

FIRE DETECTION



ELKRON. THE HI-PROTECTION COMPANY

ELKRON

ADDRESSED FIRE DETECTION SYSTEMS

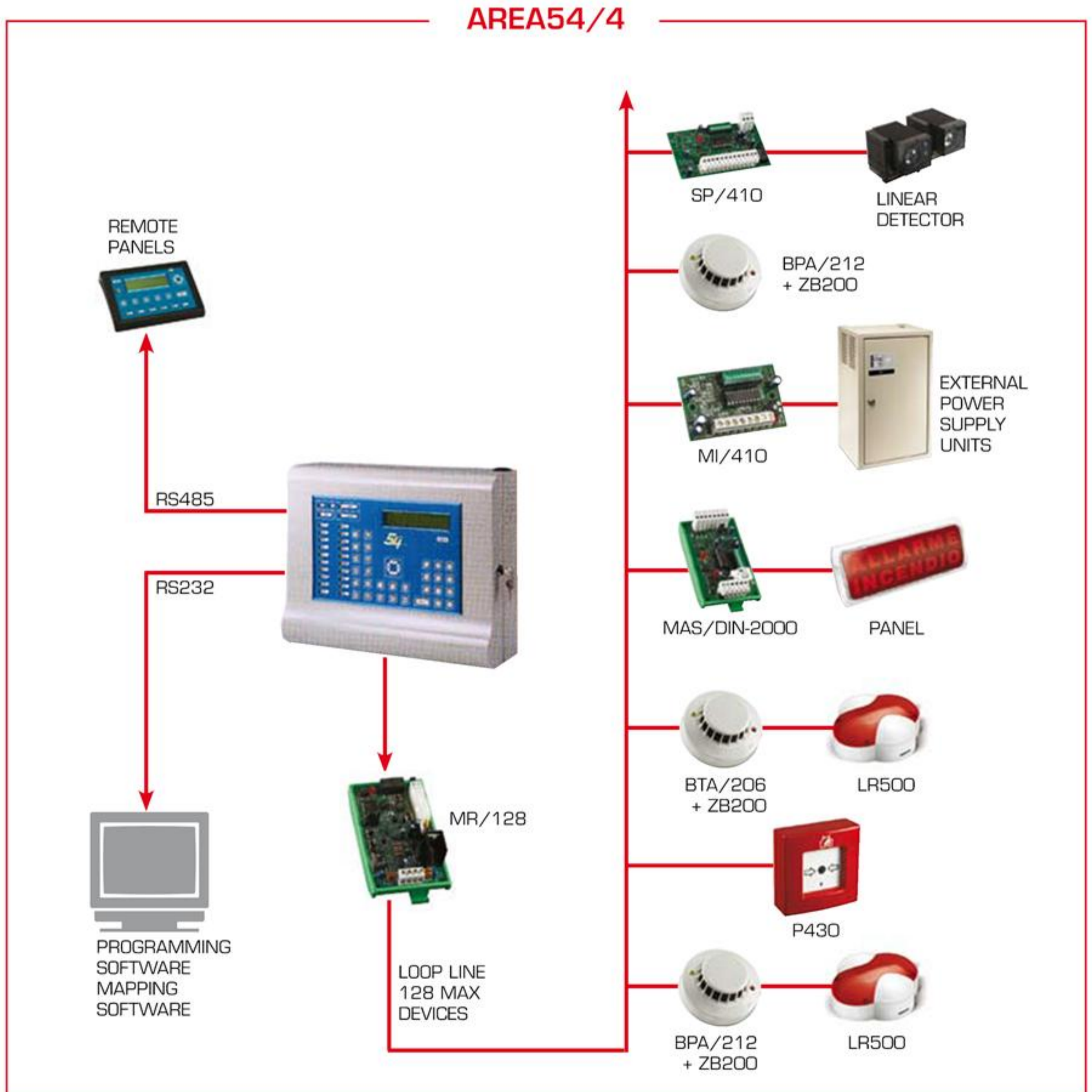
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ADDRESSED FIRE DETECTION SYSTEMS

ADDRESSED SYSTEMS

A technological innovation from Elkrone-Sira proposes a last generation multiprocessor fire analogue detection system. It is a system for all applications, even the widest ones, and for all environmental typologies. AREA54 series is provided with central units from 1 loop, for 128 addresses, up to 32 loops, for 4,096 addresses. The system can be fully managed and programmed either directly from local keyboard or smoothly by PC, via dedicated software (SOFT/54).



