



cofem
1973



TECHNICAL CATALOGUE

CONVENTIONAL SYSTEM



CLVR02-12Z

Conventional automatic control panel



Automatic conventional fire detection and fire alarm control panel.

This control panel provides different versions to fit more accurately to the needs of each facility:

- CLVR 02Z: CLVR Control panel up to 2 zones.
- CLVR 04Z: CLVR Control panel up to 4 zones.
- CLVR 08Z: CLVR Control panel up to 8 zones.
- CLVR 12Z: CLVR Control panel up to 12 zones.

CLVR control panels features are common in all its models.

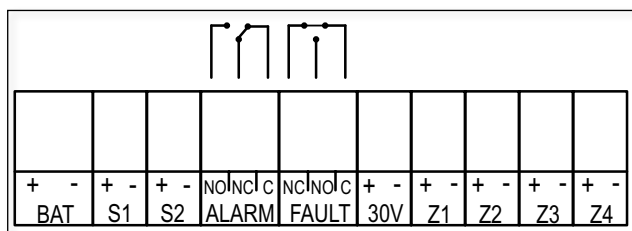
Features:

- Control panels up to 12 zones for conventional detectors and call points use.
- 2 supervised sounder outputs, delayed from 0 to 10 minutes, and protected by a fuse.
- 1 alarm output through a dry contact NO/NC (normally open / normally closed).
- 1 fault output through a dry contact NO/NC (normally open / normally closed).
- 2 auxiliary outputs 30V/DC supervised and protected by a fuse to feed external (magnetic fire doors, sounders, etc).
- Available testing mode to facilitate the quick and easy verification of the sensors and call points.
- It allows to configure the open line, alarm detector and alarm call point threshold, to adjust to the operation with other detectors.
- It allows to configure the last detection zone as a supervision input of a external protection fire system with a fault indication.
- Metallic chest with frontal bolted door, 4 predrilled of 28 mm and one rectangular else of 140 x 20 mm for electric wiring and space for 2 batteries of 7Ah.
- RS485 MODBUS protocol on-demand.
- Possibility of software ON-LINE on PC using MODBUS functionality.
- CONTACTID on-demand.
- Certified according to EN 54-2 & EN 54-4 standards and CE mark .

TECHNICAL FEATURES

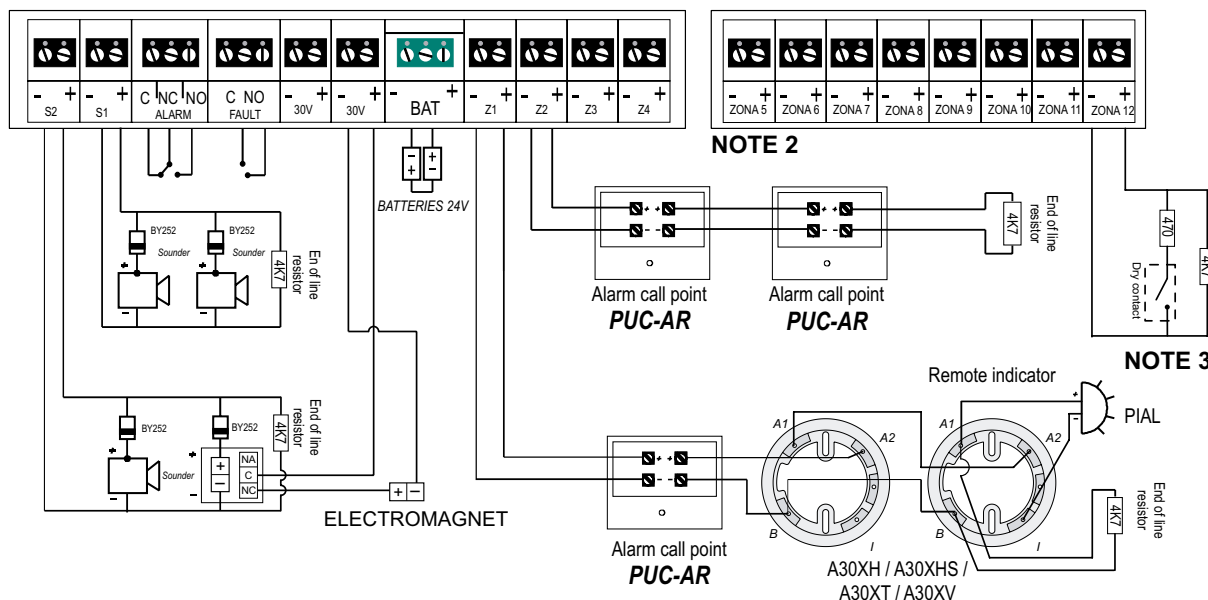
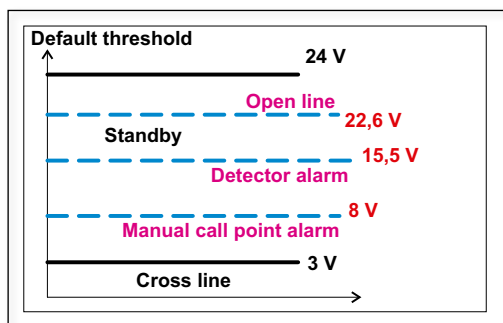
<i>Input voltage</i>	110/230VAC 50/60Hz	<i>End of line capacitor</i>	4 K7
<i>Output voltage</i>	21 V Nominal	<i>Sounder output voltage</i>	30 V/DC
<i>Maximum consumption</i>	70 VA to 230 V/AC	<i>Fault output</i>	Yes, dry contact
<i>Batteries</i>	2 x 12 V 7 Ah SLA	<i>Environmental conditions</i>	-10°C +50°C
<i>Max. voltage 30V output</i>	0,75A / 1,50A ⁽¹⁾ AUTORESET	<i>Size</i>	363 x 331 x 96 mm
<i>Battery charger</i>	500 mA 27 V/DC 20°C	<i>Weight (without batteries)</i>	4,3 Kg
<i>Devices per zone</i>	32	<i>Standar</i>	EN 54-2, EN 54-4 & EN 12094-1
<i>Control panel power supply</i>	2,2 A	<i>Sounder output fuse S1</i>	1A / 1,85A ⁽¹⁾ Autoreset
<i>Maximum current per zone</i>	2 mA (standby)	<i>Sounder output fuse S2</i>	1A / 0,75A ⁽¹⁾ Autoreset

⁽¹⁾ CLVR08Z and CLVR12Z control panels



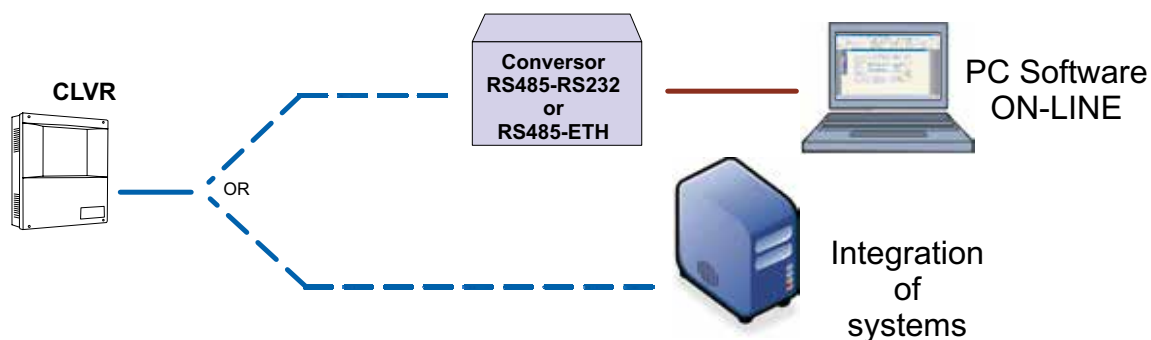
NOTE 1

* Only CLVR02Z / CLVR04Z



- NOTE 1:** Zones 3 and 4 are not functional in CLVR02Z control panel.
- NOTE 2:** This card contains 4 or 8 zones depending on the model (CLVR08Z/CLVR12Z).
- NOTE 3:** Last zone configured for external system monitoring.

Example of general wiring diagram



Example of connection for MODBUS functionality



LONDON

Automatic conventional control panel



The London control Panel has been designed according EN54 part 2 and 4 in accordance with the last directives, successfully overcoming the most severe tests of environmental conditions, conducted electrical noise, magnetic disturbances, vibration, etc.

Based in a micro processed technology of 16 bits, used this for managing the detection system and performed manoeuvres. It allows conventional detectors, with the following voltage levels:

- Open line	22,5 V	24 V
- Surveillance mode	19 V	22,5 V
- Detector alarm	7 V	16 V
- Call point alarm	3,5 V	7 V
- Crossed line	0 V	3,5 V

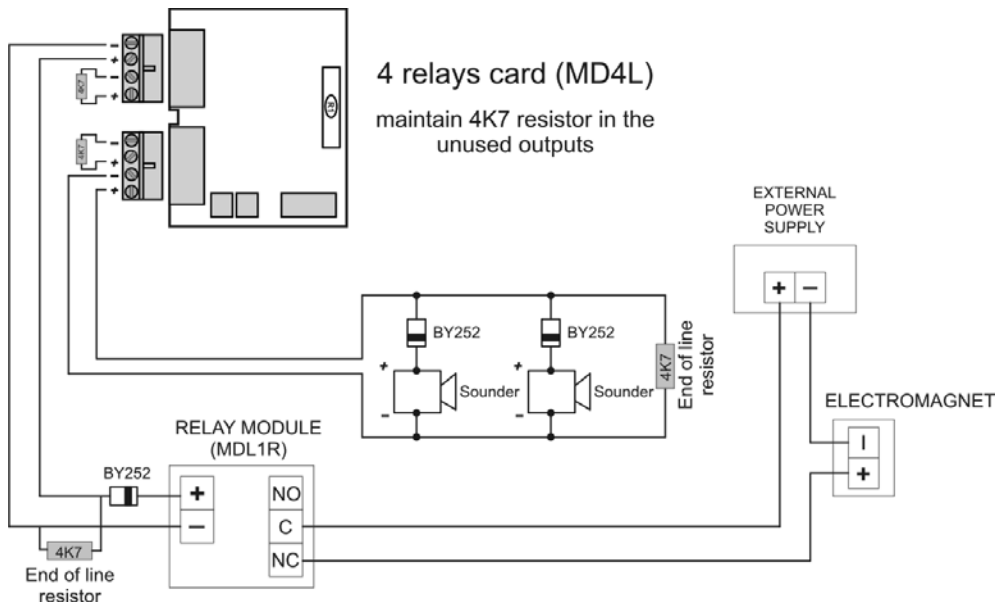
Measuring the line voltage and knowing the voltage merges aforementioned, a correspondence can be established with the control panel indication.

