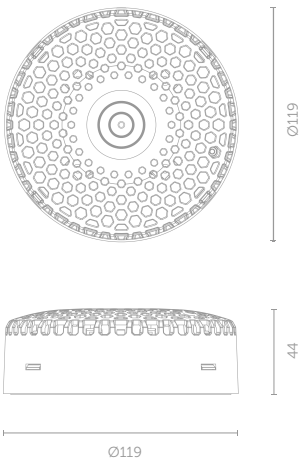
Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LVP is a loop voice sounder which is powered by external power supply. After activation acoustic sound starts and then voice announcement. Depends on configuration these devices can activate 3 diffrent comunicates. It can work on addressable loop circuits/ stub circuits of AWEX FAS system only. Connection of power wires are mandatory.



MESSAGES

VARIANT	MESSAGE
1	"ATTENTION! ATTENTION! FIRE HAS BEEN DETECTED IN THE BUILDING. PLEASE LEAVE THE BUILDING IMMEDIATELY BY THE NEAREST EMERGENCY EXIT."
2	"ATTENTION! ATTENTION! FIRE HAZARD HAS BEEN DETECTED IN THE BUILDING. PLEASE PREPARE TO EVACUATE."
3	"ATTENTION! ATTENTION! EVACUATION CANCELLED. IT IS SAFE TO RETURN TO THE BUILDING."

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	LVP	
TYPE	ACOUSTIC, ADDRESSABLE, EXTERNALLY POWERED	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND LEVEL	77 [dB]	
NUMBER OF SOUND VARIANTS	3 MESSAGES	
SYNCHRONISATION	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]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x44 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS307	FSS314

LVP-D

Addressable voice alarm sounder base with external powering

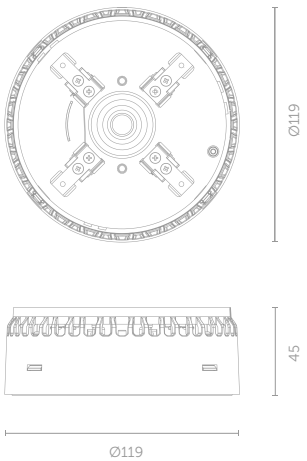


Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LVP-D is a loop voice sounder which is powered by external power supply. After activation acoustic sound starts and then voice announcement. Depends on configuration these devices can activate 3 different communicates. 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.

MESSAGES

VARIANT	MESSAGE
1	"ATTENTION! ATTENTION! FIRE HAS BEEN DETECTED IN THE BUILDING. PLEASE LEAVE THE BUILDING IMMEDIATELY BY THE NEAREST EMERGENCY EXIT."
2	"ATTENTION! ATTENTION! FIRE HAZARD HAS BEEN DETECTED IN THE BUILDING. PLEASE PREPARE TO EVACUATE."
3	"ATTENTION! ATTENTION! EVACUATION CANCELLED. IT IS SAFE TO RETURN TO THE BUILDING."

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	LVP-D	
TYPE	ACOUSTIC, ADDRESSABLE, EXTERNALLY POWERED WITH DETECTOR BASE	
SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAXIMUM SOUND INTENSITY	77 [dB]	
NUMBER OF SOUND VARIANTS	3 MESSAGES	
SYNCHRONISATION	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]	
HOUSING IP	IP21C	
OPERATING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION	
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x45 [mm]	
WEIGHT	200 [g]	
CASING COLOUR	WHITE	RED
PRODUCT CODE	FSS308	FSS315

LA 65

Addressable loop powered sounder

Sounder is designed for alarming people when fire hazard is detected to let them evacuate. LA 65 is a loop acoustic sounder 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. Because of high housing tightness rating, device can be installed outdoor.





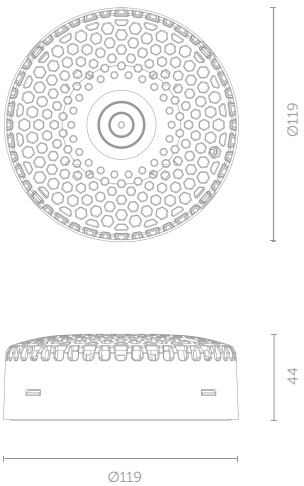


TECHNICAL DATA

FEATURE	LA 65
TYPE	ACOUSTIC, OUTDOOR, ADDRESSABLE
SUPPLY VOLTAGE	24 [V] DC ± 25%
MAXIMUM SOUND LEVEL	102 [dB]
NUMBER OF SOUND VARIANTS	32
SYNCHRONISATION	YES
QUIESCENT CURRENT CONSUMPTION	0,2 [mA]
ALARM CURRENT CONSUMPTION	16 [mA]
HOUSING IP	* IP65
OPERATING TEMPERATURE	-25 UP TO 55 [°C]
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION
DIMENSIONS (DIAMETER x HEIGHT)	Ø119x44 [mm]
WEIGHT	250 [g]
CASING COLOUR	RED
PRODUCT CODE	FSS333

* IP rating is over scope of EN54-3

DIMENSIONS [mm]





LB Addressable loop powered beacon

Addressable loop power beacon is a device designed for indicating fire hazard in the building. When it is activated, it generates blinking red powerful light. Visual indication of fire is useful especially in the spaces where background of volume is high. Then optical alert is the only way to evacuate people.



LB BEACON CHARACTERISTICS

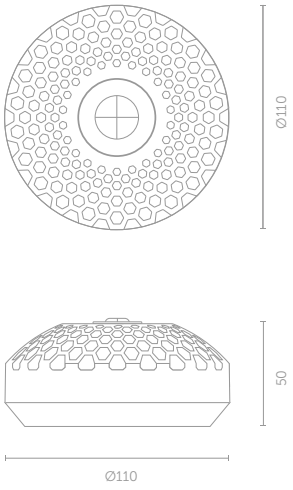
- optical alarm signaling
- monitoring of the signaling level
- loop powered device
- low profile housing
- possible to use with LA-D, LAP-D, LVP sirens
- built in, double sided, short circuit isolator
- works in addressable systems

TECHNICAL DATA

FEATURE	ADDRESSABLE LOOP POWERED BEACON LB
TYPE	BEACON, ADDRESSABLE
SUPPLY VOLTAGE	24 [V] DC] ±25%
QUIESCENT CURRENT CONSUMPTION	0,2 [mA]
ALARM CURRENT CONSUMPTION	2 [mA]
FLASHING FREQUENCY	1 [Hz]
LIGHT PATTERN	32 [ms]
LIGHT COLOUR	RED
SHORT CIRCUIT ISOLATOR	YES
HOUSING IP	IP20
OPERATING TEMPERATURE	-25 UP TO 55 [°C]
ADDMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION
DIMENSIONS (DIAMETER x HEIGHT)	Ø110x50 [mm]
WEIGHT	200 [g]
HOUSING COLOUR	WHITE
PRODUCT CODE	FSS334

* light parameters are not comply with EN54-23

DIMENSIONS [mm]



LB 65 Addressable loop powered beacon

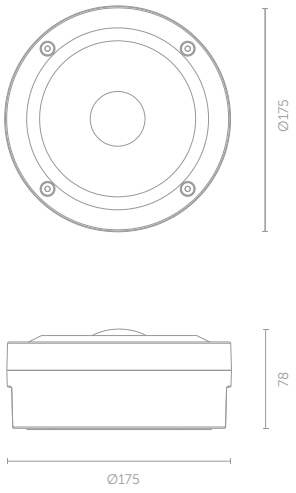


Addressable loop power beacon is a device designed for indicating fire hazard in the building. When it is activated, it generates blinking red powerful light. Visual indication of fire is useful especially in the spaces where background of volume is high. Then optical alert is the only way to evacuate people. Because of high housing tightness rating, device can be installed outdoor.

LB BEACON CHARACTERISTICS

- optical alarm signaling
- low power consumption
- outdoor installation
- red LED colour
- works in addressable systems
- loop powered device
- built in, double sided, short circuit isolator
- low-profile housing

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	LB 65
TYPE	BEACON, OUTDOOR, ADDRESSABLE
SUPPLY VOLTAGE	24 [V] DC] ± 25%
QUIESCENT CURRENT CONSUMPTION	0,2 [mA]
ALARM CURRENT CONSUMPTION	2 [mA]
FLASHING FREQUENCY	1 [Hz]
LIGHT PATTERN	32 [ms]
LIGHT COLOUR	RED
SHORT CIRCUIT ISOLATOR	YES
HOUSING IP	IP65
OPERATING TEMPERATURE	-25 UP TO 55 [°C]
ADDMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C] WITHOUT CONDENSATION
DIMENSIONS (DIAMETER x HEIGHT)	Ø175x78 [mm]
WEIGHT	560 [g]
HOUSING COLOUR	WHITE
PRODUCT CODE	FSS335

* light parameters are not comply with EN54-23

Conventional sounder

Sounder is designed for alarming people when fire hazard is detected to let them evacuate. Conventional sounders can be activated by turning on power supply. Device have 32 built-in sound patterns. Sound volume can be adjusted in 3 levels.

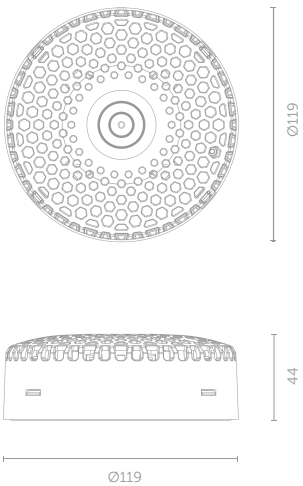


TECHNICAL DATA

FEATURE	CA	
TYPE	ACOUSTIC, CONVENTIONAL	
POWER SUPPLY VOLTAGE	24 [V] DC ± 25%	
MAX. SOUND LEVEL	99 [dB]	
NUMBER OF SOUND PATTERNS	32	
SYNCHRONIZATION	YES	
QUIESCENT CURRENT CONSUMTION	0 [mA]	
ALARM CURRENT CONSUMPTION	25 [mA] *	
HOUSING IP	IP21C	
WORKING TEMPERATURE	-25 UP TO 55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C]	
DIMENSIONS (DIAMETERxHEIGHT)	Ø119x44 [mm]	
WEIGHT	200 [g]	
HOUSING COLOUR	WHITE	RED
PRODUCT CODE	FSS309	FSS316

* current consumption at max volume level

DIMENSIONS [mm]

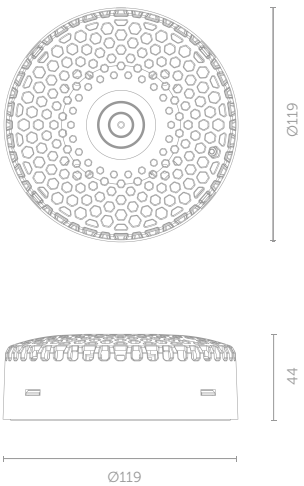


CA 65 Conventional sounder



Sounder is designed for alarming people when fire hazard is detected to let them evacuate. Conventional sounders can be activated by turning on power supply. Device have 32 built-in sound patterns. Sound volume can be adjusted in 3 levels. Because of high housing tightness rating, device can be installed outdoor.