ADDRESSED FIRE DETECTION SYSTEMS

128 ADDRESSES CONTROL UNITS

AREA54/1L Control Unit

AREA54/1L cod. SC3900121

Analogue central unit, with 16 bit microprocessor, to manage fire systems with single detection line.

- It is possible to connect up to 128 out of smoke detectors, gas detectors, heat detectors, pushbuttons actuators and interfaces to control external equipment can be connected.
- Detection line can be programmed in following configurations:
 - 4 open lines (max 32 devices per line)
 - 1 loop line (max 128 devices)
 - 2 loop lines (max 64 devices per line).
- 1 RS232 output towards PC
- LCD display with 8 lines by 40 characters
- Event log: 1000 events
- Signalling outputs:
 - Alarm Relay 1 or 3 (1A@30 Vdc), NO/NC contact
 - Alarm Relay 2 (5A@30 Vdc)
 - Failure or exclusion Relay (5A @ 30 Vdc) NO/NC contact
 - Network in Relay (1A @ 30 Vdc) NO/NC contact
- Controlled siren output for optical/acoustic indicators
- Controlled output for self-powered sirens
- In compliance with EN54/2-4
- Input voltage: 230 Vdc 50 Hz
- Output voltage: 27 Vdc 500 mA
- Battery management, check and charge: 700 mA
- Assignable batteries: max 2 x 12V - 15 Ah
- Operation temperature: -5 to + 50°C
- Base made in metal sheet and front side made in ABS.
- Dimensions (HxLxD): 450 x 350 x 160 mm.



AREA54/1L

Accessories for AREA54/1L control unit

MSP/54 cod. SC2B10121

Module allowing Console 54, printer and a PC workstation to be connected to AREA54/1 central unit.

- CENTRONICS opto-isolated port for connecting a printer
- RS 232 opto-isolated output for connection to a personal computer
- 485 opto-isolated output for connecting remote panels
- Dimensions (HxL): 160x65



MSP/54



ADDRESSED FIRE DETECTION SYSTEMS

4 LOOP CONTROL UNIT

AREA54/4L Control Unit

AREA 54/4L cod. SC1900121

Modular analogue central unit, with multiprocessor, having 4 LOOPS max.

- The unit is provided with base with 1 MR/128 module (128 addresses).
- Expandable up to 512 addresses by 3 additional line modules.
- By a two-lead closed or open loop detection line, up to 128 out of smoke detectors, gas detectors, heat detectors, pushbuttons, actuators and interfaces to control external equipment can be connected to each module.
- 1 RS232 opto-isolated bi-directional output towards PC.
- 1 RS485 opto-isolated serial output for communication from and to remote keyboard.
- LCD display with 8 lines by 40 characters.
- Programming from keyboard and PC.
- 120 software zones.
- 60 device groups.
- 60 zone assemblies.
- Event log: 1000 events.
- Signalling outputs:
 - Alarm 1, Alarm 2, Alarm 3 relays
 - Failure relay
 - Exclusion relay
 - Network in relay
- Controlled output for self-powered external siren.
- Controlled output for self-powered external siren.
- Controlled siren output for optical/acoustic indicators.
- In compliance with EN54/2-4.
- Input voltage: 230 Vdc 50 Hz.
- Output voltage: 27 Vdc max 1.5A.
- Battery management, check and charge: 700 mA.
- Casing: steel painted with epoxy powders.
- Assignable batteries: max 2 x 12V – 15 Ah.
- Operation temperature: -5 to + 50°C.
- Available also in Rack 19" version.
- LCD display with 16 lines by 40 characters.
- Dimensions (HxLxD): 400 x 480 x 136 mm.