Features:

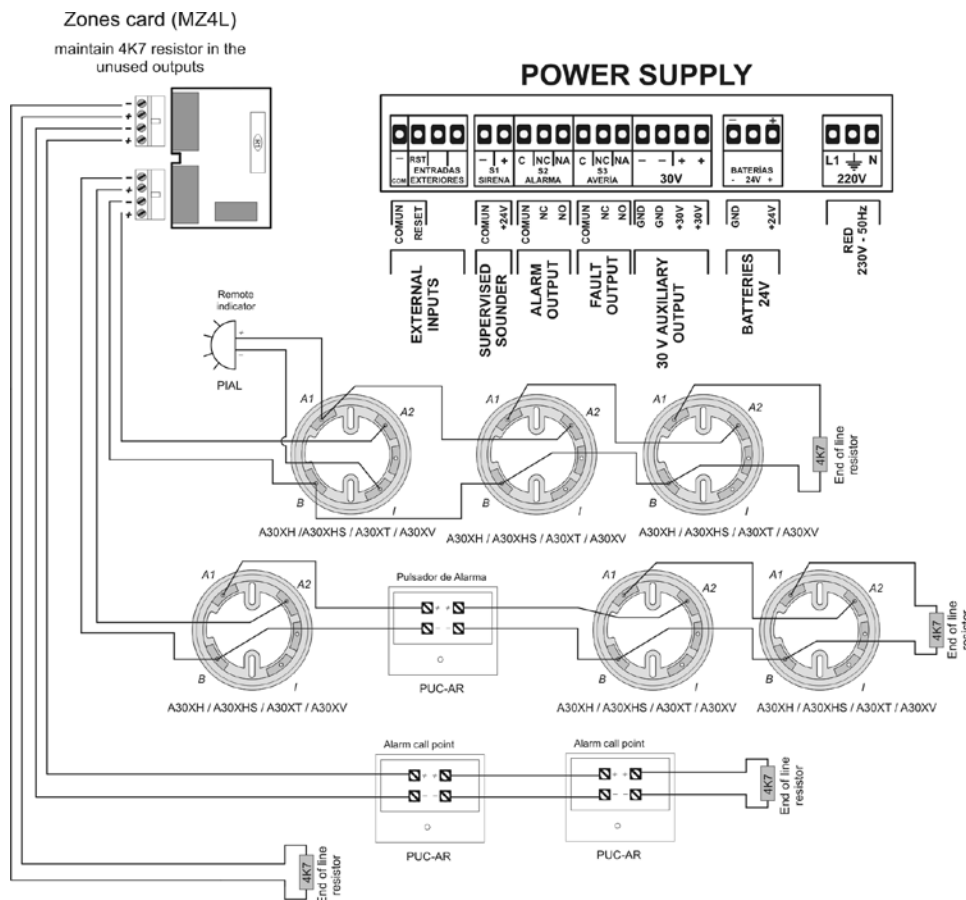
- Control panel configurable up to 12 modules, with 4 zones or 4 relays (control panel limit of 48 outputs, relays and zones).
- Expandable up to 32 modules with an additional cabinet (limit 128 outputs, zones and relays).
- Supports up to 32 devices (detectors and call points) per zone.
- Configurable with PC-EasyLONDON software (RS232).
- It allows to connect an external keyboard (standard PC-PS2).
- It allows the connection of 10 repeaters.
- 30Vdc auxiliary output.
- Equipped with 1 delayed sounder output (0 to 10 minutes) and supervised.
- Equipped with 1 alarm output and 1 fault output as free voltage relays.
- It allows the connection of a printer (RS232).
- Certified according EN 54-2 and EN 54-4, and CE mark.
- Access to the panel keyboard by means of a numeric code.
- Size: 418 x 324 x 150 mm.

TECHNICAL FEATURES

<i>Input voltage</i>	230 V 50 Hz/AC	<i>Maximum current per zone</i>	2 mA (standby)
<i>Output voltage</i>	21 V Nominal	<i>End of line capacitor</i>	4 K7
<i>Standby consumption</i>	70 mA	<i>Sounder output voltage</i>	24V/DC 2 A
<i>Alarm consumption</i>	140 mA	<i>Fault output</i>	No
<i>Batteries</i>	2 x 12 V 7 Ah SLA	<i>Environmental conditions</i>	-10°C +50°C
<i>Supply fuse</i>	4 A	<i>Size</i>	418 x 324 x 150 mm
<i>Battery charger</i>	500 mA 27V/DC 20°C	<i>Weight (without batteries)</i>	5.9 Kg
<i>Devices per zone</i>	32	<i>Standard</i>	EN 54 parts 2 & 4
<i>Control panel power supply</i>	3 A	<i>Max. voltage 30V output</i>	1 A



Example of a relay card wiring diagram



Example of a zones card connection diagram



EASY LONDON

Setup software for control panels

EASY LONDON is a support software for programming the London control panel of Cofem.

Since this control panel allows you to control a large number of elements (it could manage 128 outputs between zones and relays), it needs an effective system of labelling and programming for an easy, quickly and intuitive configuration.

You can download EasyLONDON software to any PC.

It allows you to prepare information related to the installation (labels of zones, relays and their activation, modes of operation, etc) on this computer and then dump it on the control panel with an RS232.

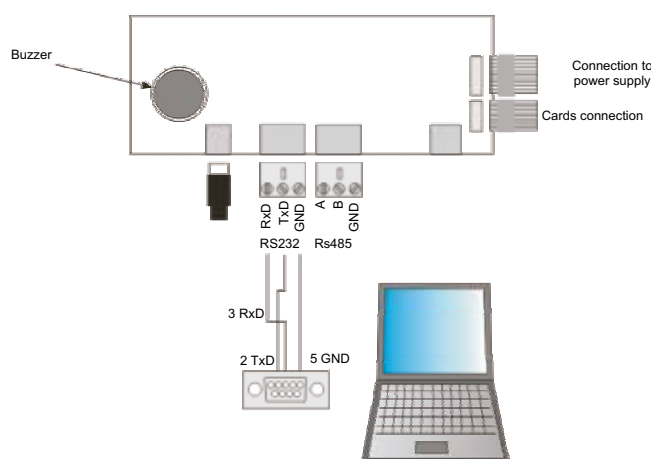
This form will be easier to work on the configuration of the control panel in any place where are all the necessary information is available, and only move to the installation for its dump on the control panel and start-up.

In addition, avoids having to enter the information through the front of the control panel, especially useful for complex installations configuration feature.

Similarly, the EasyLONDON facilitates the management and control of the configuration of all the installations with London control panel.

Features:

- Software for the LONDON control panel programming.
- Installable software on any PC (the PC must have minimum characteristics described in the manual of the software EasyLONDON)
- Allows you to easily program the control panel from PC (usually a laptop) in a Windows environment, and connecting with the control panel, then dump this information.
- Connection between PC and control panel with an RS232 connection.
- It allows to easily manage the configurations of all installations with London control panel.
- It avoids having to configure the control panel from the front of it.
- It allows to prepare the configuration from anywhere.
- It allows to prepare the configuration from anywhere.





CDLR

London repeater control panel



The London control panel allows to connecting up to 10 repeaters, using a 4 wires of 1,5 mm² connection (two for supply and two for communication for RS485 line). The two wires of the RS485 line will be connected from the control panel to the corresponding repeaters.

The two wires will connect from the 30V output of the power supply in the control panel to the back panel of their repeaters.

The repeater wiring is realized like the figure attached.

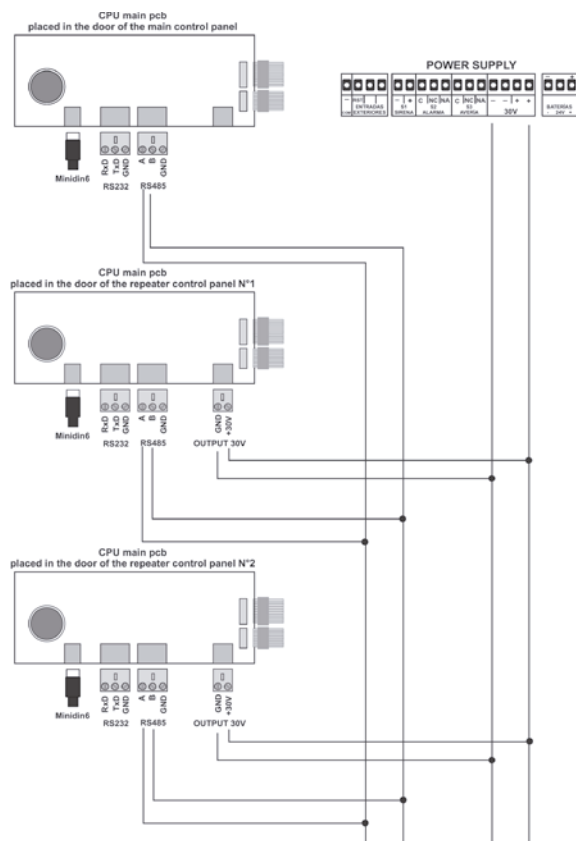
The supply up to 3 repeaters is doing from the 30V output of the power supply of the London control panel.

