

COMPALARM AP

GENERAL

The **COMPALARM AP** is a point alarm system, with as many normally closed input contacts. It gives the possibility of selecting the alarm sequence according with 30 x 30 mm cells, fitted with ultra bright white LED's, achieving a low power consumption and a lamp maintenance free operation.

The interconnecting possibility allows to design other supervision alarm systems with many extensions.

The alarm systems type **COMPALARM AP** has been conceived with its very reduced dimensions, but maintaining the characteristics of the **COMPALARM A** system.

This system has been studied for the most critical uses, i.e. electrical plants in which a malfunctioning of a single component should only harm the function of one channel at most.

Each channel is protected by optoisolators, which keep free of any external disturbances.

Every channel is fitted with a micro-switch allowing the selection of a normally open (N.O.) or a normally closed (N.C.) contact.

The **COMPALARM AP** allows also the selection of two types of sequences by means of a micro-switch, either ISA1 (ISA A) or ISA2C (ISA M) and for both sequences the first-out function (F1A and F1M), channel per channel.



It is also possible to select a different functioning of the output relays for the acousting signalling in order to have 2 signalling types according with the alarm type.

With regard to this possibility, there might be the following options, which might be selected by a micro-switch:

- 6 inputs on relay 1 and 6 inputs on relay 2
- 8 inputs on relay 1 and 4 inputs on relay 2
- 10 inputs on relay 1 and 2 inputs on relay 2
- 12 inputs on relay 1 and the relay 2 working as cumulative for indication of a group in alarm situation

The visualisation is being made by special LED's granting a high brightness together with a long lasting life (millions of working hours), which saves the lamps replacement problems.

MAIN FEATURES

- 12 contact inputs
- 4 push button inputs (test, horn off, ack, reset)
- Optoisolated inputs
- Normally open / closed input contacts
- Horn output
- Alarm cumulative output
- Flush panel mounting
- 1 wire expansion line
- Low power consumption
- No lamp maintenance required
- Fauto-reset power supply fuse
- 4 pre-selectable sequences: ISA A - ISA M - ISA F1A - ISA F1M

WORKING PRINCIPLE

Whenever there is a change over the input contacts, from the normally open (N.O.) to close situation or from normally closed (N.C.) to open situation, the **COMPALARM AP** device changes from rest condition to the alarm condition.

There will be therefore an optic and acoustic signalling with the particular behaviour, which will depend on the particular selected sequence (see the sequence table).

All the operations required by the sequences, which the device can perform, may be achieved by the push buttons, as silence, acknowledge and reset.

The silence push button particularly, reacts only on the siren, without interfering the lamp.

Whenever the silence push button is not being used, it is possible to perform simultaneously the silence of the acoustic alarm so as the change of the optic signalling from flashing to fix, by using the acknowledge push button.