DIMENSIONS [mm]



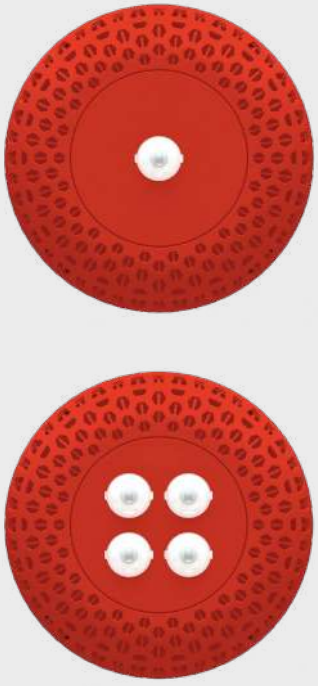
TECHNICAL DATA

FEATURE	CA 65
TYPE	ACOUSTIC, CONVENTIONAL
POWER SUPPLY VOLTAGE	24 [V] DC ± 25%
MAX. SOUND LEVEL	99 [dB]
NUMBER OF SOUND PATTERNS	32
SYNCHRONIZATION	YES
QUIESCENT CURRENT CONSUMTION	0 [mA]
ALARM CURRENT CONSUMPTION	25 [mA] *
HOUSING IP	** IP65
WORKING TEMPERATURE	-25 UP TO 55 [°C]
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C]
DIMENSIONS (DIAMETERxHEIGHT)	Ø119x44 [mm]
WEIGHT	200 [g]
HOUSING COLOUR	RED
PRODUCT CODE	FSS332

* current consumption at max volume level
** IP rating is over scope of EN54-3

Conventional acoustic-optical sounder

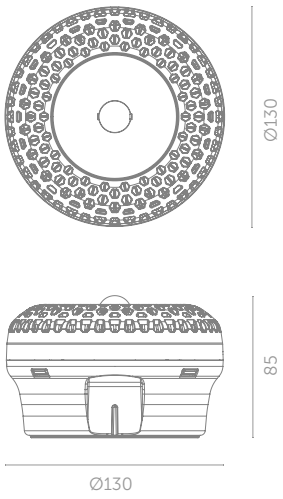
Conventional acoustic-optical sounder is designed for alarming people when fire hazard is detected to let them evacuate. CAO is activated by turning on power supply. Depends on number of LEDs, sounders has different optical coverage which details are listed below. Alarm volume can be adjusted in 3 ranges. Devices can work in synchronized mode.



TECHNICAL DATA

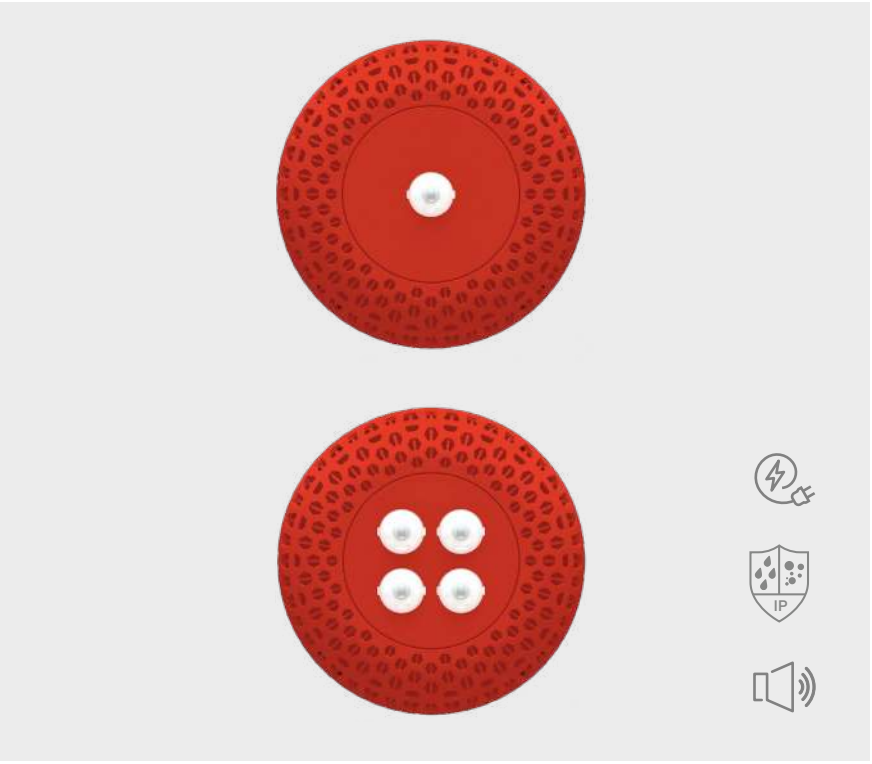
FEATURE	CAO	
POWER SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION (PSU)	0 [mA]	
MAX. SOUND LEVEL	99 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONIZATION	YES	
HOUSING IP	IP33C	
WORKING TEMPERATURE	-25 UP TO +55 [°C]	
ADDMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C]	
DIMIENSIONS (DIAMETERxHEIGHT)	Ø130x85 [mm]	
HOUSING COLOUR	RED	
OPTICAL SIGNALIZATION	1 OR 4 LEDs, RED LIGHT COLOUR	
WEIGHT	350 [g]	
OPTICAL COVERAGE (DxH)	1xLED	4xLED
	5x4 [m]	11x8 [m]
ALARM CURRENT CONSUMPTION (PSU)	60 [mA]	140 [mA]
PRODUCT CODE	FSS324	FSS325

DIMENSIONS [mm]



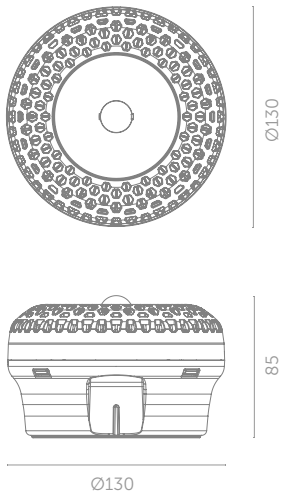
CAO 65

Conventional acoustic-optical sounder



Conventional acoustic-optical siren is designed for alarming people when fire hazard is detected to let them evacuate. CAO is activated by turning on power supply. Depends on number of LEDs, sirens has different optical coverage which details are listed below. Alarm volume can be adjusted in 3 ranges. Devices can work in synchronized mode. Because of high housing tightness rating, device can be installed outdoor.

DIMENSIONS [mm]



TECHNICAL DATA

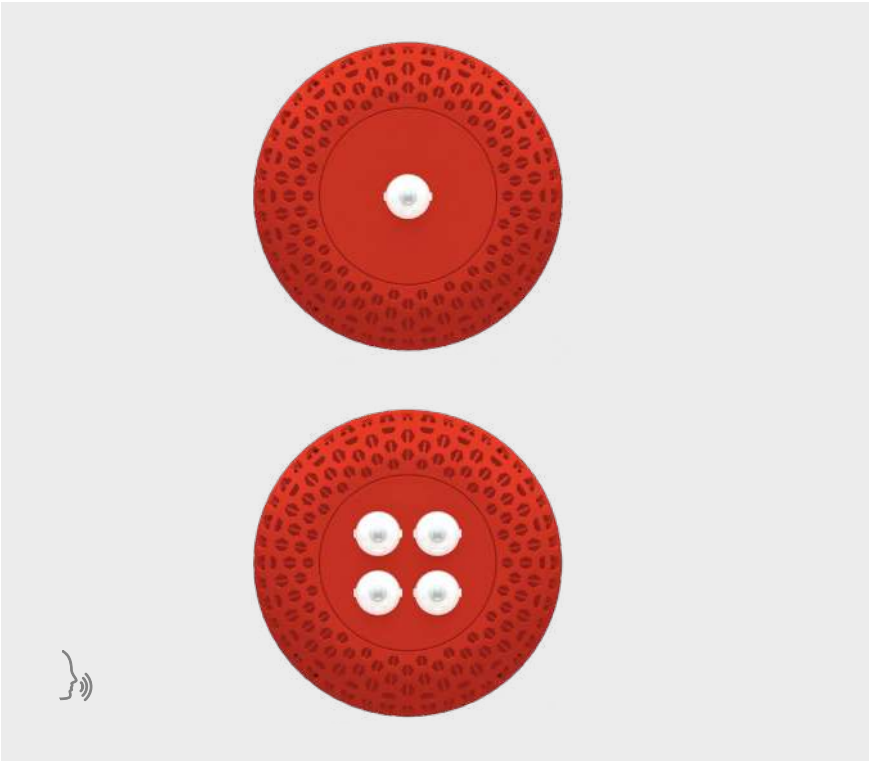
FEATURE	CAO 65	
POWER SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION (PSU)	0 [mA]	
MAX. SOUND LEVEL	99 [dB]	
NUMBER OF SOUND VARIANTS	32	
SYNCHRONIZATION	YES	
HOUSING IP	* IP65	
WORKING TEMPERATURE	-25 UP TO +55 [°C]	
ADDMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C]	
DIMIENSIONS (DIAMETERxHEIGHT)	Ø130x85 [mm]	
HOUSING COLOUR	RED	
OPTICAL SIGNALIZATION	1 OR 4 LEDs, RED LIGHT COLOUR	
WEIGHT	350 [g]	
OPTICAL COVERAGE (DxH)	1xLED	4xLED
	5x4 [m]	11x8 [m]
ALARM CURRENT CONSUMPTION (PSU)	60 [mA]	140 [mA]
PRODUCT CODE	FSS330	FSS331

* IP rating is over scope of EN54-3 and EN54-23

CVO

Conventional acoustic-optical voice alarm sounder

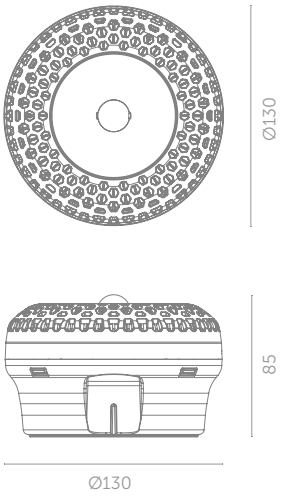
Conventional acoustic-optical sounder is designed for alarming people when fire hazard is detected to let them evacuate. CVO is activated by turning on power supply. Depends on number of LEDs, devices has different optical coverage which details are listed bellow. Sound volume is adjustable. Devices can work in synchronized mode. Depends on way of power supply sounder can generate 3 different announcement.