To feed 4 to 10 repeaters must be done from the 30V output of an external power supply (FAE).

The wiring of repeaters, communication and power wires, will be realized with twisted and shielded halogen-free of 2 x 1,5 mm² wire, maximum length up to 1200 m.

TECHNICAL FEATURES

Supply	30 V
Consumption in surveillance	150 mA
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Dimensions	418 x 324 x 150mm
Weight (without batteries)	4,9 kg
IP protection	IP 30





A30XT

Conventional heat detector



Conventional heat detector for fire detection.

The detector consists of a sensitive element to temperature variations produced by any process of combustion.

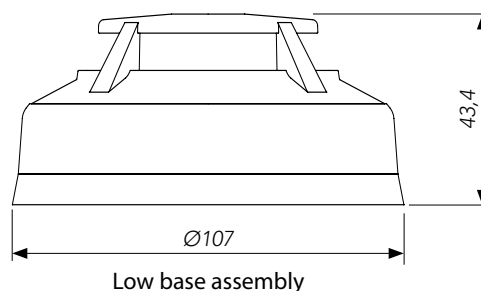
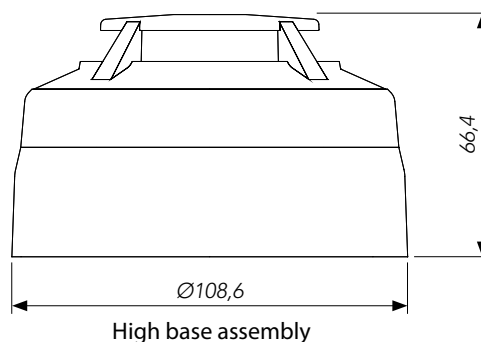
The value measured by this element is compared with a preset reference value which causes the detector to alarm status when the temperature reaches 55°C.

Features:

- Low section, total height less than 45 mm (including the base).
- Available with high base for electrical conduit of 20 mm.
- Alarm with two red LED, which makes easier the identification from any direction (360°).
- Possibility to connect a remote action indicator.
- Easy connection, without polarity.
- Detector and base with easy installation, interchangeable with the entire of range A30X, and manufactured in white heat-resistant ABS.
- According to EN 54-5 class A2, and CE mark, according to the European Regulation of Construction Products (UE) N°305/2011.



Other colors on request



TECHNICAL FEATURES

Supply	12 - 30V without polarity
Standby consumption	40 µA (at 18V)
Alarm consumption	40 mA (at 18V)
Activation signal	Two red led (360° visibility)
Remote indicator output	Yes
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Sensitivity	According to EN 54-5 Class A2
IP protection	IP 20

A30XV

Combined heat conventional detector



Combined heat detector for fire detection.

The detector A30XV has a double heat detection system that measures the speed of increase in temperature (rate of rise heat function), both as their absolute value (heat function), and compares it with a measure of internal reference.

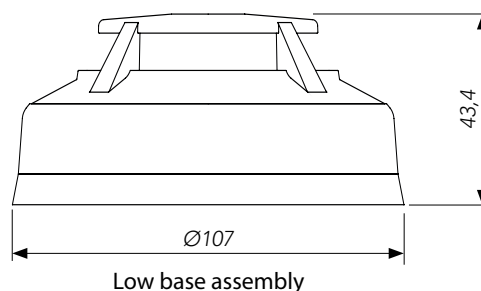
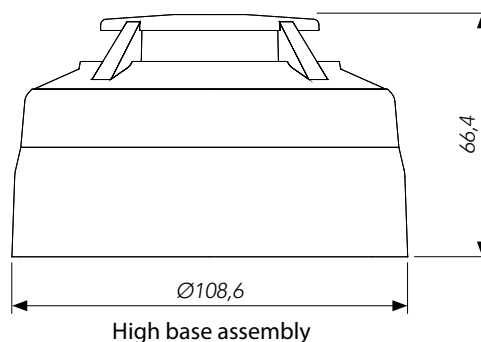
The rate of rise heat function allows to detect a fire in the early stages of their development, or, if this is very slow, is activated when the temperature reaches 55°C.

Features:

- Low section, total height less than 45 mm (including the base).
- Available with high base for electrical conduit of 20 mm.
- Alarm with two red LED, which makes easier the identification from any direction (360°).
- Possibility to connect a remote action indicator.
- Easy connection, without polarity.
- Detector and base with easy installation, interchangeable with the entire of range A30X, and manufactured in white heat-resistant ABS.
- According to EN 54-5 Class A2R (detectors with rate of rise heat function), and CE mark, according to the European Regulation of Construction Products (UE) N°305/2011.



Other colors on request



TECHNICAL FEATURES

Supply	12-30V without polarity
Standby consumption	40 μ A (at 18V)
Alarm consumption	40 mA (at 18V)
Activation signal	Two red led (360° visibility)
Remote indicator output	Yes
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Sensibility	According EN 54-5 Class A2R
IP protection	IP 20



A30XH A30XHS



Conventional smoke detector

Conventional smoke detector for fire detection.

The A30XH/A30XHS detector is based on the Tyndall effect (light refraction in a dark chamber) for detection of fires which generates smoke (plastic, wood, paper, etc).

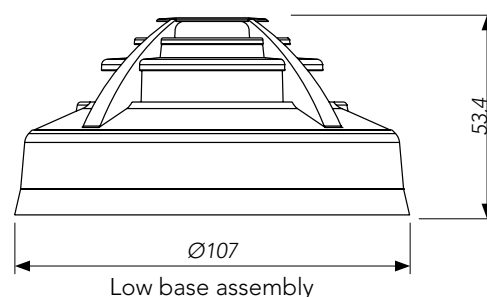
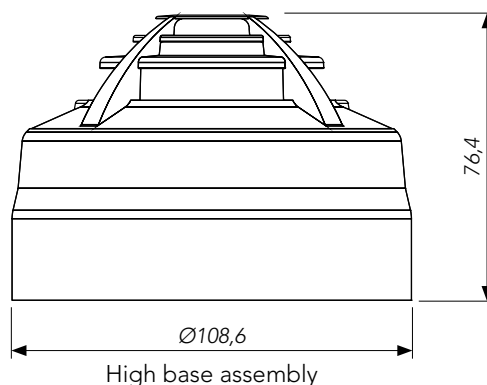
The A30XH detector (smoke-heat detector) also has a static heat element that sets the detector into an alarm mode when temperature reaches 55°C

Features:

- Low section, total height less than 45 mm (including the base).
- Available with high base for electrical conduit of 20 mm.
- Alarm with two red LED, which makes easier the identification from any direction (360°).
- Possibility to connect a remote action indicator.
- Easy connection, without polarity.
- Double flash LED indicates a dirty status of the detector (fast signal indicates alarm and slow indicates maintenance required).
- Detector and base with easy installation, interchangeable with the entire of range A30X, and manufactured in white heat-resistant ABS.
- According to EN 54-7 and CE mark according to European Regulation of Construction Products (UE) N°305/2011.



Other colors on request



TECHNICAL FEATURES

Supply	12 - 30V without polarity
Standby consumption	60 µA (at 18V)
Alarm consumption	40 mA (at 18V)
Activation and dirt signal	Two red led (360° visibility)
Remote indicator output	Yes
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Sensibility	According EN 54-7
IP protection	IP 40

PUCAR

Manual call point

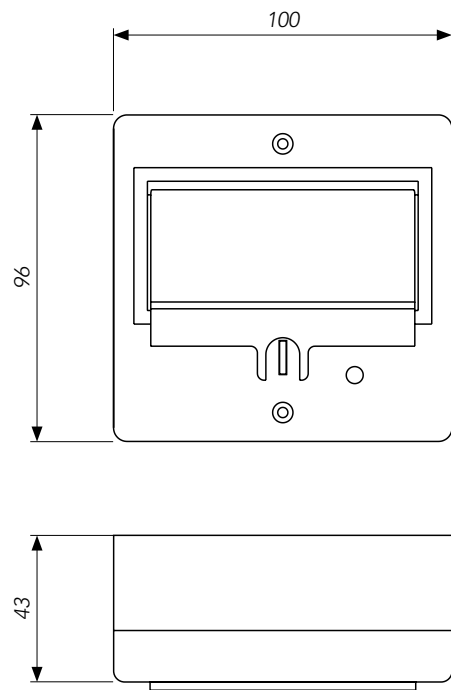
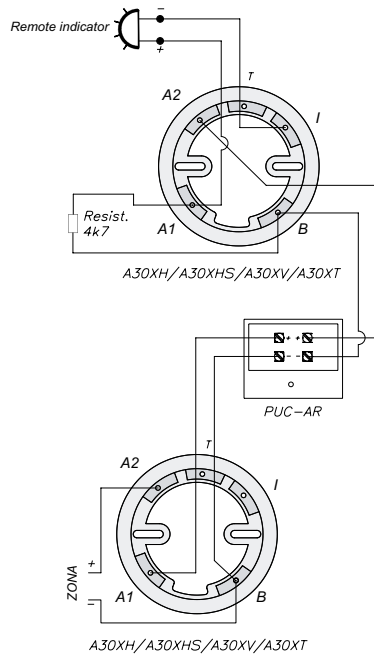


Manual call point for the conventional fire detection system.

It has an indicator of action (red led) that illuminates in case of be manually operated (alarm).

Features:

- Resettable call point by pushing yellow button on the front side.
- Transparent protector cover to avoid accidental false alarms.
- Immediate visual recognition of alarm status by the permanent activation of the LED, and the trigger of
- The yellow tab on the lower side of the activation face.
- According to EN 54-11 and CE mark according the European Regulation of Construction Products (UE N°305/2011).



TECHNICAL FEATURES

Supply	24 - 35V with polarity
Standby consumption	0 mA
Alarm consumption	35 mA
Activation signal	Red led
Remote indicator output	No
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Standard	EN 54-11
IP protection	IP 50



PIAL

Remote indicator



Remote action indicator of fire detection system.

The PIAL allows showing alarm status of sensors and modules of analogue systems, as well as of sensors of conventional systems.