AREA 54/4L



ADDRESSED FIRE DETECTION SYSTEMS

EXPANDABLE CONTROL UNITS (UP TO 1024 ADDR.)

AREA54/8L Control Units

AREA54/8L cod. SC4100121

Modular analogue central unit, with multiprocessor, having 8 LOOPS max.

- The unit is provided with 1 MR/128 module (128 addresses).
- Expandable up to 1024 addresses by 7 additional line modules.
- By a two-lead closed or open loop detection line, up to 128 out of smoke detectors, heat detectors, gas detectors, pushbuttons, actuators and interfaces to control external equipment can be connected to each module.
- 1 RS232 opto-isolated bi-directional output towards PC.
- 1 RS485 opto-isolated serial output for communication from and to remote keyboard.
- LCD display with 16 lines by 40 characters
- Programming from keyboard and PC.
- 240 software zones.
- 120 device groups.
- 120 zone groups
- Event log: 1000 events
- Signalling outputs:
 - Alarm 1 relay, Alarm 2, Alarm 3
 - Failure relay
 - Exclusion relay
 - Network in relay
- Controlled output for self-powered external siren.
- Controlled siren output for optical/acoustic indicators.
- In compliance with EN54 part 4 N°1293 - CPD - 0040 and EN 54 part 2
- Input voltage: 230 Vdc 50 Hz
- Output voltage: 27 Vdc max 1.5A
- Battery management, check and charge: 700 mA
- Casing: steel painted with epoxy powders
- Dimensions (hxlxd): 500x482x145 mm
- Assignable batteries: max 2 x 12V – 15 Ah
- Operation temperature: -5 to + 50°C
- Available also in Rack 19" version
- LCD display with 16 lines by 40 characters
- 1 MC/19 module for an independent repetition of the alarm, failure and exclusion status of each line



AREA 54/8L



ADDRESSED FIRE DETECTION SYSTEMS

EXPANDABLE CONTROL UNITS (UP TO 1024 ADDR.)

AREA54/16L Control Unit

AREA54/16L cod. SC3800121

Modular analogue central unit, with multiprocessor, having 16 L00Ps max. The unit is provided with base with 1 MR/128 module (128 addresses).

- Expandable up to 2048 addresses by 15 additional line modules.
- By a two-lead closed or open loop detection line, up to 128 out of smoke detectors, gas detectors, heat detectors, pushbuttons, actuators and interfaces to control external equipment can be connected to each module.
- 1 RS232 opto-isolated bi-directional output towards PC.
- 1 RS485 opto-isolated serial output for communication from and to remote keyboard.
- LCD display with 16 lines by 40 characters.
- Programming from keyboard and PC.
- 480 software zones.
- 240 device groups.
- 240 zone groups.
- Event log: 1000 events
- Signalling outputs:
 - Alarm 1 relay, Alarm 2, Alarm 3
 - Failure relay
 - Exclusion relay
 - Network in relay
- Controlled output for self-powered external siren.
- Controlled siren output for optical/acoustic indicators.
- In compliance with EN54/2-4
- Input voltage: 230 Vdc 50 Hz
- Output voltage: 27 Vdc max 1.5A
- Battery management, check and charge: 700 mA
- Casing: steel painted with epoxy powders
- Assignable batteries: max 2 x 12V – 15 Ah
- Operation temperature: -5 to + 50°C
- Available also in Rack 19" version
- LCD display with 16 lines by 40 characters
- 2 MC/19 module for an independent repetition of the alarm, failure and exclusion status of each line.
- Dimensions (HxLxD): 770 x 482 x 155 mm



AREA 54/16L



ADDRESSED FIRE DETECTION SYSTEMS

ACCESSORIES FOR ADDRESSED SYSTEMS

Line Module

MR/128 cod. SC2810121

Addressable line module allowing to acquire, pilot and check a closed or open type detection line on which up to 128 addressed devices can be mounted.