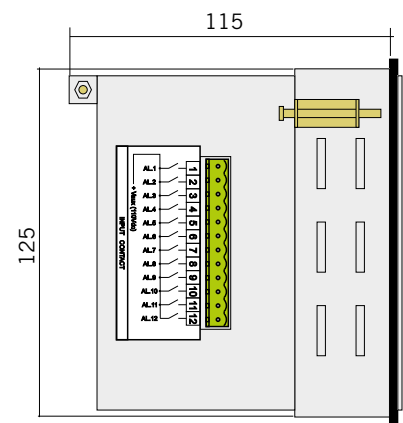
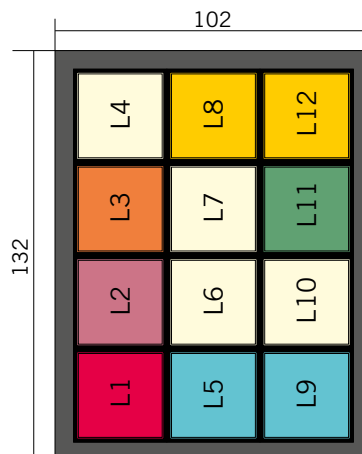
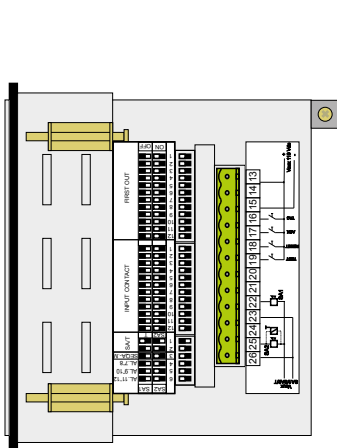
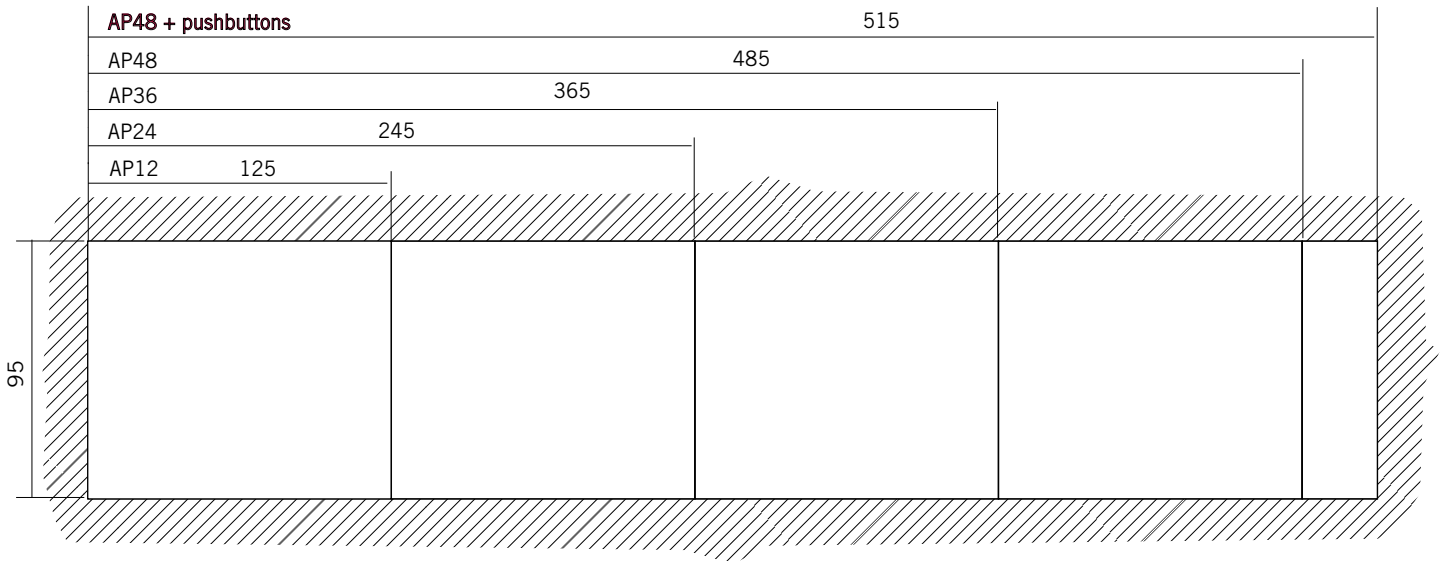
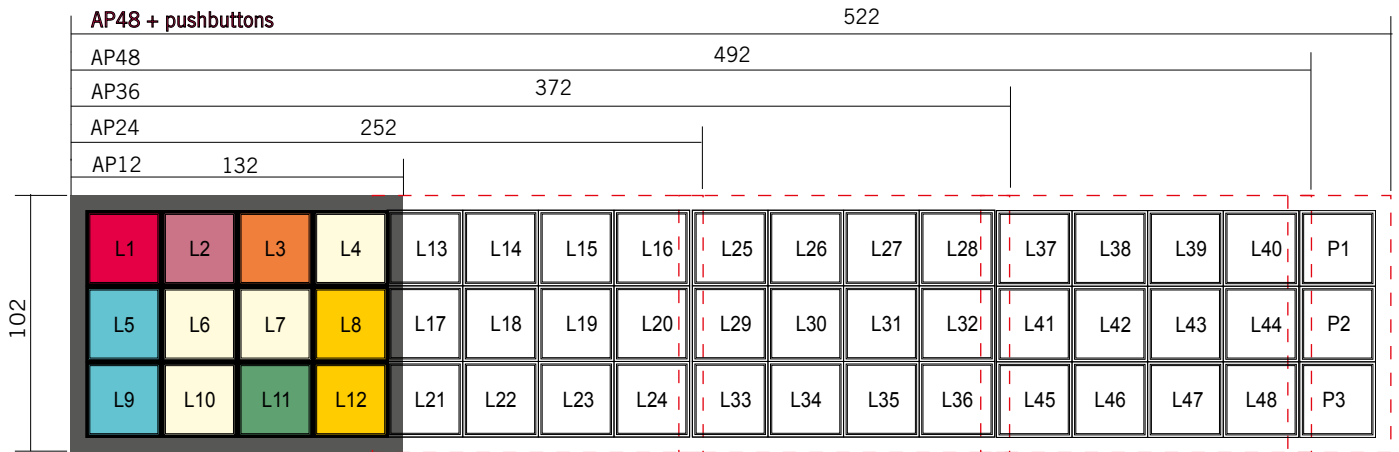
We can perform the complete test of the system through the test push button.