TECHNICAL DATA

FEATURE	CVO	
POWER SUPPLY VOLTAGE	24 [V] DC ± 25%	
QUIESCENT CURRENT CONSUMPTION (PSU)	0 [mA]	
MAX. VOICE ANNOUNCEMENT VOLUME	84 [dB]	
MAX. SIREN VOLUME	95 [dB]	
NUMBER OF ANNOUNCEMENTS	3	
SYNCHRONIZATION	YES	
IP HOUSING	IP21C	
WORKING TEMPERATURE	-25 UP TO +55 [°C]	
ADMISSIBLE RELATIVE HUMIDITY	95% AT A TEMP. 35 [°C]	
DIMENSIONS (DIAMETERxHEIGHT)	Ø 130 x 85 [mm]	
HOUSING COLOUR	RED	
OPTICAL SIGNALLING	1 OR 4 LEDs, RED COLOUR	
WEIGHT	450 [g]	
OPTICAL COVERAGE AREA (DxH)	1xLED	4xLED
	5x4 [m]	11x8 [m]
ALARM CURRENT CONSUMPTION (PSU)	270 [mA]	340 [mA]
PRODUCT CODE	FSS326	FSS327

DIMENSIONS [mm]



SAOZ-PK2

Conventional outdoor acoustic-optical sounder

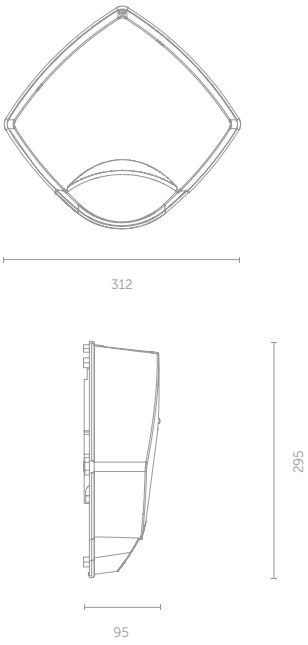


The SAOZ-Pk acoustic-optical alarm device is designed to emit fire alarm warning, alternately with an acoustic signal and an optical (visual) signal, both in outdoor and indoor (internal and external) fire alarm systems. The alarm device consists of a cover made of non-combustible material, an electronic 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 10 dB. In addition, the signaling device also allows to build networks of alarm devices operating synchronously.

FEATURES OF THE EXTERNAL CONVENTIONAL ACOUSTIC-OPTICAL SIREN SAOZ-PK2

- indoor and outdoor installation
- adjustable sound level
- 4 sound patterns
- operation in the sounder synchronic network

DIMENSIONS [mm]



TECHNICAL DATA

FEATURE	SAOZ-PK2
SUPPLY VOLTAGE	24 [V] DC ± 30%
QUIESCENT CURRENT CONSUMPTION	0 [mA]
ALARM CURRENT CONSUMPTION	<100 [mA]
SOUND LEVEL AT A DISTANCE OF 1 m	>110 [dB]
DIMENSIONS	312x295x95 [mm]
WEIGHT	960 [g]
PRODUCT CODE	FSS016

LOOP TESTER

The Loop Tester is a tool designated for people involved in the commissioning and diagnostics of the FAS Fire Alarm System. The device is fitted in a compact case, making it easy to carry. It has a built-in rechargeable battery that allows it to operate for several hours without AC power connected. Functionally, the tester is particularly suitable for situations in which the installation is divided for few stages. It allows each individual loop to be addressed and checked, indicating current leakage, breaks and short circuits in the wiring. It simplifies the final configuration process, which is often delayed by the need to eliminate faults on the loops.



TOUCH SCREEN

7” touch screen
with intuitive menu

WEB SERVER

handling from any
Internet browser

DC POWERING

built-in battery

DIAGNOSTICS

indication of: short-circuits,
interruptions, earth faults

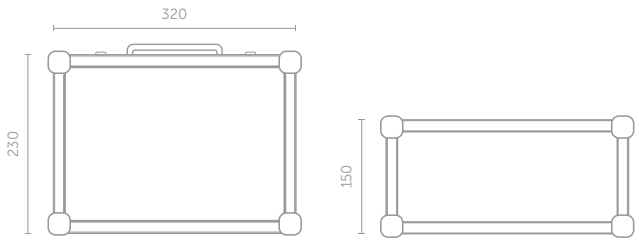
FUSE

AC and DC
safety protection

TECHNICAL DATA

FEATURE	LOOP TESTER
AC SUPPLY VOLTAGE	230 [V]
DC BATERRY CAPACITY	3.7 [Ah]
OUTPUT VOLTAGE OF THE DIAGNOSTIC SOCKET	24 [V] DC
DIAGNOSTIC CONNECTION OF THE LOOP	YES, 1 LOOP
SD CARD SLOT	YES
RJ45 SOCKET	YES
DISPLAY	TOUCH SCREEN, 7 INCH
SHORT CIRCUIT DETECTION	YES
WIRE BREAK DETECTION	YES
AUTOMATIC DETECTION OF EARTH FAULT IN A (-) WIRE	YES
CURRENT MEASUREMENT AT THE BEGINNING AND END OF THE LOOP	YES [A]
VOLTAGE MEASUREMENT AT THE BEGINNING AND END OF THE LOOP	YES [V]
(+) WIRE OF THE LOOP RESISTANCE TESTING	YES [Ω]
PROTECTION ON THE AC POWER SUPPLY	YES, FUSE
PROTECTION ON THE DC POWER SUPPLY	YES, FUSE 3 [A]

DIMENSIONS [mm]



FEATURES OF THE LOOP TESTER

- compact size
- detection and addressing from the beginning or end of a loop without rewiring
- precise fault location
- battery power supply

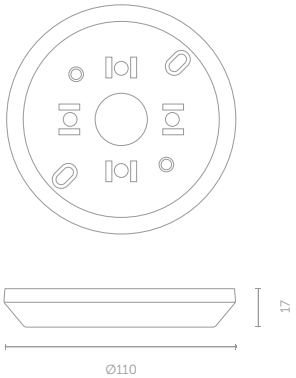
accessories



DETECTOR BASE

CODE: FSD007 WHITE
CODE: FSD011 BLACK

DIMENSIONS [mm]

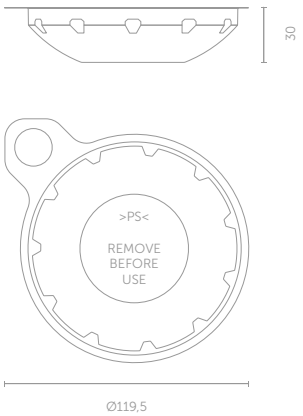




SET OF DUST COVER
(10 PCS)

CODE: FSD008

DIMENSIONS [mm]

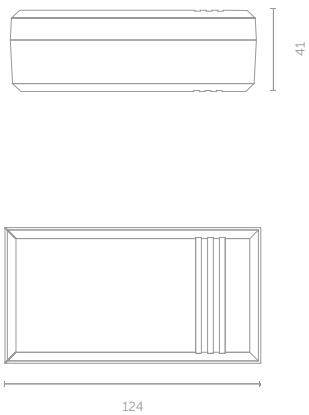




MIO MODULES TESTER

CODE: FSA001

DIMENSIONS [mm]



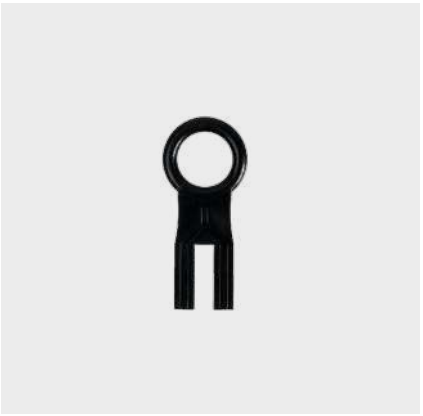


SET OF GLASSES FOR ROP 65
(10 PCS)

CODE: FSR004

DIMENSIONS [mm]

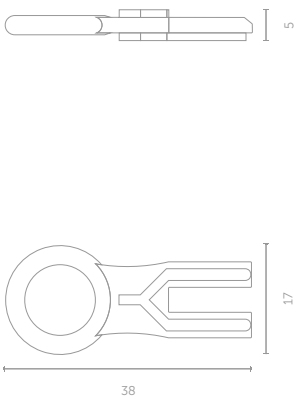




SET OF KEYS FOR ROP 21
(10 PCS)

CODE: FSR006

DIMENSIONS [mm]