Typical cases of use:

- Places where elements of the detection system are not visible, for example, inside false ceiling, in which the PIAL can be visibly situated on the lower part of the ceiling or near the wall.
- Reduced accessibility rooms or that is needed do a big inspection range for the identification of the element in alarm, for example in hotel rooms, where the PIAL can be situated above the door frame of each room, making very easy its identification.

Permanent activation of the red LED indicates alarm status.

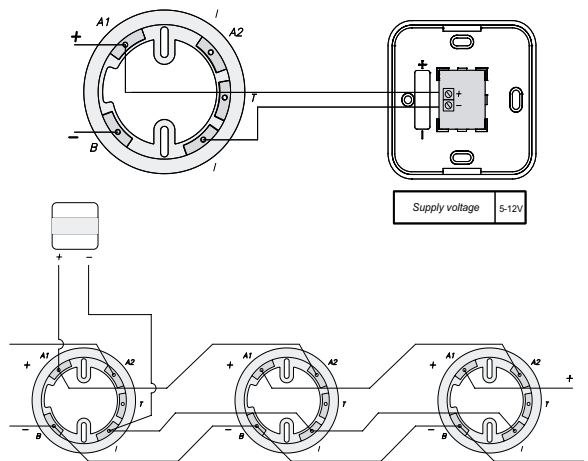
It is an element easy to install, both for its electrical wiring and its fixation, furthermore, can be adapted to the conduit boxes and switchgear.

Features:

- Alarm status can be identified in any perpendicular direction at its installation.
- Easy connection, with polarity.
- Can be adapted to the conduit boxes and switchgear.
- The red light is produced by two LEDs, increasing reliability against failure of any of them.
- Manufactured in heat-resistant ABS. Base and lid are white, red viewer.

TECHNICAL FEATURES

Supply	5 - 12 V/DC with polarity
Standby consumption	0 mA
Alarm consumption	5 mA
Activation signal	Red led
Humidity	20 - 95% RH
Temperature	-10°C +50°C
IP protection	IP 50



A30XZSL A30XZSD



Alarm devices

Base with EN 54-23 visual alarm certified for A30X series, EN 54-3 sound certified and base detector.

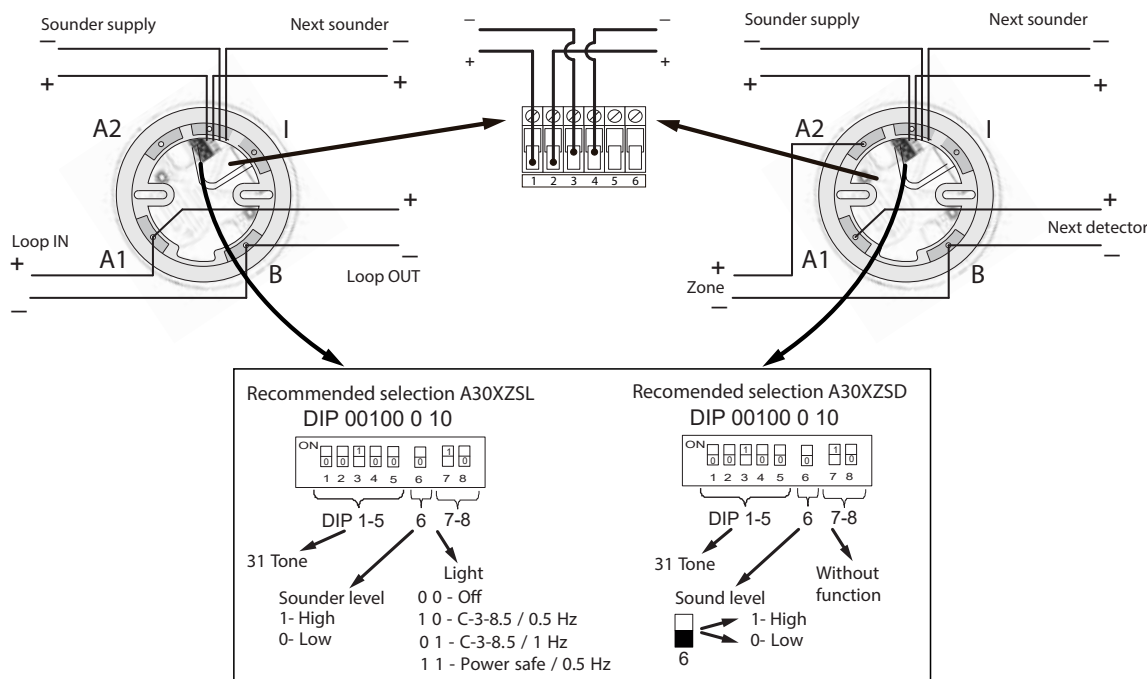
There are 2 models available:

- A30XZSL: A30XZ base with sound and light base.
- A30XZSD: A30XZ base with sound.

Typical uses of the A30XZSDDR and A30XZSLDR are spaces that require integrated fire detection equipment with sounder and visual alarm, such as hotel rooms fitted out for clients with hearing impairments, waiting rooms, nursing rooms, etc.

Functionally, the detector is wired according to the control panel to which it is connected.

For its part, the base with sounder functions as a conventional sounder that will be wired according to the equipment (sounder output of the fire control panel, external power supply, MDA1Y, MYOA addressable modules, etc).



TECHNICAL FEATURES

	A30XZSD	A30XZSL
Supply	18-30 V with polarity	18-30 V with polarity
Standby consumption	0 mA	0 mA
Alarm consumption	5 mA / 6 mA (Low/High dB)	19 mA / 20 mA (Low/High dB)
Operating temperature	-10°C +55°C	-10°C +55°C
Dimensions	Ø112mm x high 43 mm (w/o detec.)	Ø112mm x high 43 mm (w/o detec.)
IP protection	IP 21C	IP 21C
Sound intensity	Low 90 / High 96 dB-1m	Low 90 / High 96 dB-1m
Tones	31 types	31 types
Standar	EN 54-3	EN 54-23 and EN 54-3
Flash	-	0,5 Hz (60 ms)

ACCESSORIES



**BEAM
DETECTORS**



**ALARM
DEVICES**

**POWER
SUPPLY**



MDL1R MDL2R MDL-8



Relays module

Relay module for fire detection system.

This module consists of a relay that controls the output of a dry contact normally open (NO) normally closed (NC), unsupervised.

That provision allows you to control as typical application door electromagnets in conventional fire detection systems, either through the control panel supply or sources of external power supply (FAE).

The equipment is very simple and easy to install.

The board of the relay module is mounted on a plastic base, which carries some tapes that allow secure comfortably in the place that best suits, taking advantage of the available space in stations, power supplies (FAE), etc, according to the normal distribution of the wiring of the installation.

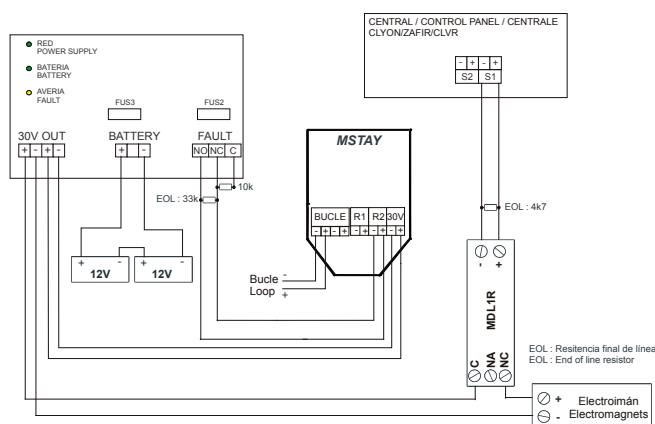
In addition, the relay module contains a safety fuse on the side of the dry contact.

There are three versions of modules based on the number of relays contained on the base:

- MDL1R: 1 relay module.
- MDL2R: 2 relays module.
- MDL-8: 8 relays module.

Features:

- Relay with dry contact output NO-NC, not supervised.
- Simple installation by means of adhesive tapes, taking advantage of the space and following the normal distribution wiring.
- It contains safety fuse.



TECHNICAL FEATURES

Supply	24 - 35V
Standby consumption	0 mA
Fuse	2 A
Consumption active	20 mA
Dry contact output	30 Vdc / 230 Vac 2A



A30XBI

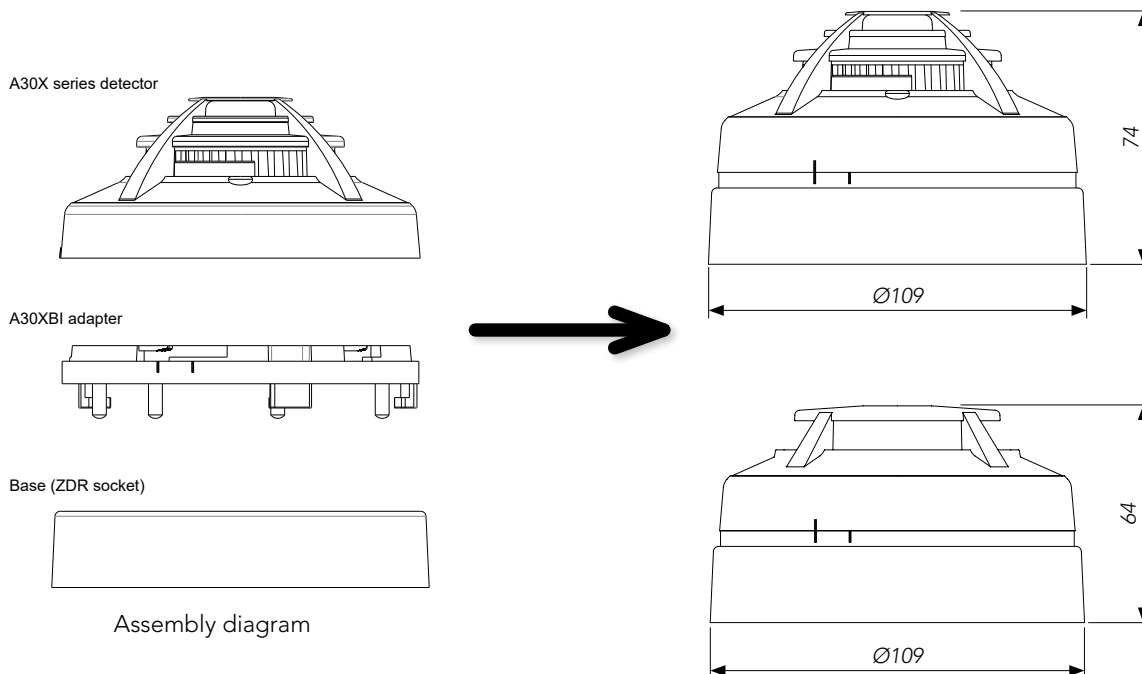
Socket adapter



To facilitate the task of updating the TC25/A system to the Lyon system (and in general the conventional system), Cofem has an "interconnection base" that allows for placing the detectors of the algorithmic-addressable and conventional system directly on the sockets of higher systems without the need to change or rewire the sockets.