On request, it is possible to perform the LED's test only, instead of the complete test.

ELECTRICAL CHARACTERISTICS

Supply voltage	24 Vca/cc or 48 Vcc or 110 Vcc ± 20 %
Frequency	cc - 50 ÷ 60 Hz
Power consumption	10 W MAX
Terminals	Plug in terminal block for screws
Operating temperature	0 ÷ 60 °C
Storage temperature	- 20 ÷ 70 °C
Relative humidity	45 ÷ 90 % (non condensing)
Max vibration allowed	0,5 G
Operating position	Whatever
Line fuse	Internal autoreset
Overall dimensions	132 x 102 x 80 mm
Cut-out dimensions	125 x 115 mm
Weight	800 g MAX
EMC compliance	Directive EMC 89/336/CEE
Emission	EN 50081-1
Immunity	EN 50082-2
Inputs	12 optocoupled channels
Voltage	24 Vca/cc or 48 Vcc or 110 Vcc ± 20 %
Current	2,5 mA MAX 3,7 mA MAX 5 mA MAX
First out line	1000 m MAX 2
Outputs	2 NO-N-NC contacts
Max switching voltage	220 Vcc / 250 Vca
Max switching power	20 W MAX
Output protection fuse and crowbar	1 A fast
Galvanic separation	Input Output Supply
Test voltage	2500 V 50 Hz, 1 Minute
Isolation voltage	300 VRMS MAX
Display	Hi-efficiency white LED
Illumination face	30 x 30 mm
Lens	28 x 28 mm
Engraving area	27 x 27 mm
Screen colors	Orange, white, red, green, yellow, blue

DIMENSIONS AND PANEL CUT OUT



VERSIONS

The COMPALARM AP alarm systems is available with various auxiliary supply and operation voltages. The available types are as follows:

- auxiliary supply and contact voltages 110 Vcc
- auxiliary supply and contact voltages 48 Vcc
- auxiliary supply and contact voltages 24 Vca/cc

MODELS

The available executions are as follows:

- 12 points execution type COMPALARM AP12
- 24 points execution type COMPALARM AP24
- 36 points execution type COMPALARM AP36
- 48 points execution type COMPALARM AP48
- other on request

Should it be necessary to extend the first out function on the full system and not only to a 12 points groups, on the AP24, AP36, AP48 executions, it is necessary to use FOO connecting accessory. It's possible to have other executions with a multiple of 12 number of points (ex. 60).