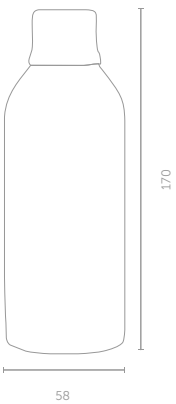




TESTING GAS

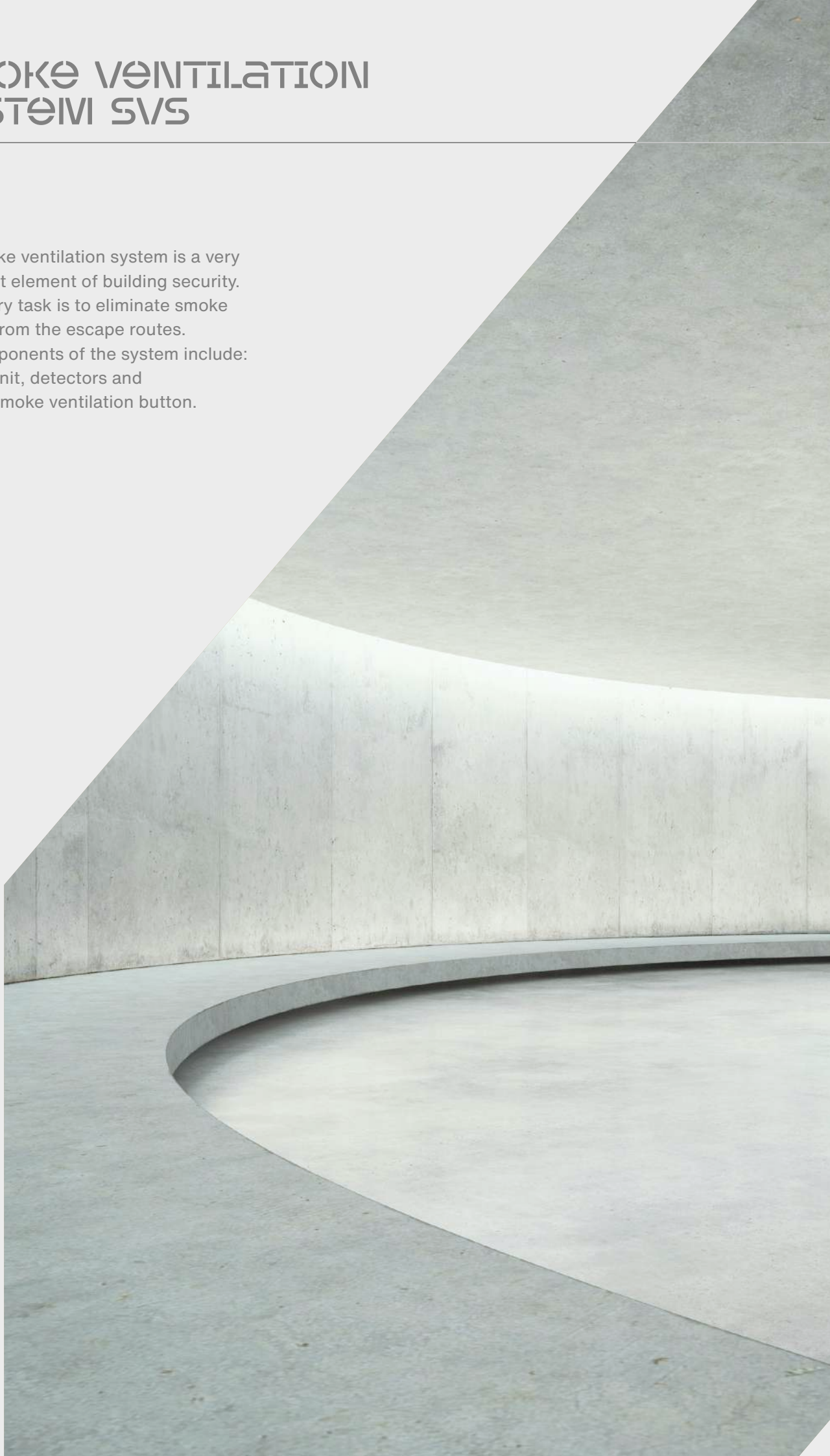
CODE: FSA002

DIMENSIONS [mm]



SMOKE VENTILATION SYSTEM SVS

The smoke ventilation system is a very important element of building security. Its primary task is to eliminate smoke logging from the escape routes. The components of the system include: control unit, detectors and manual smoke ventilation button.





According to general systems working scenarios, lifts should stop working during a fire. Hence, the stairwells become the only escape route. Smoke logging in this space is a serious impediment to the evacuation itself and to rescue operations. Therefore, for safety reasons, the ventilation of stairwells is crucial.

SVS Control unit

The control unit for smoke ventilation systems, type SVS, is part of the smoke and heat control system. It is designed to control the actuators that remove smoke from the escape routes. The control unit may be used in various types of building because of its modularity.



CE

EUROPEAN CERTIFICATION

the product meets the requirements of the European Directive

CNBOP-PIB

CERTIFICATE OF APPROVAL

the product has a Certificate of Approval

FEATURES OF THE SVS CONTROL UNIT

- modularity of the control unit
- up to 8 control outputs 24V DC
- maximum relay output load 8 [A]
- compliance with EN 12101-10
- cable monitoring
- addressable interaction with FAS
- universal relay outputs
- control of main and backup power source
- event report

WEB SERVER

handling from any Internet browser

SMART VISIO

compatible with the SMART VISIO platform

APP

smartphone app for configuration and diagnostics

BACnet ready

COMPATIBLE WITH BACNET

BACnet for communicating with the BMS

TECHNICAL DATA

FEATURE	SVS CONTROL UNIT
TYPE	MODULAR
SUPPLY VOLTAGE	230 [V] AC
OUTPUT VOLTAGE RANGE	12 UP TO 34 [V] DC
BATTERIES	LEAD-ACID BATTERIES 2x7.2 [Ah] / 12 [Ah] AGM
INPUT/OUTPUT CABLE CROSS SECTIONS	MAXIMUM 4.5 [mm²]
MAXIMUM NUMBER OF POWERED RELAY OUTPUTS	8
MAXIMUM NUMBER OF UNIVERSAL RELAY OUTPUTS	16
MAXIMUM NUMBER OF MONITORING INPUTS	16
MAXIMUM NUMBER OF VENTILATION BUTTONS PER LINE	8
MAXIMUM NUMBER OF DETECTORS PER LINE	16
MAXIMUM NUMBER OF VENTILATION SWITCHES	8
MAXIMUM NUMBER OF OUTPUTS FOR ELECTRIC STRIKES	16
EVENT COUNTER	UP TO 10 000
LAN CONNECTOR	YES
CASING COLOUR	RAL 7030
CASING MATERIAL	POWDER PAINTED STEEL
HOUSING IP	IP30

DIMENSIONS [mm]





ALARM INPUT

ALARM OUTPUT

FAULT OUTPUT

WEATHER STATION



16

up to 16 detectors





8

up to 16 detectors



8A

maximum current

DC

8

up to 8 ventilation switches

SVS Control unit table

PRODUCT CODE	SVS004	SVS005	SVS010	SVS011	SVS015	SVS016	SVS018	SVS019
SVS CONTROL PANEL KIT	CONTROL UNIT 8A/1G, SVSC	CONTROL UNIT 8A/1G, SVSC+1xVMIO	CONTROL UNIT 8A/2G, SVSC+1xVME	CONTROL UNIT 8A/2G, SVSC+1xVME +1xVMIO	CONTROL UNIT 16A/2G, SVSC+1xVME	CONTROL UNIT 16A/2G, SVSC+1xVME +1xVMIO	CONTROL UNIT 24A/3G, SVSC+2xVME	CONTROL UNIT 24A/3G, SVSC+2xVME +1xVMIO
POWER SUPPLY VOLTAGE	230 [V] AC							
VOLTAGE FREQUENCY	50/60 [Hz]							
POWER OUTPUT VOLTAGE	24 [V] DC ± 25%							
VOLTAGE TRANSFORMER TYPE	200 [W] x1	200 [W] x1	200 [W] x1	200 [W] x1	400 [W] x1	400 [W] x1	400 [W] x1, 200 [W] x1	400 [W] x1, 200 [W] x1
BATTERIES	2x7.2 [Ah]	2x12 [Ah]	2x12 [Ah]	2x12 [Ah]	2x12 [Ah]	2x12 [Ah]	4x12 [Ah]	4x12 [Ah]
MAXIMUM CROSS-SECTION OF OUTPUT/INPUT CABLES	4.5 [mm²]							
LAN CONNECTOR	YES							
BLUETOOTH COMMUNICATION	YES							
HOUSING MATERIAL	POWDER-COATED STEEL							
HOUSING COLOUR	RAL 7030							
HOUSING IP RATING	IP30							
OPERATING TEMPERATURE RANGE	-5 UP TO +40 [°C]							
HOUSING DIMENSIONS	400x400x174 [mm]	400x400x174 [mm]	400x400x174 [mm]	630x480x174 [mm]	400x400x174 [mm]	630x480x174 [mm]	630x480x174 [mm]	630x480x174 [mm]
NUMBER OF POWERED CONTROL OUTPUTS	1	1	2	2	2	2	3	3
MAXIMUM LOAD OF CONTROL OUTPUTS	8 [A] (1x8 [A])	8 [A] (1x8 [A])	8 [A] (2x4 [A])	8 [A] (2x4 [A])	16 [A] (2x8 [A])	16 [A] (2x8 [A])	24 [A] (3x8 [A])	24 [A] (3x8 [A])
NUMBER OF DETECTOR LINES	1	1	2	2	2	2	3	3
MAXIMUM NUMBER OF DETECTORS	16 (1x16)	16 (1x16)	32 (2x16)	32 (2x16)	32 (2x16)	32 (2x16)	48 (3x16)	48 (3x16)
NUMBER OF MCP (MANUAL CONTROL POINT) BUTTON LINES	1	1	2	2	2	2	3	3
MAXIMUM NUMBER OF MCP BUTTONS	8 (1x8)	8 (1x8)	16 (2x8)	16 (2x8)	16 (2x8)	16 (2x8)	24 (3x8)	24 (3x8)
NUMBER OF VENTILATION PUSH BUTTON LINES	1	1	2	2	2	2	3	3
MAXIMUM NUMBER OF VENT PUSH BUTTONS	8 (1x8)	8 (1x8)	16 (2x8)	16 (2x8)	16 (2x8)	16 (2x8)	24 (3x8)	24 (3x8)
NUMBER OF ADDITIONAL POWERED OUTPUTS 24 [V] DC 0,5 [A]	0	2	0	2	0	2	0	2
NUMBER OF RELAY OUTPUTS NO/NC 5 [A]	0	2	0	2	0	2	0	2
INPUTS FOR POTENTIAL-FREE CONTACT	0	2	0	2	0	2	0	2
WEATHER MODULE CONNECTOR-WEATHER	YES							
FAS LOOP INTERFACE-AWEX FAS	YES							
NO/NC INPUT-ALARM IN	YES							
RELAY OUTPUT-OUT FALUT	YES							
RELAY OUTPUT-OUT ALARM	YES							