Thus, if the wiring and the sockets of the installation are in good condition, a quick, simple and very cheap update to the system can be carried out, based on replacing the fire detection and alarm control panel and its detectors.

The A30XBI adaptor can be used with conventional and algorithmic-addressable detectors and these are supplied configured according to the detectors to be replaced.





CA6 SIR24F SIR24P

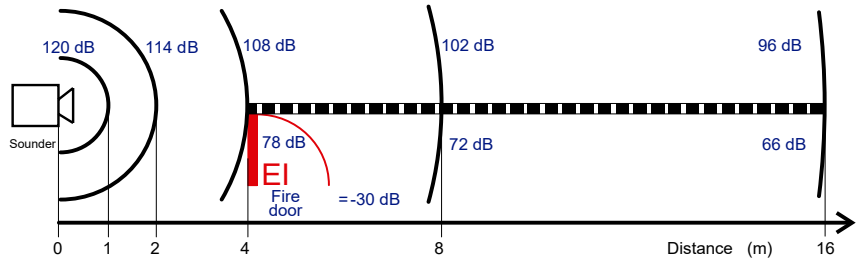


Indoor sounders

Sound level (dB-(A))	Distance (m)
120	1
114	2
108	4
102	8
96	16
90	32
84	64

ACOUSTIC GENERAL RULES

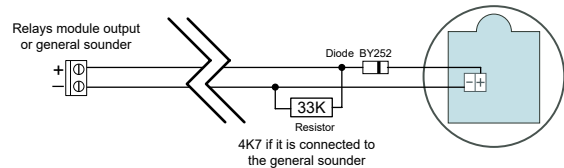
- Every time you double the distance, 6 dBs are lost.
- 30 dBs are lost for every fire door.
- 20 dBs are lost for every normal door.



Indoor sounders to be directly connected to the output of control panels or relay modules.

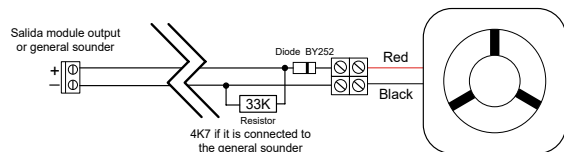
ALARM BELL 6" CA6

Output voltage	24 Vcc
Consumption	25 mA
Output volume	95 dBA at 1 meter 92 dBA at 3 meters
Operative temperature	-20°C to 60°C
Humidity	Max. 90% RH
Size	6" (150 mm x 56 mm)
Weight	764g
IP protection	IP33



SIR24P & SIR24F SOUNDERS

Material	red P.V.C.
Operating voltage	30 Vdc
Consumption at 30 Vdc	70 mA
Sound level	85 dB
Operating temperature	5°C to 40°C
Size	80 x 80 x 30 mm
With intermittent flash	Only SIR24F model



SIR24B SIR24BL SIR24B+BSLC SIR24C



Indoor and outdoor sounders

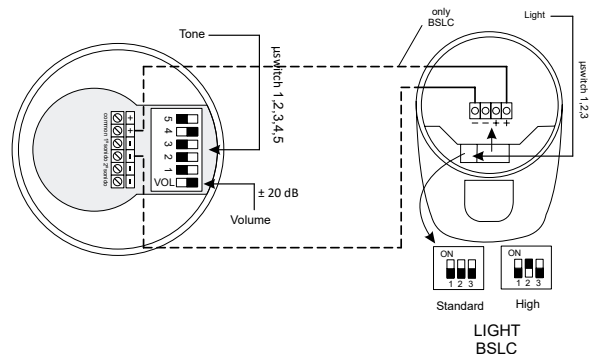
List of indoor and outdoor sounders to connect directly to the sounder output of the control panels or relay modules.

SOUNDER SIR24B, SIR24BL, SIR24BZA and BSLC

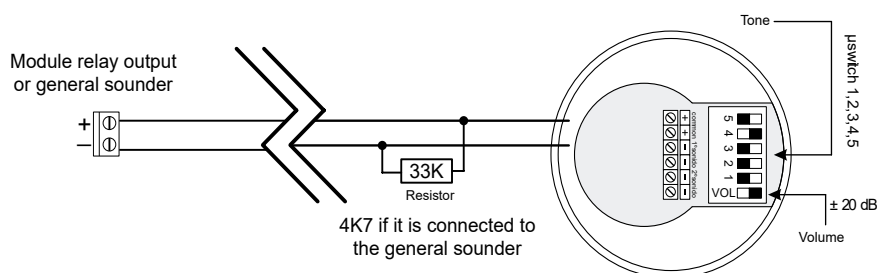
- Indoor and outdoor sounder made of red ABS.
- Great sound level. Low consumption.
- 32 selectable tones. Volume control.
- Automatic synchronization.
- SIR24B: Sounder.
- SIR24C: Sounder with light, certified EN54-23.
- SIR24BL: Sounder with light.
- SIR24BZA: Sounder with high base.
- BSLC: Base with light, certified EN54-23.
- All sounders have a diode incorporated.

Voltage range	9-28 Vdc
Consumption: (Using tone 3)	at 24Vdc 16mA (SIR24B) 20mA (SIR24BL) 49mA (SIR24C)
(Using tone7) Consumption: (Tone 3/0,5Hz/high power)	at 24Vdc 32mA (SIR24B+BSLC)
Output volume	at 24 Vdc 102 dB (A) (tone 3) SIR24C 107dB (tone 23)
Operating temperature	-25°C at +70°C
Size	Ø95 x 91 mm Ø95 x 107 mm (SIR24BL/SIR24BZA) Ø95 x 95 x 135 mm (SIR24B+BSLC) Ø100 x 98 mm (SIR24C)
IP protection	IP54-SIR24B IP65-SIR24BL IP65-SIR24BZA IP65-SIR24B+BSLC IP21C-SIR24C (low base) IP65-SIR24C (high base)

SIR24B + BSLC SOUNDER



SIR24B, SIR24BL & SIR24BZA SOUNDERS





SIR24SC SIR24SC+SIR24SLC

Voice alarm devices

Device that activates a voice message with sound of fire alarm.

The message is selectable from its internal list. They have a diode incorporated.

A. SIR24SC and SIR24SC+SIR24SLC:

- Voltage: 18 ÷ 28 Vdc.
- Consumption: 4 ÷ 8 mA.
- Sound: 90/100 dB selectable.
- Several selectable alarm tones.
- Temperature: -10°C a 55°C.
- Protection: IP21C.
- Color: red.
- Dimensions: 106 x 106 x 91mm.



B. SIR24SC + SIR24SLC:

Set alarm voice with bright warning based device.

- Certified EN54-23.
- W 2,4 - 7,5.
- Consumption: 18 ÷ 28 mA.
- 1 Hz (0,5 Hz selectable).

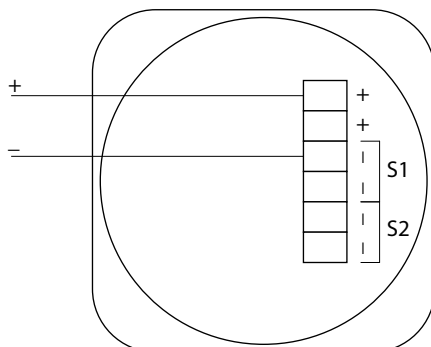


DIAGRAM FOR SIR24SC



SIRCEI SIRWAL SIR-PIT



Light warning devices

Luminous warning devices:

Devices that when are activated emit flashes of light in order to alert people with hearing disabilities:

A. SIRWAL and SIRCEI:

- Certified EN54-23.
- Supply: 9 ÷ 60 Vdc.
- Operating temperature: -25°C to 70°C.
- High base.
- Protection IP65.
- Red color.
- Dimensions: Ø93 mm x 65 mm.
- Flash: White 1Hz (0,5 Hz selectable).
- Consumption: 10-25 mA according selection.
- They have a diode incorporated.

A1. SIRWAL:

- Wall device.
- W 2,4 - 7,5.

A2. SIRCEI:

- Ceiling device.
- C 3 - 7,5.

B. SIR-PIT:

- Supply: 9 - 60 Vdc.
- Consumption: 3 ÷ 15 mA according selection.
- Flash: 1 flash 1Hz.
2 flashes 1Hz.
Continuous 1Hz.
- Temperature: -20°C to 55°C.
- Protection: IP21C.
- Color: red.
- Red flash.