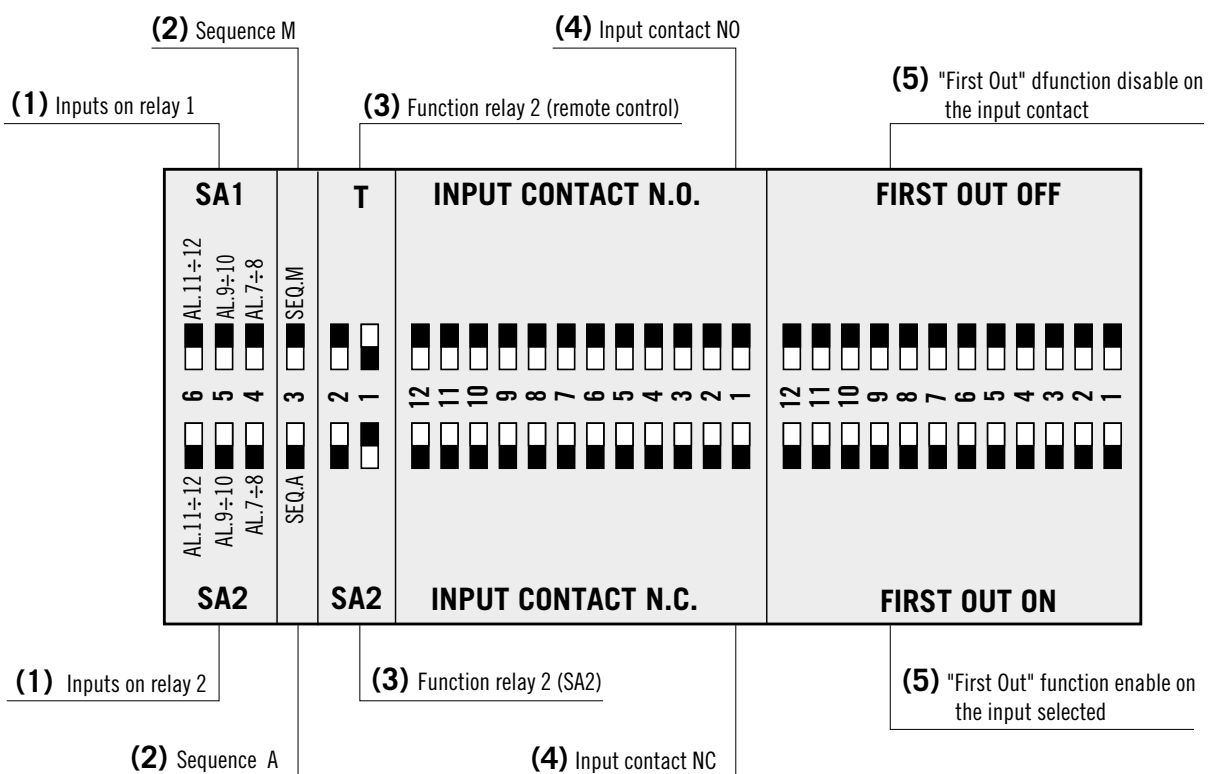
ACCESSORIES

Connector and cable for the FIRST OUT connection between two or more COMPALARM AP units.