SVS021	SVS022	SVS024	SVS025	SVS027	SVS028	SVS029	SVS030	SVS031
CONTROL UNIT 32A/4G, SVSC+3xVME	CONTROL UNIT 32A/4G, SVSC+3xVME +1x VMIO	CONTROL UNIT 40A/5G, SVSC+4xVME	CONTROL UNIT 40A/5G, SVSC+4xVME +1xVMIO	CONTROL UNIT 48A/6G, SVSC+5xVME	CONTROL UNIT 48A/6G, SVSC+5xVME +1xVMIO	CONTROL UNIT 56A/7G, SVSC+6xVME	CONTROL UNIT 56A/7G, SVSC+6xVME +1xVMIO	CONTROL UNIT 64A/8G, SVSC+7xVME
230 [V] AC								
50/60 [Hz]								
24 [V] DC ± 25%								
400 [W] x2	400 [W] x2	400 [W] x2, 200 [W] x1	400 [W] x2, 200 [W] x1	400 [W] x3	400 [W] x3	400 [W] x3, 200 [W] x1	400 [W] x4	400 [W] x4
4x12 [Ah]	4x12 [Ah]	6x12 [Ah]	6x12 [Ah]	6x12 [Ah]	6x12 [Ah]	8x12 [Ah]	8x12 [Ah]	8x12 [Ah]
4,5 [mm²]								
YES								
YES								
POWDER-COATED STEEL								
RAL 7030								
IP30								
-5 UP TO +40 [°C]								
630x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]	1260x480x174 [mm]
4	4	5	5	6	6	7	7	8
32 [A] (4x8 [A])	32 [A] (4x8 [A])	40 [A] (5x8 [A])	40 [A] (5x8 [A])	48 [A] (6x8 [A])	48 [A] (6x8 [A])	56 [A] (7x8 [A])	56 [A] (7x8 [A])	64 [A] (8x8 [A])
4	4	5	5	6	6	7	7	8
64 (4x16)	64 (4x16)	80 (5x16)	80 (5x16)	96 (6x16)	96 (6x16)	112 (7x16)	112 (7x16)	128 (8x16)
4	4	5	5	6	6	7	7	8
32 (4x8)	32 (4x8)	40 (5x8)	40 (5x8)	48 (6x8)	48 (6x8)	56 (7x8)	56 (7x8)	64 (8x8)
4	4	5	5	6	6	7	7	8
32 (4x8)	32 (4x8)	40 (5x8)	40 (5x8)	48 (6x8)	48 (6x8)	56 (7x8)	56 (7x8)	64 (8x8)
0	2	0	2	0	2	0	2	0
0	2	0	2	0	2	0	2	0
0	2	0	2	0	2	0	2	0
YES								
YES								
YES								
YES								
YES								

FIRE DETECTOR

Fire detectors are used to detect a fire in its early stages. The smoke detection process is carried out by means of a photodiode array with the use of the light scattering phenomenon. The detectors operate on monitored conventional surveillance lines. The detectors have a visible triggering indicator that allows easy and quick location of the place of sensor triggering.

FEATURES OF FIRE DETECTOR OSD23

- degree of sensitivity according to EN 54
- suitability for detection of fires: TF1, TF2, TF3, TF4, TF5
- operation in conventional systems
- restored surveillance status
- signaling of surveillance

FEATURE	FIRE DETECTOR OSD23
SUPPLY VOLTAGE	18 [V] (12-28 [V])
QUIESCENT CURRENT CONSUMPTION (AVERAGE)	35 [µA]
ALARM CURRENT CONSUMPTION	18 [mA] (AT 18 [V])
OPERATING TEMPERATURE	-22 UP TO +55 [°C]
RELATIVE HUMIDITY	95% at 40 [°C]
WEIGHT	150 [g]
DIMENSIONS	107x63 [mm]

FIRE DETECTOR OSD23



FEATURES OF FIRE DETECTOR ActiV C4416

- high quality
- soiling compensation
- duplicated status indicator
- wide operating voltage range
- locking the detector in its socket

FEATURE	FIRE DETECTOR ActiV C4416
SUPPLY VOLTAGE	24 [V] (6-33 [V])
QUIESCENT CURRENT CONSUMPTION (AVERAGE)	35 [µA]
ALARM CURRENT CONSUMPTION	19 [mA] (AT 18 [V])
OPERATING TEMPERATURE	-22 UP TO +55 [°C]
RELATIVE HUMIDITY	95% AT 40 [°C]
WEIGHT	99 [g]
DIMENSIONS	102x37 [mm]

FIRE DETECTOR ActiV C4416



VRPO, VRPO-B Smoke ventilation button

The primary function of the VRPO and VRPO-B smoke ventilation buttons is to transmit information on smoke logging to the control panel. The person who has noticed a fire manually activates the device. The manual smoke ventilation button may operate only on control lines controlled by the SVS Awex smoke ventilation control unit.



SMOKE VENTILATION BUTTON VRPO

FEATURES OF VRPO

- restored surveillance state
- alarm reset button
- LEDs indicating: activation / standby / fault
- indoor use

FEATURE	VRPO
TYPE OF SMOKE VENTILATION BUTTON	B
SUPPLY VOLTAGE	24 [V] DC ± 25%
QUIESCENT CURRENT CONSUMPTION	7 [mA]
ALARM CURRENT CONSUMPTION	14 [mA]
ACOUSTIC SIGNALLING	NONE
ASSEMBLY	FOR INDOOR USE
HOUSING IP	IP30
OPERATING TEMPERATURE	-10 UP TO 55 [°C]
CASING COLOUR	ORANGE (RAL 2011)
DIMENSIONS	91x99x49 [mm]



SMOKE VENTILATION BUTTON VRPO-B

FEATURES OF VRPO-B

- restored surveillance state
- alarm reset button
- alarm mute key
- LEDs indicating: activation / standby / fault
- indoor use

FEATURE	VRPO
TYPE OF SMOKE VENTILATION BUTTON	B
SUPPLY VOLTAGE	24 [V] DC ± 25%
QUIESCENT CURRENT CONSUMPTION	7 [mA]
ALARM CURRENT CONSUMPTION	22 [mA]
ACOUSTIC SIGNALLING	YES, BUZZER
ASSEMBLY	FOR INDOOR USE
HOUSING IP	IP30
OPERATING TEMPERATURE	-10 UP TO 55 [°C]
CASING COLOUR	ORANGE (RAL 2011)
DIMENSIONS	91x99x49 [mm]

VENTILATION SWITCH

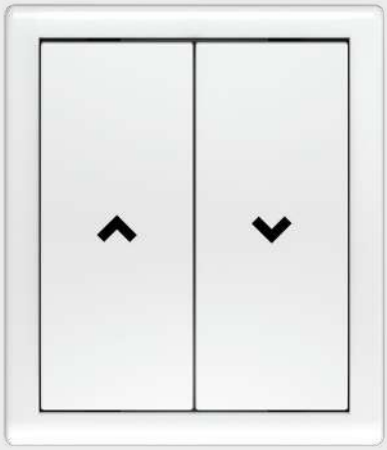
If there is a need to ventilate the staircase, the user can open the smoke dampers by manually activating this switch. By means of the configuration of the control unit, it is possible to program the opening angle, the time and the time of day at which the smoke flap is to be opened.

FEATURES OF THE VENTILATION SWITCH P

- compact housing
- ventilation schedule
- up to 8 buttons per line
- programmable activation

FEATURE	VENTILATION SWITCH P
SUPPLY VOLTAGE	16-34 [V] DC
MAX CURRENT LOAD	10 [A]
HOUSING IP	IP20
CASING MATERIAL	PLASTIC
DIMENSIONS	60x60x37 [mm]
WEIGHT	60 [g]

VENTILATION SWITCH P



FEATURES OF THE VENTILATION SWITCH M

- metal housing
- protection against unauthorized operation
- surface mounting

FEATURE	VENTILATION SWITCH M
OPERATING VOLTAGE	16-34 [V] DC
MAX CURRENT LOAD	5 [A]
HOUSING IP	IP30
CASING MATERIAL	METAL
DIMENSIONS	74x74x46 [mm]
WEIGHT	360 [g]

VENTILATION SWITCH M





WEATHER MODULE

The weather module is an external device connected to the control unit. It is designed for blocking the ventilation function during strong wind or precipitation conditions. Also in case of dangerous weather conditions the unit will close previously opened dampers.



FEATURES OF THE WEATHER MODULE

- heated rain sensor
- optional wind sensor
- high degree of IP protection
- mounting accessories

TECHNICAL DATA

FEATURE	WEATHER MODULE
OPERATING VOLTAGE	16-32 [V] DC
CURRENT CONSUMPTION	15 [mA]
HOUSING IP	IP65
CASING MATERIAL	POLYCARBONATE
DIMENSIONS	136x136x67 [mm]

ACCESSORIES

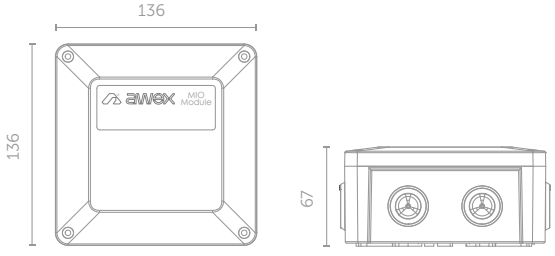


WIND DIRECTION SENSOR



WIND SPEED SENSOR

DIMENSIONS [mm]



VMD

Sequence door opening module for smoke ventilation systems



Double-leaf doors are often used in diverse types of facilities. In an alarm situation, it is difficult to open or close them automatically because of the need to maintain the correct sequence of opening / closing the individual door leaves.
The VMD module allows this process to be automated. Additionally, the device has 2 relay outputs dedicated to access control or electric door openers.

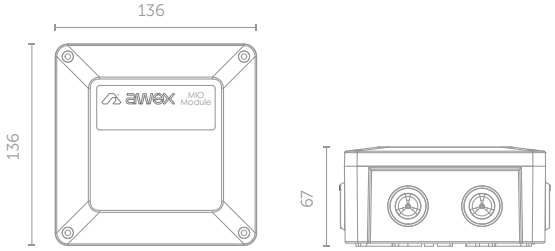
FEATURES OF THE SEQUENCE DOOR OPENING MODULE

- compatible with the M-BOX fire protection installation box
- configurable delay time
- additional auxiliary relays
- up to 6 [A] per leaf

TECHNICAL DATA

FEATURE	SEQUENCE DOOR OPENING MODULE - VMD
OPERATING VOLTAGE	16-34 [V] DC
MAX. CURRENT PER LEAF	6 [A] INDUCTIVE 3 [A] RESISTANCE
AUILIARY RELAYS	2
LOAD CAPACITY OF AUXILIARY RELAYS	6 [A]

DIMENSIONS [mm]



POWER SUPPLY FOR FIRE PROTECTION EQUIPMENT

The AWEX Fire Safety Systems contains also power supply unit for fire protection systems. Because of their very important role, devices which are part of fire alarm or heat and control systems needs to be powered continuously. This functionality is ensured by the EN 54-4 and 12101-10 compliant.