- Fully managed by microprocessor.
- RS485 57600 bps serial asynchronous communication.
- Autonomous operation in case of control unit failure.
- Managed by microprocessor.
- Module addressing 1 – 32.
- Relay for release from RS485 in case of failure.
- 27 Vdc supply.
- Dimensions (hxl): 110 x 65 mm.



MR/128

Modules

MSP/54 cod. SC2B10121

Module allowing a parallel 80 column printer with continuous form to be connected.

- Dimensions (hxl): 185 x 45 mm



MSP/54

SONG/54 cod. HS0910121

Module to check and activate bells/plates/sirens. It is to be used on controlled outputs in central units.

- The module is to be installed immediately near the device to be checked.
- Dimensions (hxl): 25 x 30 mm.



SONG/54

INT-SONG/54 cod. HS1010121

Module to check and activate bells/plates/sirens. It is to be used on controlled outputs in central units.

- The module is to be installed immediately near the device to be checked.
- Dimensions (hxl): 25 x 30 mm.



INT-SONG/54

MC/19 cod. SC1C10121

Independent display panel of the alarm, failure and exclusion status of each line.

- The module only concerns AREA54 central units with 8 or 16 lines in Rack 19" version.
- Dimensions (hxlxp): 89 x 482 x 28 mm.



MC/19



ADDRESSED FIRE DETECTION SYSTEMS

ACCESSORIES FOR ADDRESSED SYSTEMS

Modules

SP/410 cod. SC2610121

Analogue addressed multi-purpose interface allowing to control dry contact equipment or input for impulsive contacts and to reset connected equipment, e.g. linear detectors, bathe tie rods or normally open pushbuttons, etc.

- Working voltage: 18 Vdc modulated
- Assorbimento medio: 150 μ A.
- Average absorption: 150 μ A.
- Operation temperature: -20° C to + 50° C.
- Relative humidity: 95 % Max RH non condensing.
- Dimensions (DIN guide) (HxLxD): 44 x 110 x 21 mm.



SP/410

SP/410-S cod. SC4E10121

Same as **SP/410** but in **IP55** enclosure.

- Dimensions (hxlxp): 105 x 170 x 82 mm.

MI/410 cod. SC2010121

Analogue addressed interface allowing to control equipment with dry and not impulsive contacts, e.g. pushbuttons, switches, technological contacts, heat sensing cables, by using proper connection.

- Working voltage: 18 Vdc modulated.
- Average absorption: 100 μ A
- Alarm repetition (O.C): 100 mA Max
- Visual Alarm repetition: red led
- Operation temperature: -20°C to + 50°C
- Relative humidity: 95 % Max RH non condensing
- Dimensions (HxLxD): 44 x 67 mm.



MI/410

MI/410-S cod. SC9610121

Same as **MI/410** but in **IP55** version.

- Dimensions (HxLxD): 90 x 130 x 58 mm.

MAS/DIN-2000 cod. SC2110121

Analogue addressed actuation module allowing to manage accessory devices arranged on field (plates, sirens, shutters, auxiliary relays, electromagnets, etc.).

- The module has 4 open collector electronic repetitions (100mA) which define fault, alarm 1, alarm 2, reset conditions and a repetition with the switching by a relay which can be preselected via a jumper in order that the module can operate in case of failure, alarm 1, alarm 2 or reset.
- Supply voltage: 20÷30Vdc
- Working voltage: 18 Vdc modulated
- Rest absorption: 200 mA
- Alarm absorption: 30 mA
- Alarm repetition (O.C): 100 mA max
- Relay output: 1A @ 24Vdc
- Operation temperature: -10 ÷ 50°C
- Dimensions (HxLxD): 65 x 110 x 35 mm.