OPTIONS

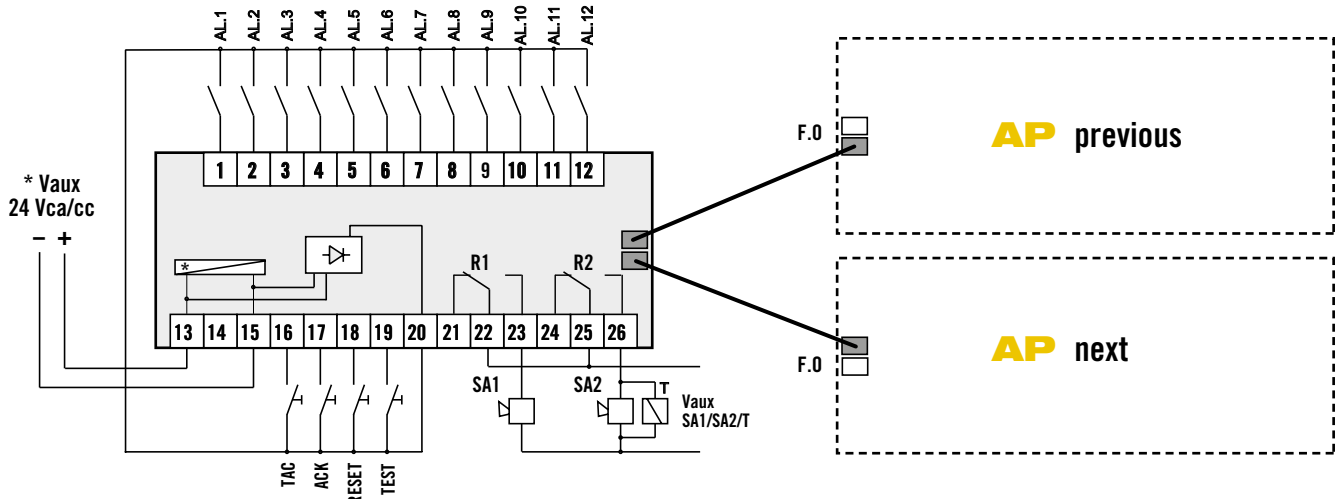
- test of LED (as alternative to the test of sequence)
- sifail safe (relay 2 normally excited)
- incorporate push buttons

PROGRAMMING

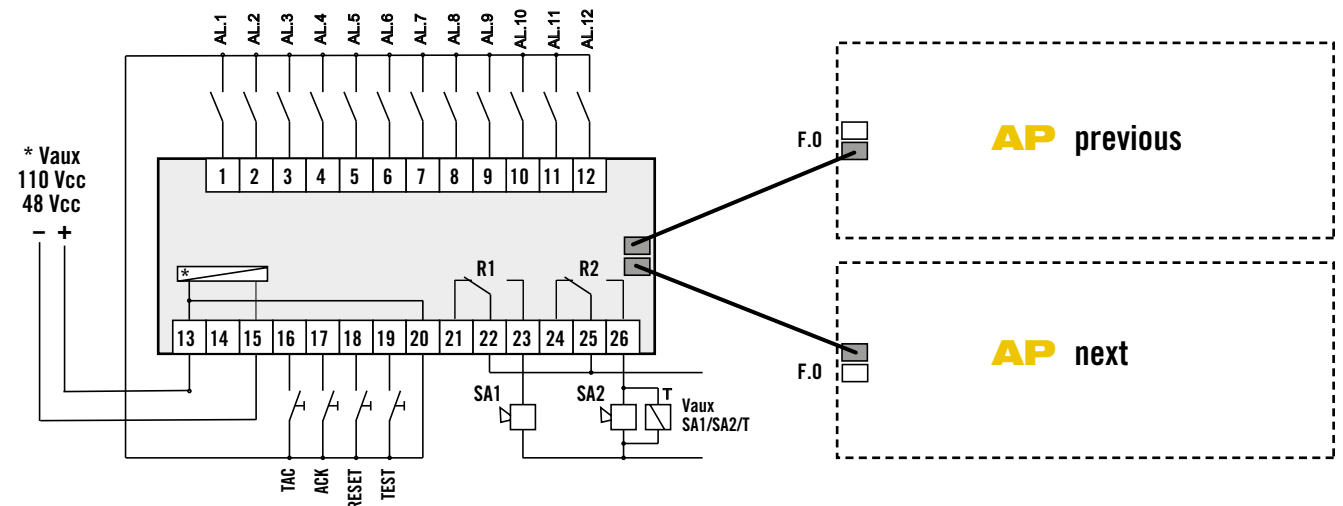


CONNECTIONS

Supply voltage 24 Vca/cc



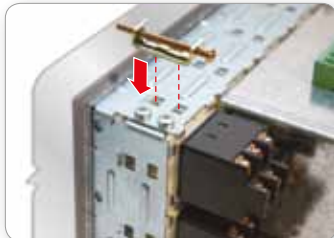
Supply voltage 48 o 110 Vcc



GROUP FIXING



1
Insert the device by the front of the panel through the available location.



2
Install the fixing devices into their available grooves, as shown in the image and screw down up to their complete fixing.