In the event of an AC power failure, the unit immediately and automatically switches over to a DC battery backup power supply. The power of the PSU is determined by the current consumption of their connected devices. Next step is to select an appropriate battery pack which ensure power for 72 hours in standby and 30 minutes in alarm mode.

PSU

Power supply unit for fire protection equipment

The primary task of power supplies for fire protection equipment is to ensure continuity of energy supply. The main power supply function is provided by connection to the AC mains. The backup power supply is provided by a battery pack (appropriately selected for the load). The device has 2 DC power supply outputs, and each one is equipped with an individual fuse. The IP42 of the housing allows indoor installation. The PSU is used to supply power to fire devices such as conventional sirens, ESP remote panels or line detectors.



CE

EUROPEAN CERTIFICATION

the product meets
the requirements
of the European Directive

CNBOP-PIB

CERTIFICATE OF APPROVAL

the product has
a Certificate of Approval

AC
230/110

POWERING

wide range of AC
powering

IP

IP30

IP degree
of protection

+ −
− —

BACK-UP BATTERY SUPPLY

when AC power fails,
automatic changeover to DC

TECHNICAL DATA

FEATURE	POWER SUPPLY UNIT FOR FIRE PROTECTION EQUIPMENT		
TYPE	PSU-2A	PSU-3.5A	PSU-5A
SUPPLY VOLTAGE	230 / 110 [V] AC		
BATTERY VARIANTS [Ah]	7 / 12 / 18	7 / 12 / 18 / 26	18 / 26 / 40 / 65
NUMBER OF POWER OUTPUTS	2		
OUTPUT VOLTAGE	24 [V] DC		
INTERNAL POWER SUPPLY SYSTEM CURRENT CONSUMPTION	20 [mA]		
NUMBER OF POWERED OUTPUTS	2		
POWERED OUTPUT FUSE	3.15 [A]		
CASING COLOUR	RAL 7043		
SIGNALLING LEDS	YES, GREEN – POWERING; YELLOW - FAULT		
CASING VARIANT	A / B *	A / B / C *	A / B / C *
CASING TIGHTNESS CLASS	IP42		
CASING DIMENSIONS [mm] (HEIGHT X WIDTH X DEPTH)	A – 300x325x115 / B – 360x420x155 / C – 580x420,5x155		
MEASUREMENT OF THE RESISTANCE OF THE BATTERY CIRCUIT	YES		
WEIGHT	*		
OPERATING TEMPERATURE	-5 UP TO 40 [°C]		

* batteries type is related with housing variant and this cause various weight

PRODUCT CODE	TYPE	BATTERY [Ah]
PSU001	PSU-2A	7,2
PSU002	PSU-2A	12
PSU003	PSU-2A	18
PSU004	PSU-3,5A	7,2
PSU005	PSU-3,5A	12
PSU006	PSU-3,5A	18
PSU007	PSU-3,5A	26
PSU013	PSU-5A	18
PSU014	PSU-5A	26
PSU016	PSU-5A	40
PSU018	PSU-5A	65

FEATURES OF THE POWER SUPPLY UNIT FOR FIRE PROTECTION EQUIPMENT

- EN54-4 and 12101-10 compliant
- various power options
- various battery types
- cable entry: flush-mounted or surface-mounted
- battery temperature measurement
- lockable housing
- fuse for each power output



2 DC power outputs

wide range of applications due to varied outputs 2A / 3.5A / 5A

EN 54-4
EN 12101-10

3 housing variants and different battery capacity variants

AC ~ / DC

POSSIBLE APPLICATION



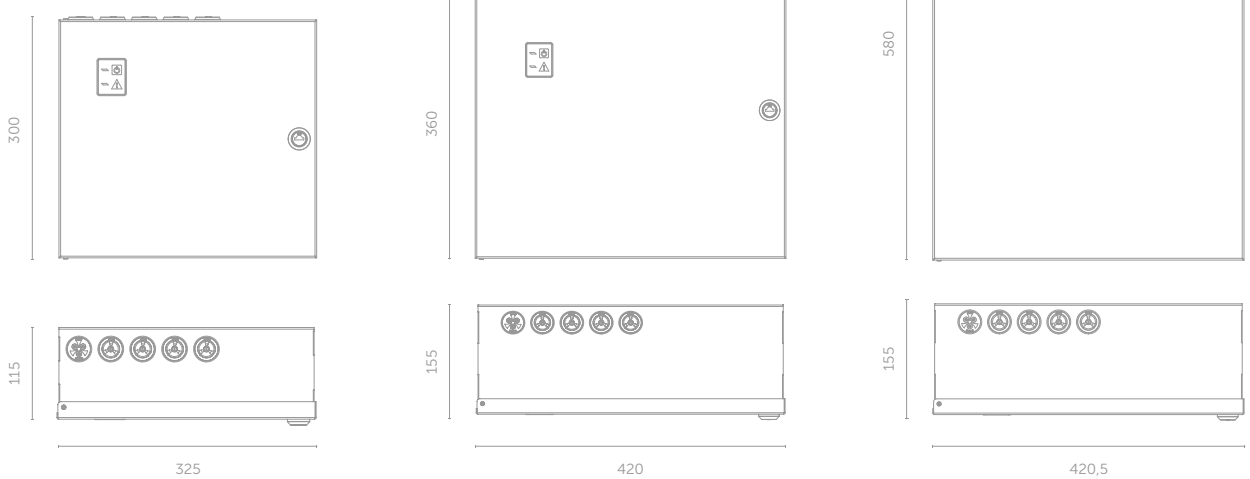








DIMENSIONS [mm]



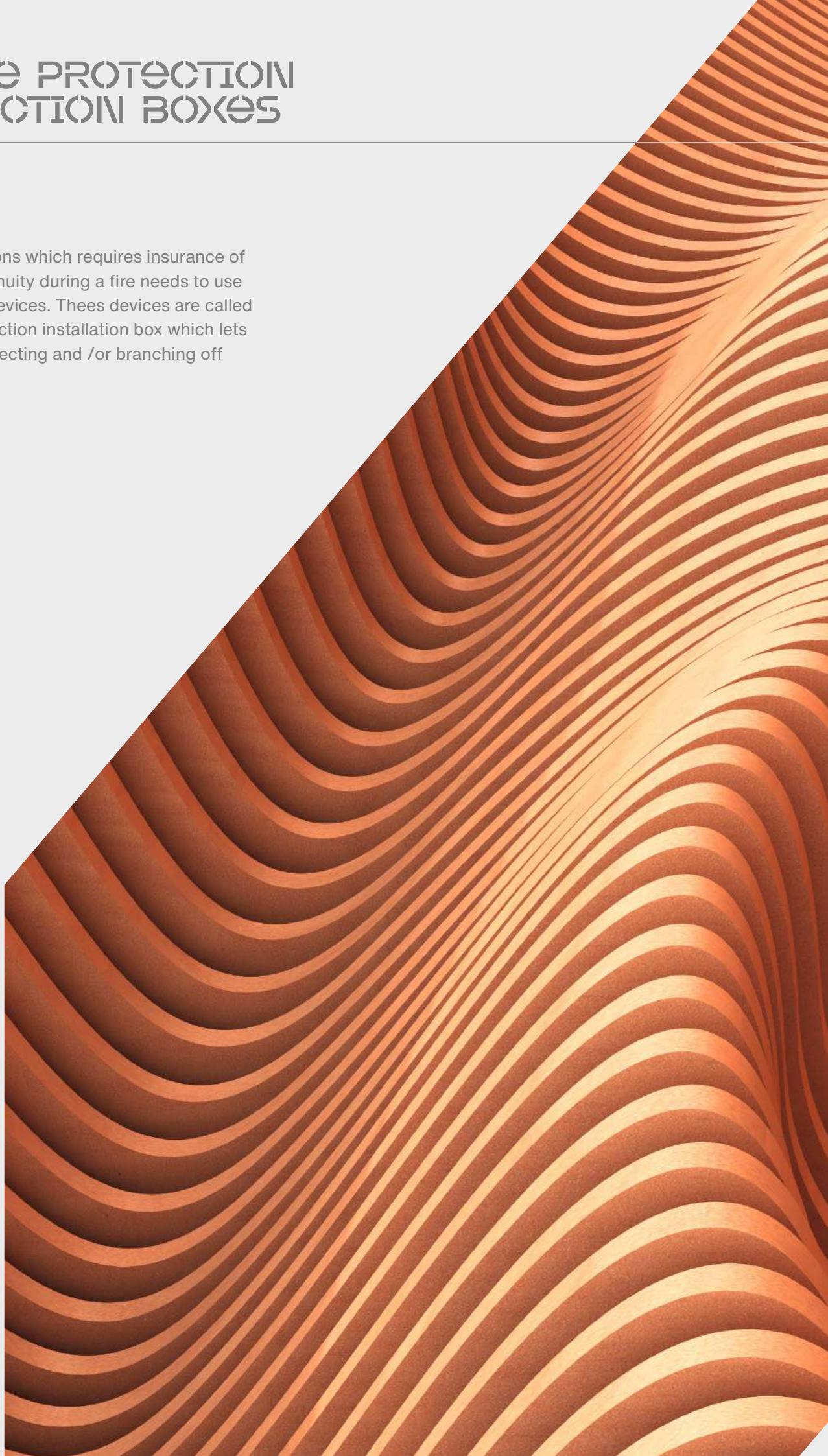
PSU Power supply unit for fire protection equipment table