MAS/DIN-2000

MAS/IP-2000 cod. SC8710121

Same as **MAS/DIN-2000** but in **IP55** version.

- Dimensions (HxLxD): 105 x 170 x 82 mm.



ADDRESSED FIRE DETECTION SYSTEMS

ACCESSORIES FOR ADDRESSED SYSTEMS

Modules

MCR/DIN-2000 cod. SC9110121

Analogue addressed module with collective addressing. The module allows to manage a secondary line, made up of conventional detectors. Max number of elements is 10.

- The interface has 4 O.C. repetitions and 4 relays for failure, alarm 1, alarm 2 reset status.
- Supply voltage: 20÷30Vdc
- Working voltage: 18Vdc modulated
- Rest absorption: 1 mA
- Alarm absorption: 20 mA per alarmed relay
- Repetition outputs (O.C.): 100 mA max
- Relay output: 1A @ 24Vdc
- Operation temperature: -10÷50°C
- Dimensions (HxLxD): 112 x 168 x 50 mm.



MCR/DIN-2000

ISO/BP cod. SC6H00121

Short-circuit analyser module for lines for analogue detections; the module is designed to ensure the operation of the detectors and/or pushbuttons that are connected to the same line, in case a short-circuit occurs.

- The module is contained in smoke detector cap.
- On the two sides of the cap there are yellow leds having the task of signalling the section where the short-circuit is being detected.
- For detection line connection, ZB/200 base is used.
- The module needs no additional power supply.
- Working voltage: 18 Vdc modulated
- Average absorption: 250 µA
- Operation temperature: -20°C to + 50°C
- Protection degree: IP 43
- Dimensions: Ø 100 mm H.45 mm



ISO/BP

ISO/BASE cod. SC4H00121

Short-circuit analyser module for lines for analogue detections; the module is designed to ensure the operation of the detectors and/or pushbuttons that are connected to the same line, in case a short-circuit occurs.

- Yellow leds having the task of signalling the section where the short-circuit is being detected.
- The module is contained in ZB/215 connector block.
- The module needs no additional power supply.
- Working voltage: 18 Vdc modulated
- Average absorption: 250 µA
- Operation temperature: -20°C to + 50°C
- Relative humidity: 95 % Max RH non condensing
- Dimensions: Ø 100 mm H.45 mm



ISO/BASE



ADDRESSED FIRE DETECTION SYSTEMS

ACCESSORIES FOR ADDRESSED SYSTEMS

Modules

ISO/C cod. SC2210121

Short-circuit analyser module for lines for analogue detections; the module is designed to ensure the operation of the detectors and/or pushbuttons that are connected to the same line, in case a short-circuit occurs.

- Yellow leds having the task of signalling the section where the short-circuit is being detected.
- The module is contained in S/215 connector block.
- The module needs no additional power supply.
- Working voltage: 18Vdc modulated
- Average absorption: 250 μ A
- Operation temperature: -20 to + 50°C
- Relative humidity: 95 % Max RH non condensing
- Dimensions: \varnothing 100 mm H 45 mm



ISO/C

ISO/BASE-IP cod. SC6G00121

Same as ISO/C but in IP55 version.

- Dimensioni (hxlxp): 90x130x58 mm.



ISO/BASE-IP

ISO ZB cod. SC4200121

Short-circuit analyser module for lines for analogue detections; the module is designed to ensure the operation of the detectors and/or pushbuttons that are connected to the same line, in case a short-circuit occurs.

- The module is contained in a ZB200 base
- The module needs no additional power supply.
- Working voltage: 18Vdc modulated
- Average absorption: 250 μ A
- Operation temperature: -20 to + 50°C
- Relative humidity: 95 % Max RH non condensing
- Dimensions: \varnothing 100 mm H 45 mm

ISO/MINI cod. SC4000121

Short-circuit analyser module for lines for analogue detections; the module is designed to ensure the operation of the detectors and/or pushbuttons that are connected to the same line, in case a short-circuit occurs.