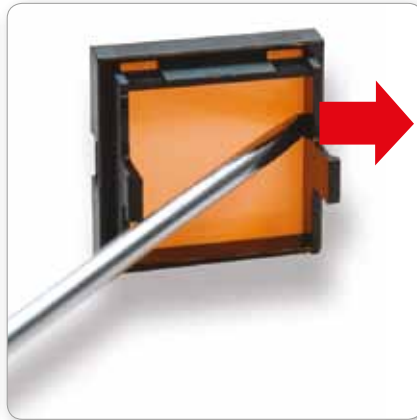
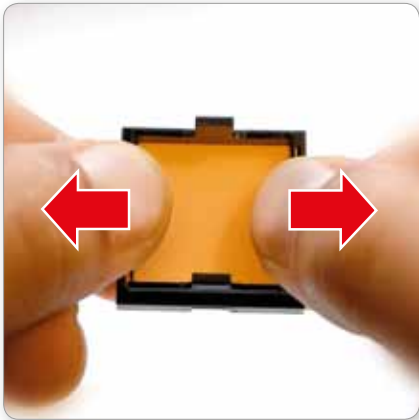


- Should the device be subject to vibrations, block the screws with the varnish or similar fixing material.
- The number of fixings varies according with the dimensions of the group, which should be supported. Four fixings are sufficient for a basic unit, up the maximum of twelve for 16 units groups.

FRONT PANEL

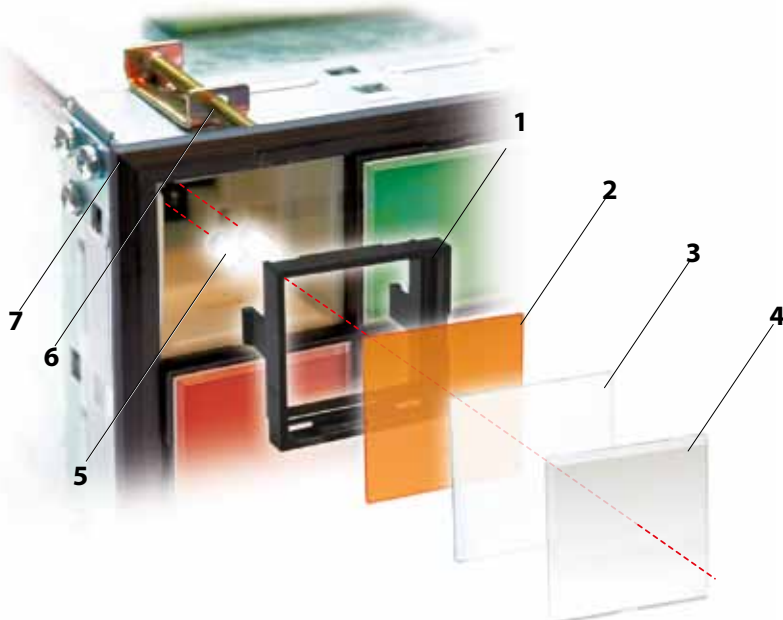


1
For removing the lens groups, it's sufficient to insert the screwdriver tip into the frame's groove and lever up slightly, as indicated.



2
To separate the parts of the group, press on the rear of the plate, enlarging slightly the frame, as indicated on the left image, or levering up with a small screwdriver.

COMPONENTS



1	Frame
2	Coloured filtere BLUE - GREEN - RED - YELLOW - WHITE - ORANGE
3	Printing plate
4	Lens
5	Lamp
6	Fixing clips
7	Lens fixing frame
Note:	For printing, it's possible to print the number 3 part, or introduce a printed transparent film, similar to those used in luminous screens with printed texts, preferably printed with laser printers.