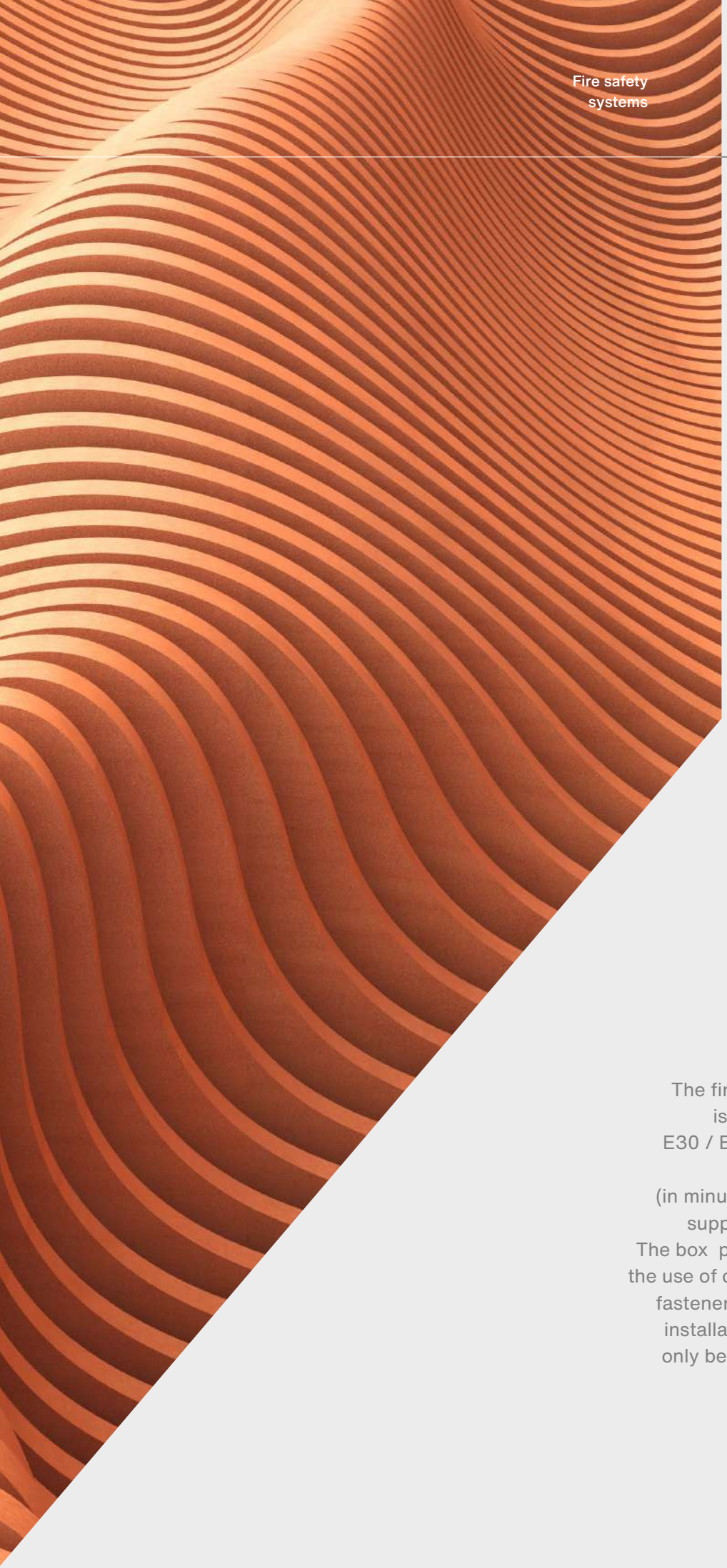
PRODUCT CODE	PSU001	PSU002	PSU004	PSU005
TYPE	PSU-2A	PSU-2A	PSU-3,5A	PSU-3,5A
POWER CONSUMPTION	50 [W]	50 [W]	100 [W]	100 [W]
AC SUPPLY VOLTAGE	230/110 [V] AC	230/110 [V] AC	230/110 [V] AC	230/110 [V] AC
AC SUPPLY FREQUENCY	50/60 [Hz]			
BATERRY CAPACITY	7,2 [Ah]	12 [Ah]	7,2 [Ah]	12 [Ah]
MAX IN/OUT WIRES CROSS SECTION	4,5 [mm²]			
MAX AC CURRENT CONSUMPTION	0,95 [A] - 115 [V] 0,56 [A] - 230 [V]	0,95 [A] - 115 [V] 0,56 [A] - 230 [V]	1,9 [A] - 115 [V] 1,2 [A] - 230 [V]	1,9 [A] - 115 [V] 1,2 [A] - 230 [V]
INTERNAL PSU POWER CONSUMPTION	20 [mA]			
HOUSING TYPE	A			
HOUSING DIMENSIONS	325x300x115 [mm]	325x300x115 [mm]	325x300x115 [mm]	325x300x115 [mm]
HOUSING MATERIAL	POWDER-COATED STEEL			
HOUSING COLOUR	RAL 7043			
HOUSING IP RATING	IP30			
WORKING TEMPERATURE	-5 UP TO +40 [°C]			
NUMBER OF POWER OUTPUTS	2			
OUTPUTS VOLTAGE	24 [V] DC ± 25%			
OUTPUT CURRENT (IMAXA ACC TO EN 54-4)	1,45 [A]	1,26 [A]	3,17 [A]	2,99 [A]
OUTPUT CURRENT (IMAXB ACC TO EN 54-4)	1,72 [A]	1,72 [A]	3,45 [A]	3,45 [A]
OUTPUT CURRENT (IMAXA ACC EN 12101-10)	0,03 [A]	0,06 [A]	0,03 [A]	0,06 [A]
MAINS FUSE	3,15 [A]			
BATTERY FUSE	10 [A]			
BATTERY TEMPERATURE SENSOR	YES			
FAULT OUTPUT	YES			
AC FAULT OUTPUT	YES			

PSU006	PSU007	PSU013	PSU014	PSU016	PSU018
PSU-3,5A	PSU-3,5A	PSU-5A	PSU-5A	PSU-5A	PSU-5A
100 [W]	100 [W]	150 [W]	150 [W]	150 [W]	150 [W]
230/110 [V] AC	230/110 [V] AC	230/110 [V] AC	230/110 [V] AC	230/110 [V] AC	230/110 [V] AC
50/60 [Hz]					
18 [Ah]	26 [Ah]	18 [Ah]	26 [Ah]	40 [Ah]	65 [Ah]
4,5 [mm²]					
1,9 [A] - 115 [V] 1,2 [A] - 230 [V]	1,9 [A] - 115 [V] 1,2 [A] - 230 [V]	3,0 [A] - 115 [V] 1,7 [A] - 230 [V]	3,0 [A] - 115 [V] 1,7 [A] - 230 [V]	3,0 [A] - 115 [V] 1,7 [A] - 230 [V]	3,0 [A] - 115 [V] 1,7 [A] - 230 [V]
20 [mA]					
B	B	B	B	C	C
420x360x155 [mm]	420x360x155 [mm]	420x360x155 [mm]	420x360x155 [mm]	420,5x580x190 [mm]	420,5x580x190 [mm]
POWDER-COATED STEEL					
RAL 7043					
IP30					
-5 UP TO +40 [°C]					
2					
24 [V] DC ± 25%					
2,77 [A]	2,47 [A]	4,49 [A]	4,20 [A]	3,69 [A]	2,77 [A]
3,45 [A]	3,45 [A]	5,17 [A]	5,17 [A]	5,17 [A]	5,17 [A]
0,11 [A]	0,16 [A]	0,11 [A]	0,16 [A]	0,26 [A]	0,43 [A]
3,15 [A]					
10 [A]					
YES					
YES					
YES					

FIRE PROTECTION JUNCTION BOXES

Installations which requires insurance of the continuity during a fire needs to use special devices. Thees devices are called fire protection installation box which lets you connecting and /or branching off wires.





The fire resistance of a junction box is determined by the parameter E30 / E60 / E90. In this designation, the numbers specify the time (in minutes) when continuity of power supply is guaranteed during a fire. The box performs this function through the use of ceramic connectors and metal fasteners. It is very important that the installation of these elements should only be carried out only on walls with sufficient fire resistance.

M-BOX Fire protection junction box

The main task of the fire protection junction box is to branch off electrical circuits and ensure their continuity even under fire conditions. An unquestionable advantage is also the high housing protection class - IP65.



CERTIFICATE OF APPROVAL

the product has a National Certificate

AC/DC

DIVERSE OF POWER SOURCES

possibility to connect AC or DC power supply

IP65

IP degree of protection

FUSE

possibility of installing accessory fuses 0.5 / 1 / 2.5 / 3.15 [A]

from 8 up to 32 connectors in a single junction box



installation of wires with a max. diameter of 16 [mm²]

FIRE RESISTANCE

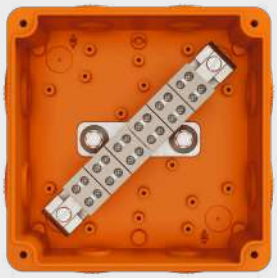
maintaining circuit continuity during a fire E30 / E60 / E90

M-BOX v1p



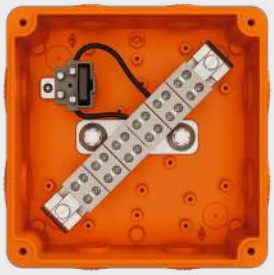
CONNECTORS
IN HORIZONTAL ORIENTATION

M-BOX v1s



CONNECTORS
IN OBLIQUE ORIENTATION

M-BOX v1s

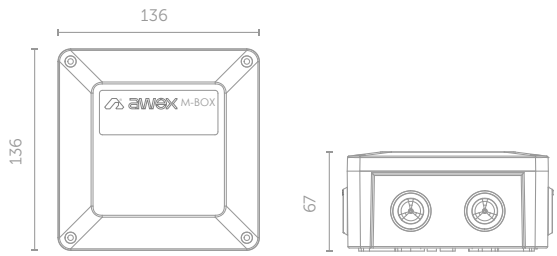


CONNECTOR WITH FUSE
IN OBLIQUE ORIENTATION

TECHNICAL DATA

FEATURE	PRODUCT CODE	FIRE RESISTANCE CLASS	MAX WIRES CROSS-SECTION [mm²]	CONNECTOR ORIENTATION	NUMBER OF CONNECTORS	NUMBER OF TERMINALS	WEIGHT [g]
M-BOX v1p	FSB001	E60	6	HORIZONTAL	6	24	380
M-BOX v1s	FSB002	E90	6	SLANTING	6	24	390
M-BOX v2p	FSB003	E60	4	HORIZONTAL	6	12	340
M-BOX v3p	FSB005	E90	4	HORIZONTAL	8	16	360
M-BOX v4p	FSB007	E90	10	HORIZONTAL	4	8	400
M-BOX v4s	FSB008	E90	10	SLANTING	5	10	450

DIMENSIONS [mm]



L-BOX Fire protection junction box

The main task of the electrical fire box is: to branch off electrical circuits and ensure their continuity even under fire conditions. Another unquestionable advantage is the high housing protection class - IP65.