- The module is contained in S/215 connector block.
- The module needs no additional power supply.
- Working voltage: 18Vdc modulated
- Average absorption: 250 μ A
- Operation temperature: -20 to + 50°C
- Relative humidity: 95 % Max RH non condensing
- Dimensions: \varnothing 100 mm H 45 mm



ADDRESSED FIRE DETECTION SYSTEMS

DETECTORS FOR ADDRESSED SYSTEMS

Optical Detector

BPA/212 cod. SD3600121

Low profile smoke optical addressed analogue detector.

- Visual operation signal is provided by two red leds placed on the cap, which flashes at each call from the central unit.
- The alarm signal from the central unit puts leds on steady.
- Operation principle: Tyndall effect
- Supply voltage: 18 Vdc modulated
- Absorption: 280 μ A at rest
- Alarm repetition: O.C. 100 mA max
- Visual alarm repetition: 2 red leds
- Dimensions: \varnothing 100 x H 45 mm
- Magnetic test
- Operation temperature: -20 to +55 °C
- Relative humidity: 95% max non condensing
- EN 54 part 7 certified
- Associable to following bases: ZB/200, ZB/201, ZB/204



BPA/212

Optical heat detector

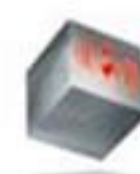
BPA/212-T cod. SD5800121

Low profile optic heat addressed analogue detector with heat probe with intervention temperature.

- Visual operation signal is provided by two red leds placed on the cap, which flashes at each call from the central unit.
- The alarm signal from the central unit puts leds on steady.
- Operation principle: Tyndall effect+heat probe
- Supply voltage: 18 Vdc modulated
- Absorption: 280 μ A at rest
- Alarm repetition: O.C. 100 mA max
- Visual alarm repetition: 2 red leds
- Dimensions: \varnothing 100 x H 45 mm
- Magnetic test
- Operation temperature: -20 to +55 °C
- Relative humidity: 95% max non condensing
- Protection degree: IP 43
- Associable to following bases: ZB/200, ZB/201, ZB/204



BPA/212T



ADDRESSED FIRE DETECTION SYSTEMS

DETECTORS FOR ADDRESSED SYSTEMS

Differential HEAT DETECTOR

BTA/206 cod. SD3400121

Low profile maximum temperature thermo-speedometric and heat addressed analogue detector.

- Visual operation signal is provided by two red leds placed on the cap, which flashes at each call from the central unit.
- The alarm signal from the central unit puts leds on steady.
- Operation principle: Double heat probe
- Supply voltage: 18 Vdc modulated
- Absorption: 300 μ A at rest
- Alarm repetition: O.C. 100 mA max
- Visual alarm repetition: 2 red leds
- Size: \varnothing 100 x H 45 mm
- Magnetic test
- Operation temperature: -20 to +55 °C
- Relative humidity: 95% max non condensing
- EN 54 part 5 certified
- Associable to following bases: ZB/200, ZB/201, ZB/204.



BTA/206

REMOTE PANEL

Console 54

CONSOLLE/54 cod. KP3400121

Remote Panel useful for repeating and displaying active events and commands from and to the Central Units of AREA 54 series.

- The panel is housed in a enclosure the design of which was studied in order that the panel can be used both as a desk panel and wall panel.
- AREA 54 series can manage up to 32 remote panels placed at a maximum distance of 1200 m.
- Backlit display with 8 lines by 20 characters displays and repeats all events occurring at the central unit.
- A backlit keyboard provided with specific keys for commands from and to the Central Unit is available to user.
- From the keyboard, events from the central unit can be acquired, lag time for alarm can be incremented if programmed at the central unit, sirens can be entered /cut off, a general reset can be performed and a functional test can be made on all visual signalling (LED).
- Alarm and Fault status is acoustically signalled by a local buzzer, which is disabled from the keyboard.
- Supply voltage: 17 to 30 Vdc
- Absorption: 70 mA @ 24 Vdc at rest
- 200 mA @ 24 Vdc with lit keyboard and display
- Connection: 4-lead bus 485
- Alarm output: Relay 1 A @ 30Vdc
- Operation temperature: -5° C to + 50° C
- Relative humidity: 95 % maximum non condensing
- Protection degree: IP 43
- Dimensions (HxLxD): 195 x 290 x 50 mm.