DIAGRAM FOR SIRWAL AND SIRCEI

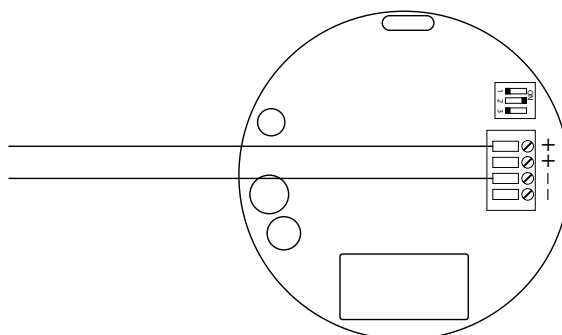
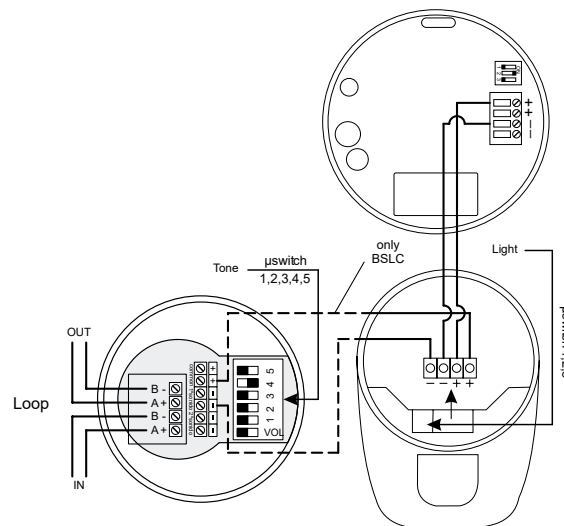


DIAGRAM FOR SIRWAL AND SIRCEI WITH BSCL AND SIRAY



NOTE: They can be connected with the SIRAYBSLC by selecting low sound and light on this device and BSCL. The calculation of consumption points of the SIRAY+BSLC and this additional device shall be computed as a SIRAY+BSLC with selection of sound and maximum light.



CAEC

Sirena de exterior



OUTDOOR SOUNDER CAEC

- Outdoor red sounder made in ABS plastic.
- Internal cover to protect all pcb's
- 24V power sounders.
- Piezoelectric speaker.
- EN54-3 type B certified.

Activation

Supply

Power

Timing by cycle

LED's

Dimensions

Current / consumption

IP protection

Via power supply application

24 Vcc

92 dB

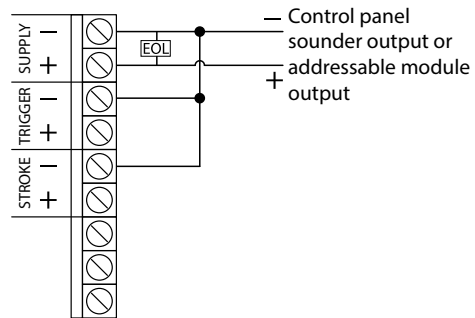
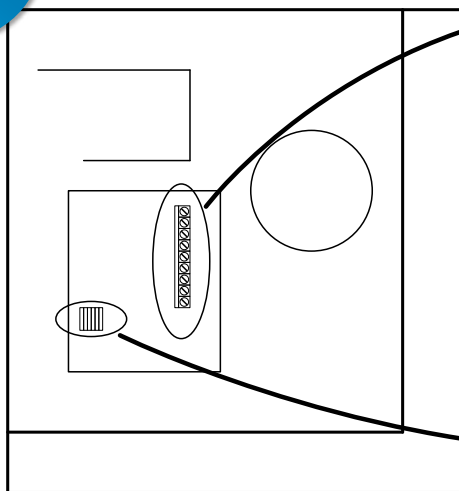
3/15 minutes

1 led bar

260 x 275 x 55 mm

200 mA

IP44



JUMPERS



timing selection

TIME

- with jumper: 3 min
- without jumper: 15 min

NOTE:

EOL: 33KΩ supply by addressable algorithmic modules.
 EOL: 4K7 Cofem fire control panel sounder general output.



PWS03/05

External power supply



External switched-mode power supply.

There are 2 models depending on the system's power requirements:

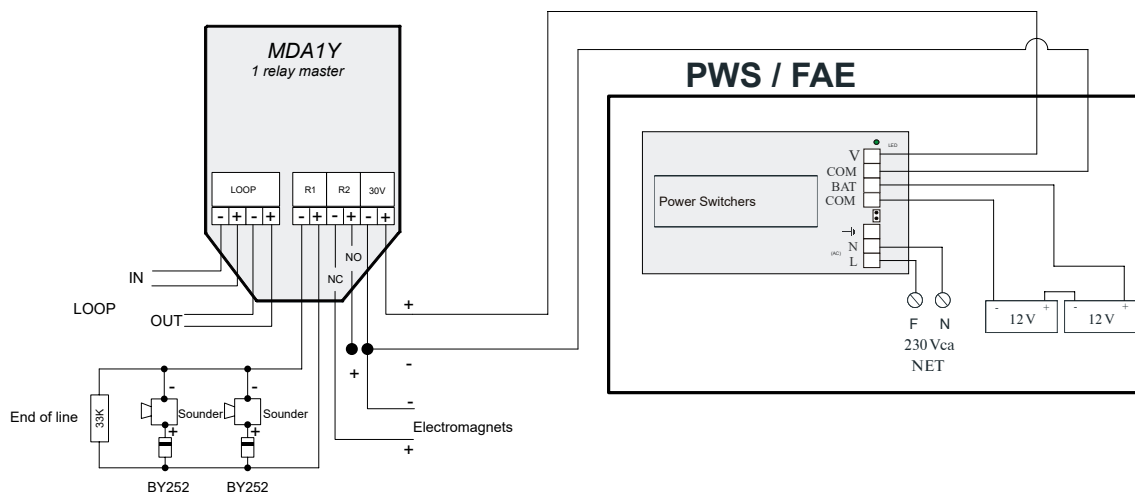
- PWS03: 3A (100W) supply capacity.
- PWS05: 5A (155W) supply capacity.

The PWS is offered installed inside a 416x321x132 mm cabinet (without inside door), which provides additional space for the necessary batteries inside.

Features:

- Supply capacity of 3A (PWS03 model) or 5A (PWS05 model).
- PWS incorporated in a cabinet, which allows the necessary batteries to be installed inside it.
- Metallic cabinet.
- Incorporated battery charger
- Existing variant with London finish cabinet (FAE03Y / 05Y).

Wiring diagram
PWS03/05 with relay modules



TECHNICAL FEATURES

Supply	230 V/AC 50 Hz
Output voltage	30 V/DC
Standby consumption	100 mA
Output current	FAE 03: 3A / FAE 05: 5A
Battery charger	Yes
Humidity	20 - 95% RH
Temperature	-10°C +50°C
Dimensions	416x321x132 mm (without door)
IP protection	IP 30



ZAFIRPWS

External power supply



External Power Supply (with batteries charge incorporated) for fire detection and fire alarm systems. Certified according to EN 54-4.

This equipment is specially recommended for properly feeding any fire detection device which requires external power supply.

It has two outputs:

- Two 30V output monitored and protected by a fuse, for easy connection.
- Dry contact fault output, for integration with other systems.

The system has three indication leds to show system status:



RED (green): system operating through 110/230 V/AC power supply.



BATTERY (green): system operating under batteries.



FAULT (amber): system fault, general power supply fault or fault in the auxiliary battery supply.

There are 2 models available depending on the needs of the system:

- ZAFIRPWS2 (65W): supply capacity 1,5A (65w).
- ZAFIRPWS5 (150W): supply capacity 4A (150w).

General power supply connection is different between the two models. ZAFIRPWS2 is connected to electrical network by a connector located on the right side of the box. ZAFIRPWS5 is connected to electrical network directly to the switching power supply.

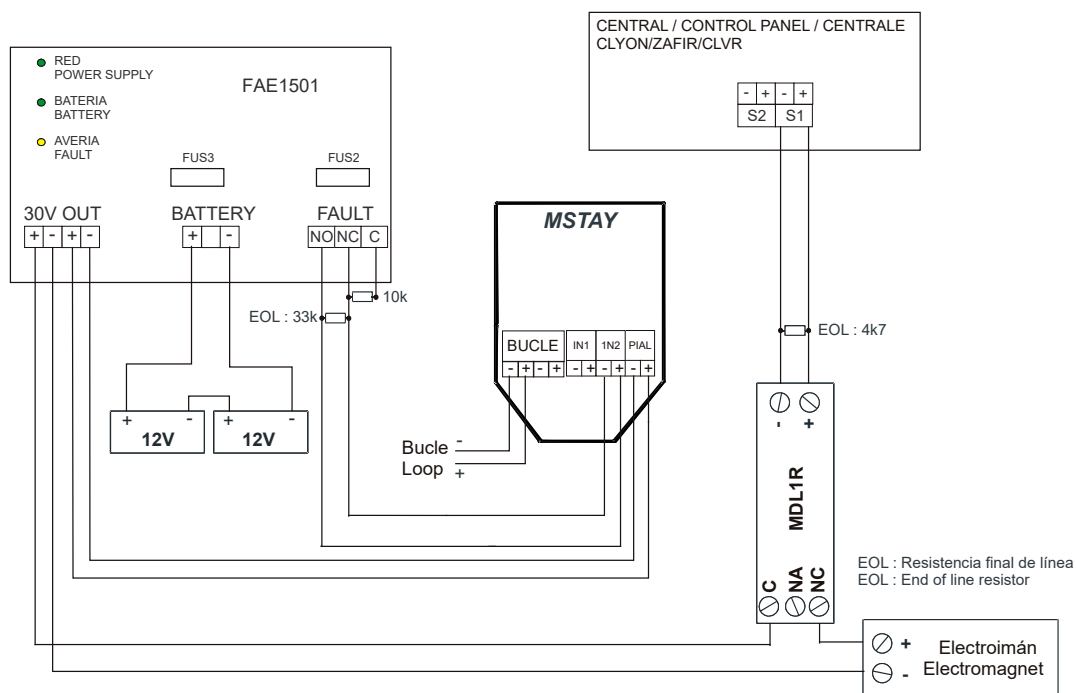
External Power Supply is placed inside a metallic box of 363 x 331 x 96 mm, which allow additional space for installing batteries (2x12 Vdc7Ah).