CERTIFICATE OF APPROVAL

the product has a National Certificate

AC/DC

DIVERSE OF POWER SOURCES

possibility to connect AC or DC power supply

IP65

IP degree of protection

FUSE

possibility of installing accessory fuses 0.5 / 1 / 2.5 / 3.15 [A]

from 8 up to 32 connectors in a single junction box

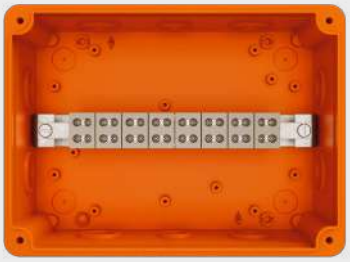


installation of wires up to 16 [mm²] in diameter

FIRE RESISTANCE

maintaining circuit continuity during a fire E30 / E60 / E90

L-BOX v1p



CONNECTORS
IN HORIZONTAL ORIENTATION

L-BOX v2s



CONNECTORS
IN OBLIQUE ORIENTATION

L-BOX v2s

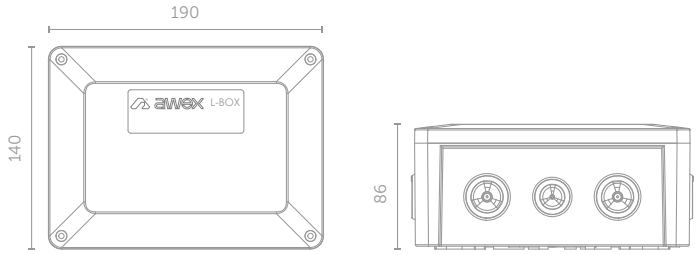


CONNECTOR WITH FUSE
IN OBLIQUE ORIENTATION

TECHNICAL DATA

FEATURE	PRODUCT CODE	FIRE RESISTANCE CLASS	MAX WIRES CROSS-SECTION [mm²]	CONNECTOR ORIENTATION	NUMBER OF CONNECTORS	NUMBER OF TERMINALS	WEIGHT [g]
L- BOX v1p	FSB009	E90	6	HORIZONTAL	8	32	530
L-BOX v1s	FSB010	E60	6	SLANTING	8	32	550
L-BOX v2s	FSB012	E90	10	SLANTING	6	24	590
L-BOX v3p	FSB013	E90	16	HORIZONTAL	6	14	570
L-BOX v3s	FSB014	E60	16	SLANTING	6	14	590
L-BOX v4p	FSB015	E90	16	HORIZONTAL	5	20	650
L-BOX v4s	FSB016	E30	16	SLANTING	5	20	660
L-BOX v5p	FSB017	E60	4	HORIZONTAL	12	24	520
L-BOX v6p	FSB019	E30	4	HORIZONTAL	12	24	520
L-BOX v6s	FSB020	E60	4	SLANTING	12	24	540
L-BOX v7p	FSB021	E90	10	HORIZONTAL	7	14	510
L-BOX v7s	FSB022	E90	10	SLANTING	7	14	630

DIMENSIONS [mm]



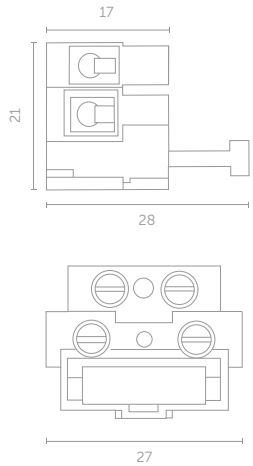


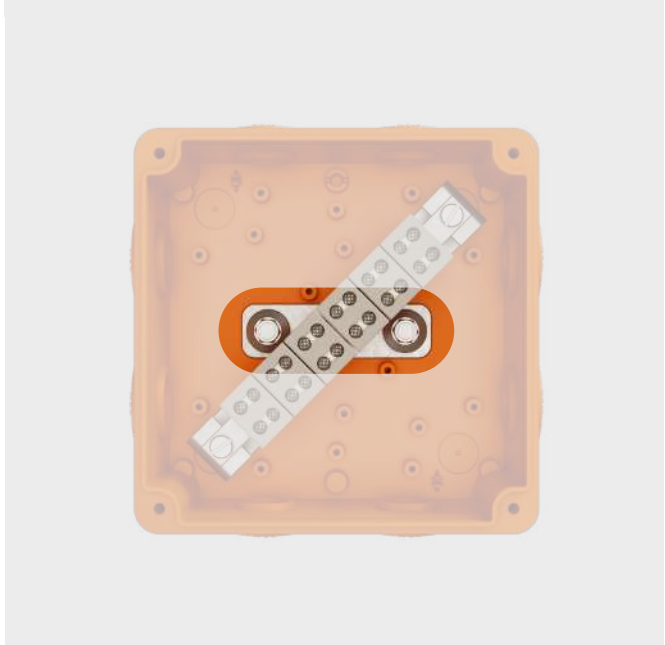
FUSE FOR M-BOX AND L-BOX

TECHNICAL DATA

FEATURE	PRODUCT CODE
FUSE SOCKED FOR M-BOX AND L-BOX	FSB100
FUSE SOCKED WITH FUSE FOR M-BOX AND L-BOX 0.5 [A]	FSB101
FUSE SOCKED WITH FUSE FOR M-BOX AND L-BOX 1 [A]	FSB102
FUSE SOCKED WITH FUSE FOR M-BOX AND L-BOX 2.5 [A]	FSB103
FUSE SOCKED WITH FUSE FOR M-BOX AND L-BOX 3.15 [A]	FSB104

DIMENSIONS [mm]



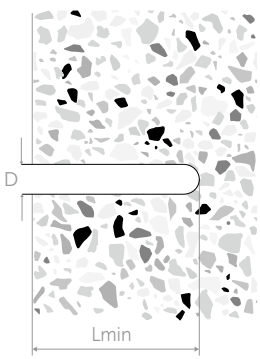


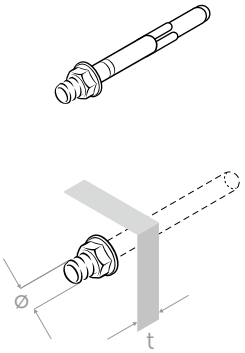
ASSEMBLY KIT

TECHNICAL DATA

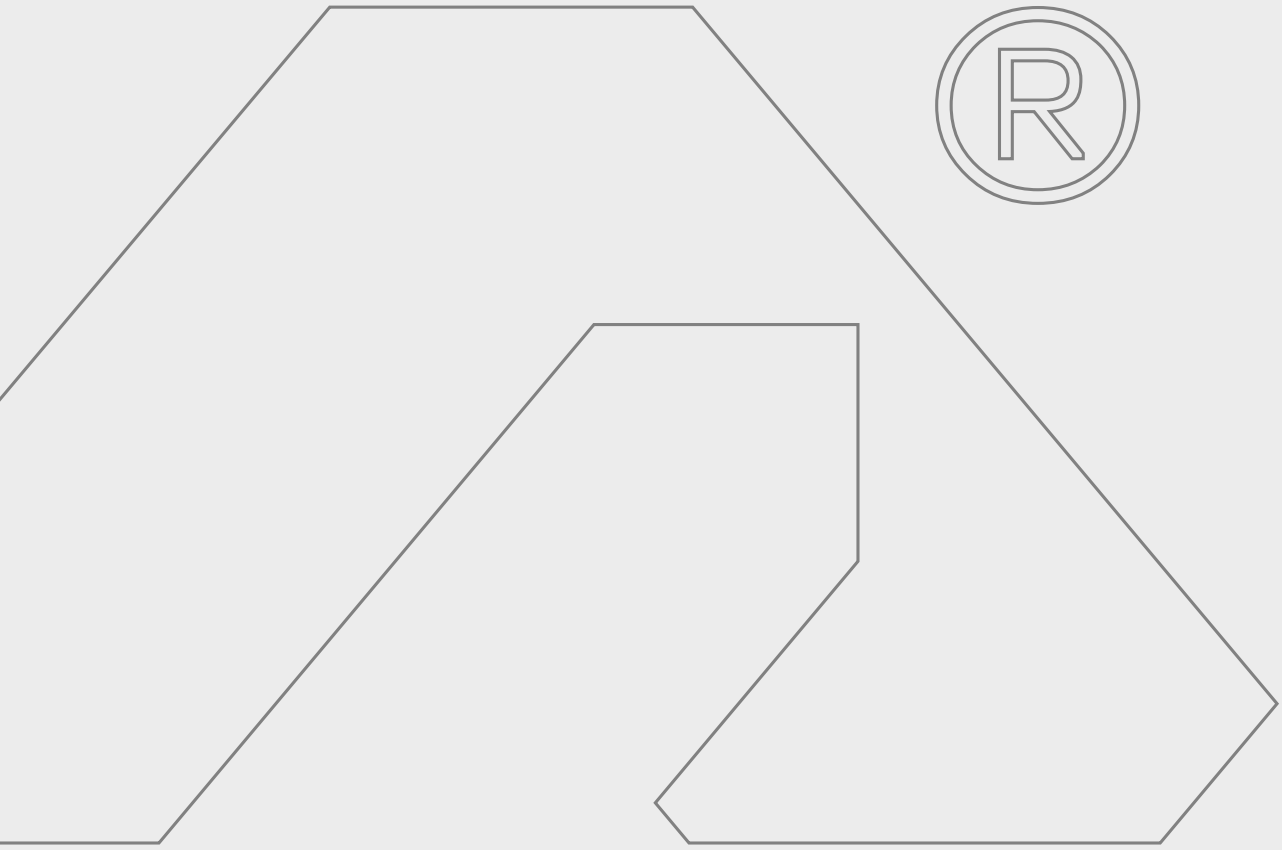
FEATURE	PRODUCT CODE	Lmin	D	Ø	t
ASSEMBLY KIT	FSB200	40 mm	6 mm	6 mm	0-30 mm

DIMENSIONS [mm]









awex.eu

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