CONSOLLE/54



ADDRESSED FIRE DETECTION SYSTEMS

BUTTONS FOR ADDRESSED SYSTEMS

Buttons

P/430 cod.SB2200121

Red alarm analogue pushbutton with recommissioning.

- Visual alarm repetition: red led
- Dimensions (HxLxD): 110 x 110 x 42 mm
- Weight: 100 g
- Average absorption: 100 μ A @ 18 Vdc
- Actuation Type: Recommissioning



P/430

P/435 cod. SB3900121

Red alarm conventional pushbutton with breaking.

- Visual alarm repetition: red led
- Dimensions (HxLxD): 110 x 110 x 42 mm
- Weight: 100 g
- Average absorption: 100 μ A @ 18 Vdc
- Actuation Type: Breaking



P/435

P/410 cod. SB3600121

Break glass addressed analogue pushbutton with accident-prevention glass red in colour.

- Visual alarm repetition: red led
- Average absorption: 100 μ A @ 18 Vdc
- Alarm repetition: 100 mA. Max.
- Dimensions (HxLxD): 64x120x55 mm
- Weight: 120 g
- Protection degree: IP 30



P/410

P/420 cod. SB2100121

Break glass addressed red alarm analogue pushbutton with transparent protection cover.

- Visual alarm repetition: red led
- Dimensions (HxLxD): 85x85x52 mm
- Weight: 180 g
- Average absorption: 100 μ A @ 18 Vdc
- Actuation Type: Breaking
- Protection degree: IP 54



P/420



ADDRESSED FIRE DETECTION SYSTEMS

ACCESSORIES FOR CENTRALISATION

Centralisation

MRS/232/485-DIN cod. SC9310121

Module to convert signals from RS232 to RS485 allowing serial communication between apparatuses up to 1,200 mt distance.

- Available also in IP 55 version, MRS/232/485-IP coded.
- Power supply: 12 - 24 Vdc
- Absorption: 50 mA
- Operation: -5° C to + 50 °C
- Dimensions (HxLxD): 67x112x45 mm

MAPPA/54 cod. SW2700121

Software for graphic map system, capable to connect up to 18 central units through serial line, LAN network or modem.

- For system configuration it is necessary to insert graphic map sheets (SHEET/54) and devices on field (POINT/54).

MMS/54 cod. SC1B10121

Module enabling the central units of AREA54 series to following functions:

- Connecting and managing a modem
- Connecting central units in Master / Slave configuration.

- Dimensions (hxl): 180X65 mm
- 1 serial connector 485 for connecting Master/Slave central units.
- 1 connector DB9 for connection to modem

MODEM54 cod. CT7300123

56K analogue modem



MODEM54

LAN/54 cod. SC7910121

Module allowing connection to a LAN (Local Area Network) of analogue central units of AREA 54 series.

- Communication protocol is of TCP/IP UDP type.
- Power Supply: 24 Vdc
- Dimensions (HxLxD): 110x85 mm



LAN/54

TLG/54 cod. SW2800121

Program providing functions for unloading, displaying and printing the chronological history log of AREA54 central units.

- The program allows to constantly keep under control the operation of central units, to execute commands remotely and to inquire and modify the status of AREA54 central units.
- Communication between central units and PC can be implemented by serial connections, by connections through the network, by connections via Modem (also simultaneously).

FOGLIO/54 cod. SW2900121

Graphic map leaf from autocad support

PUNTO/54 cod. SW3100121

Graphic map point from autocad support

SOFT/54 cod. SW2300121

Software for local/remote AREA54 programming