TECHNICAL FEATURES

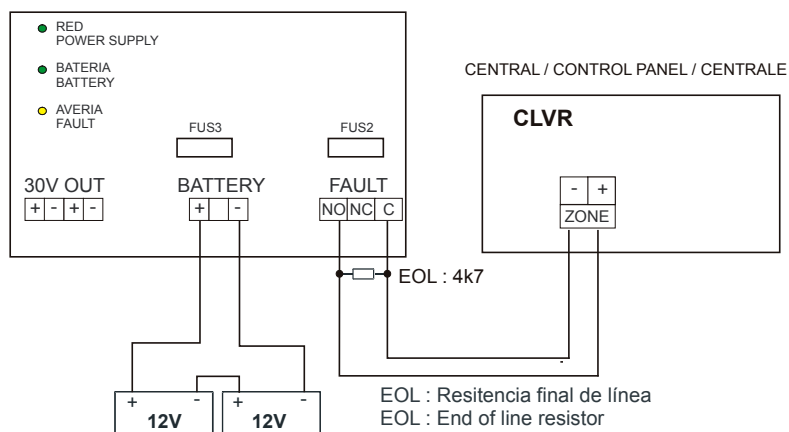
Power supply	110/230V 50-60Hz/AC
Consumption in standby	50 mA
Output voltage	29 ~ 29,5 VDC
Output current	ZAFIRPWS2: 1,5A ZAFIRPWS5: 4A
Batteries charger	Yes
Humidity	20 - 95% HR
Temperature	-10°C to +50°C
Dimensions	363 x 331 x 96 mm
IP protection	IP 30
Standard	EN 54-4



ZAFIRPWS WIRING DIAGRAM ALGORITHMIC ADDRESSABLE SYSTEM



ZAFIRPWS WIRING DIAGRAM FAULT OUTPUT





DLR

Optical smoke beam detectors

Optical smoke beam detectors for fire detection system consisting in a system of emitting/receiving an optical beam of infra-red light.

The installation of these detectors is ideal for large premises or for premises with very high ceilings.

There are several models:

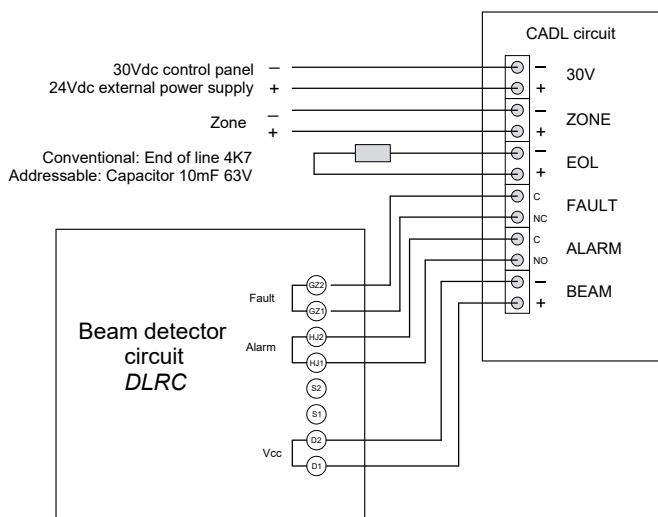
-DLR50M and DLR100M: Motorised beam detector with separation between 50 and 100 m.

-DLRONE50 and DLRONE120: Beam detector with self-alignment, cancellation of ambient light, monitoring of the building's movements and models with separation between 50 and 120 m.

-DLRC: Conventional beam detector between 8 to 100m. Supply from control panel or external supply. Alarm and fault output connected to zone.

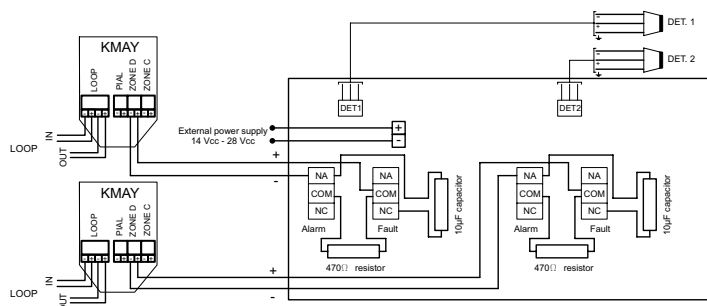


	<i>DLR50M DLR100M</i>	<i>DLRONE50 DLRONE120</i>	<i>DLRC</i>
Power supply	14 to 28 Vcc	14-36 Vdc	20-28 Vdc
Standby consumption	10, 12, 14, 16 mA (for 1, 2, 3, 4 det.)	5 mA	23 mA
Alarm consumption	48 - 52 mA	33 mA	33 mA
Wavelength	850 nm	850 nm	-
Max. angle detector	± 0.3°	± 0.5°	± 0.4°
Max. angle reflector	± 5°	± 5°	-
Relay output	30 Vcc	2 A to 30 Vdc	2 A to 30 Vdc
Temperature	-10°C to +55°C	-20°C to +55°C	-10°C to +55°C
Protection	IP 54	IP 55	IP30 (IP66 with silicone sealing)
Standard	EN 54-12	EN 54-12	EN 54-12

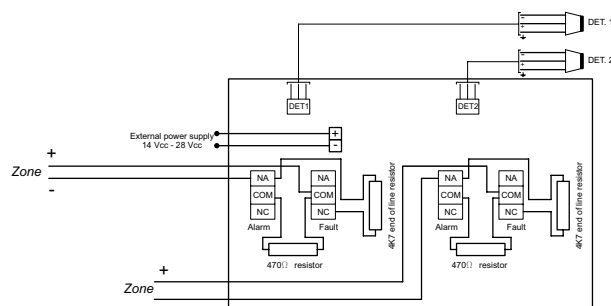


DLRC connection diagram

ALGORITHMIC ADDRESSABLE SYSTEM

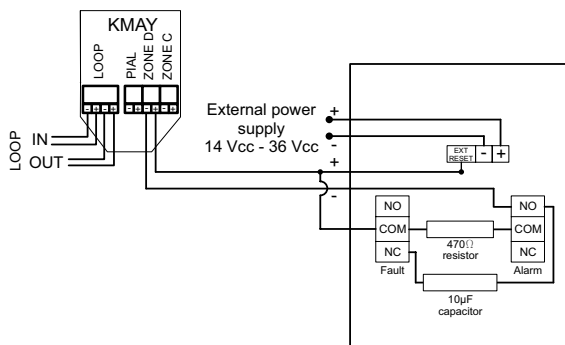


CONVENTIONAL SYSTEM

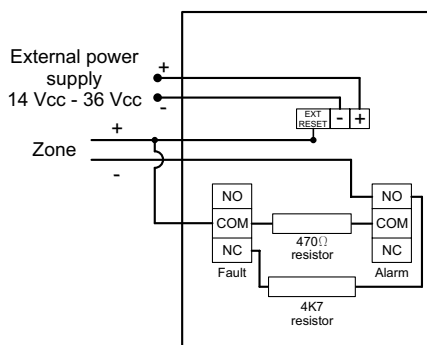


DLR50M / DLR100M connection diagram

ALGORITHMIC ADDRESSABLE SYSTEM



CONVENTIONAL SYSTEM



DLRONE50 / DLRONE120 connection diagram



CTE / CTX

Lineal heat detector

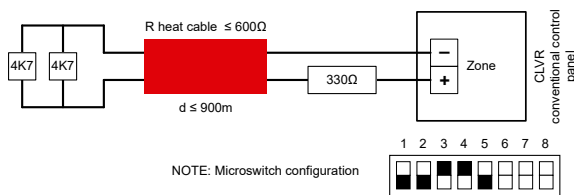


Linear heat Detector is a proprietary cable that detects the heat at any point of its length.

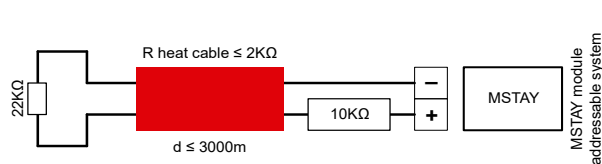
The sensor cable consists of two steel conductors individually insulated with a polymer sensitive to temperature. The insulated conductors are twisted together to create a spring pressure, then is wrapped with an outer cover appropriate to the environment in which must be installed in the detector.

In the calibrated temperature, heat sensitive insulating polymer yields against the pressure generated by the radiation of heat, allowing interior conductors get in touch between them and activate an alarm signal. This action occurs at any point heated within the detector cable length. It is not required to heat a specific length to activate the alarm, or you need to calibrate the system to compensate for changes in environmental temperature where it is installed.

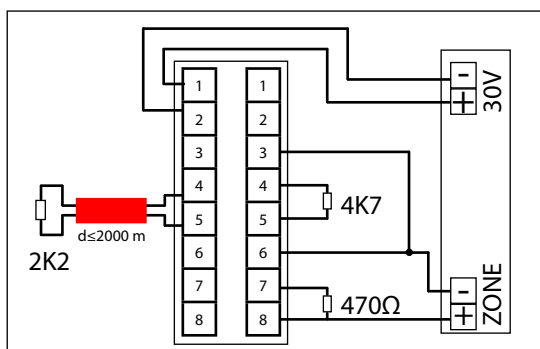
The linear heat Detector provides the advantages of coverage of lines with sensitivity of specific points.



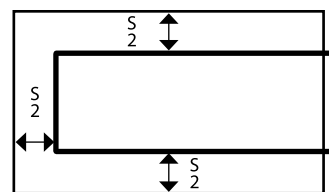
Wiring diagram with direct connection to the conventional control panel



Wiring diagram with direct connection to addressable module MSTAY



Wiring diagram with interface module



Ceiling of the protected area
S= Generally will be 6,4 m, according to UNE 23007-14

Type of product and temperature

Product type	Alarm T°C	Max. environ. T°C
EPC Various utilities/ Industrial and commercial applications	68 °C	38 °C
	88 °C	66 °C
	105 °C	79 °C
	138 °C	93 °C
	180 °C	105 °C
EPR Property against erosion by climate / Performance of the cover for high T°C	68 °C	38 °C
	88 °C	66 °C
	138 °C	93 °C
	180 °C	121 °C
XCR Industrial applications excellent resistance to the chemical abrasion	68 °C	38 °C
	88 °C	66 °C
	105 °C	79 °C
	180 °C	121 °C
XLT Excellent for low T°C	57 °C	38 °C

TECHNICAL FEATURES

Max. nominal voltage	30 VAC, 42 VDC
2W wire resistance	0,2 ohmios / pie. (0,656 ohm / m)
Min. radius of curvature	6,4 cm
Diameter	Nominal 4 mm
Weight	Nominal 3,6 kg / 152 m

STF / STPR

Probe temperature

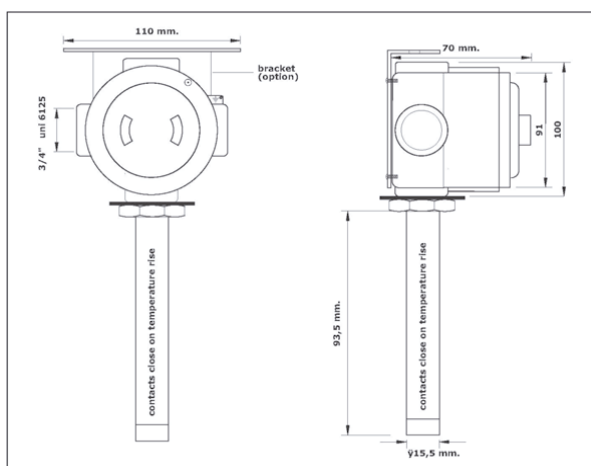


Punctual heat detector based on a probe that allows its installation in special environments.

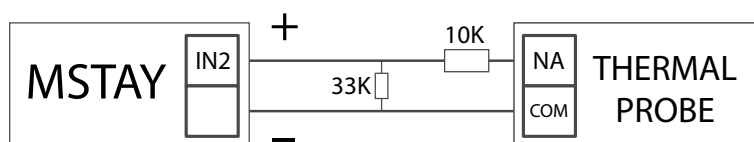
Depending on the protection needs, the detector can be used in:

- Aggressive environments: Model IP65.
- ATEX environments: II2GD Exd IIC T6.

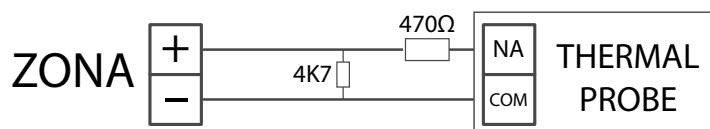
Protection	IP65									
Relative humidity	98%									
Weight	400g									
Bimetal component	Nilvia (Nilvar)									
Sensor material	Steel									
Fixed calibration on request (°C)	60	71	88	107	135	163	182	232	315	385



ALGORITHMIC ADDRESSABLE SYSTEM



CONVENTIONAL SYSTEM





FDINA40 FDAAT60



Flame detector

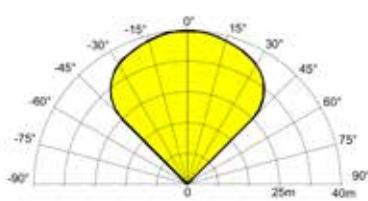
Flame detector to protect zones with open fires.

The detector is designed to respond to the flicker frequency and wavelengths characteristic of flames

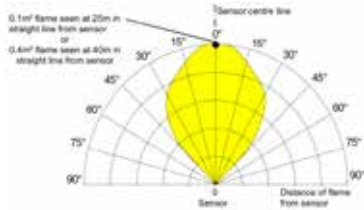
There are three types of detectors depending on the used sensors to centre in the typical specific wavelengths of the flames and generate algorithms to discriminate these flames from others lightning supplies.

- IR²: 2 IR sensors
- IR³: 3 IR sensors
- UV/IR³: 1UV sensor and 2 IR sensors.

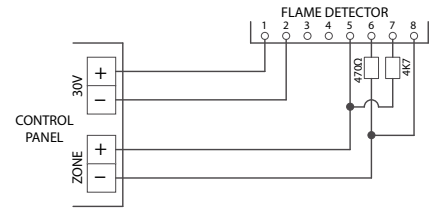
Equally, there are an ATEX and conventional version of the previous models.



Detection field for the conventional detector



Detection field for the ATEX detector



Wiring diagram

Supply voltage	14-30 VCC
Alarm current, options	28 mA, RL1 and RL2 energized 20 mA, current loop, RL1 and 2 off 9 mA, RL1 energized
Alarm indicator	Red, light-emitting diode (LED)
Alarm reset time	1 second
View range	0,1m ² n-heplane at 25m
Sensibility	Class 1 (EN54-10)
View field	90° cone
Spectral response	185 a 260 nm UV / IR3 1,0 - 2,7 um
Operating temperature / Humidity	-10°C to +55°C (without ice or condensation) / 95% RH without condensation
IP protection	IP 65 (conventional) / IP 66 (ATEX)
Cover material	Die-cast Zinc Alloy, blue (conventional) Copper-free aluminium, red (ATEX)
Dimensions	142 x 108 x 82 mm (conventional) / 150 x 146 x 137 mm (ATEX)
Weight	2 KG (conventional) / 2,5 KG (ATEX)



DAS100C DALM1Z



Aspire smoke detector

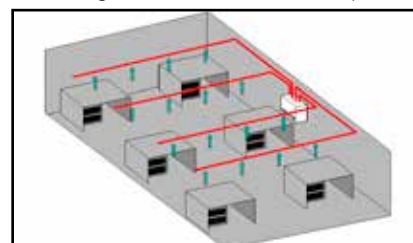
Range of aspire smoke detectors with selectable levels of sensibility (Normal, Better and High)

They detect the smoke analyzing the aspirated air through the holes in a tubes distributed by the enclosure to monitoring and taken to the detector

Aspire smoke detector uses laser light to discriminate the particles from the air and get an alarm early and reliable.

Typical applications of this range of detectors are: data storage, air conditioning units, machines, computers, equipment racks, prison cells, air ducts, rooms machines, etc.

There are several models depending on the needs of detection (refer to attached table)



	Features	Max. cover	Alarm levels	Aspiration tubes length (m)	Detection class	System sensibility	Test points QT.	
Senator Nano	190x230x110 mm 1,2 kg IP50	250 m ²	Pre-alarm 1 alarm 1 fault	1 tube 25-50 m	Class C Class B Class A	Normal 5% Better 2% High 0,8%	10 4 2	24V / 350 mA Øint tube=15-25mm Øext tube=26-26,5mm
Senator 25	140x200x85 1,85 kg IP50	500 m ²	Pre-alarm 1 alarm 1 fault	1 tube 50 m	Class C Class B Class A	Normal 5% Better 2% High 0,8%	10 Sw design Pipecad	24V / 250 mA
Senator 100	297x200x85 3,75 kg IP50	1000 m ²	Pre-alarm 1 alarm 1 fault	2 tube 50-100 m (50m x 2) (100m x 1)	Class C Class B Class A	Normal 5% Better 2% High 0,8%	20 Sw design Pipecad	24V / 400 mA
Senator 200	427x372x95 5,2 kg IP50	2000 m ²	4 - pre-alarm alarm individual levels 1 - fault	4 tubes 200-250 m (50m x 4) (100 m x2)	Class C Class B Class A	Normal 5% Better 2% High 0,8%	100 400 20	Øext tube=25/26-26,5mm 24Vdc / 300-470-750 mA (according aspirating speed)

There is also a model that includes only the air aspirating system for incorporating an external fire detector inside.

- Consumption: 24Vdc / 300 mA.
- Size: 259 x 184 x 166 mm.
- Temperature: -10°C to +60°C.
- External/internal tube diameter: Ø25/Ø21 mm.
- Tube max. length: 100 m.
- Protection: IP65.
- 1 or 2 detectors in the same aspiration (IAS-1) or independents (IAS-2).





ELPCF

Electromagnets for fire doors



ELPCF50K



ELPCF140K



ELPCF50KS



ELPCF300K

ELPCF50K-ELPCF50KR-ELPCF50KAL-ELPCF50KALR ELECTROMAGNETS:

Electromagnetic wall retainers for fire containment doors.

- Power supply: 24V DC
- Consumption: 60 mA.
- Retention force: > 55 Kg | adjustable force.
- Unblocking push button.
- Noise suppressor.
- Anti-magnetic spring.
- UNE 1155 certificate.
- Head dimensions: 75x90x35 mm.

ELPCF140K ELECTROMAGNET:

Electromagnetic wall retainers for fire containment doors:

- Power supply: 24 V DC
- Consumption: 70 mA.
- Retention force: > 140 Kg.
- Unblocking push button.
- Noise suppressor.
- Anti-magnetic spring.
- EN 1155 certificate.
- Head dimensions: 90x100x43 mm.

ELPCF300K ELECTROMAGNET:

High power electromagnetic retainer for emergency and general passage doors.

- Power supply: 12 - 24V DC.
- Consumption at 12V DC: 500 mA.
- Consumption at 24V DC: 250 mA.
- Retention force: 300 Kg.
- With damping.
- Operating temperature: -10°C to +50°C.
- Protection: IP40.
- Dimensions: 250x48x25 mm.

ELPCF600K ELECTROMAGNET:

High power electromagnetic retainer for emergency and general passage doors.

- Power supply: 12 - 24V DC.
- Consumption at 12 V DC: 500 mA.
- Consumption at 24 V DC: 250 mA.
- Retention force: 600 Kg.
- Dimensions: 265x66x41 mm.

ELPCF50KS ELECTROMAGNET:

Electromagnetic retainer for mounting on the floor.

- Power supply: 24V DC
- Consumption: 45 mA.
- Retention force: 50 Kg.
- Protection: IP40.



Fire protection manufacturer
C/ Compositor Wagner, 8 - Pl. Can jardí
08191 Rubí, SPAIN
www.cofem.com