



Alarm Technical Guide and user manual

Features

- ❖ Compact alarm system, with a basic module of 1 to 20 windows variable in dimension depending on number of windows
- ❖ Multiple modules coupling possibility
- ❖ Easy colour printing of Alarm points (text and back ground) parallel arrangement possibility of compact alarm for increasing number of windows
- ❖ Isolated by Opto coupler inputs. Supply input by customer order from 24VDC to 240VDC , NO (normally open) free contacts
- ❖ Alarm sequence possibilities according to ISA 18.1
- ❖ Easy and fast programming by dip switches for emergency or normal signals
- ❖ Two separate contact free relay for emergency and normal signals
- ❖ Signals are synchronic when alarms are parallel to each other
- ❖ Possibility to parallel each compact alarm for extending any number of windows
- ❖ Possibility to control all windows by each of the keyboards on any compact alarms enjoying the parallel arrangement

The AEG SAM compact alarm system is suitable for 1 to 20 points, with NO input contacts.

This system is supplied in a DIN 144×144×90 mm enclosure for flush mounting. An easy alarms description and background colour printing . Inputs by plug-in terminals and a high degree protection panel.

The Alarm has 20 inputs that can be set as NO for choosing normal and emergency signals using dipswitches. All inputs are isolated by opto coupler and can be supplied with any voltage between 24 to 240VAC/DC depend on customer order but normally it is 110 VDC. The Alarm includes an small keyboard for horn off, acknowledgement, reset and lamp test push buttons. Any of push buttons can control other alarms in parallel arrangement.

The outputs are two voltage free contacts relays. One of them is intended for the acoustic or signaling and the other for external output relay or any other use

As mentioned above alarm modules could enlarge the alarm system by making a bus bar at the rear of each module work under ISA – 18 sequence standard. In this state any of keyboard push buttons is active for all windows, or external push buttons wired on the rear bus bar.

Description

To describe texts on any of windows , you can type and print by the colour back ground on a paper and then put it on the panel as shown blow . For convenience a CD is supplied which include the software for designing text and background colour of in-front panel shown as fig 1.

- 1 : Take out the external Alarm system cover
- 2 : Design the text and colours on normal paper (by use of CD)
- 3 : Put the paper in its place and set the paper
- 4 : Put the panel in its place and complete the process

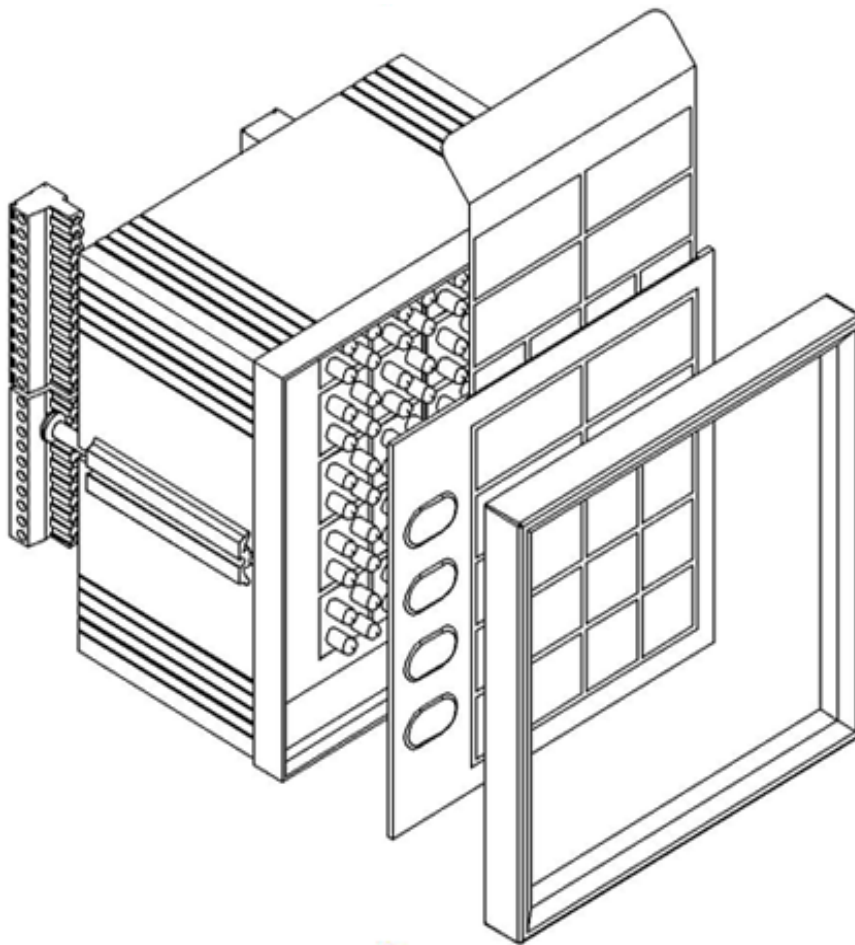


Fig 1

If the twenty windows alarm is selected the number and dimensions of windows can be changed from 1 to 20 windows as shown in picture 2 .



Fig 2

As shown in the fig 3 the keyboard of the front panel contain Horn off, Acknowledge, Reset and Lamp test.

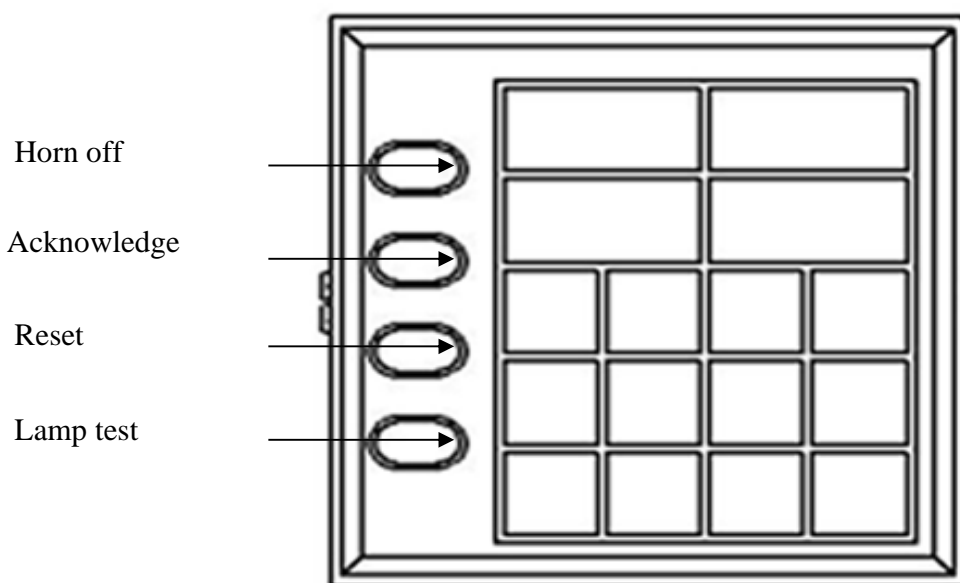


Fig 3

Back of alarm in fig 4, shows five sections from 1 to 5 as follows

1. A twelve plug-in terminal for paralleling , supply , horn of , ACK , reset , lamp test and to free open compacts.
2. Twenty dip switches for selecting normal or emergency windows to be silent or voiced status.
3. Twenty plug in inputs terminals .
4. Structure for installation .
5. To earth alarm unit .
6. Two Amp fuse power supply.

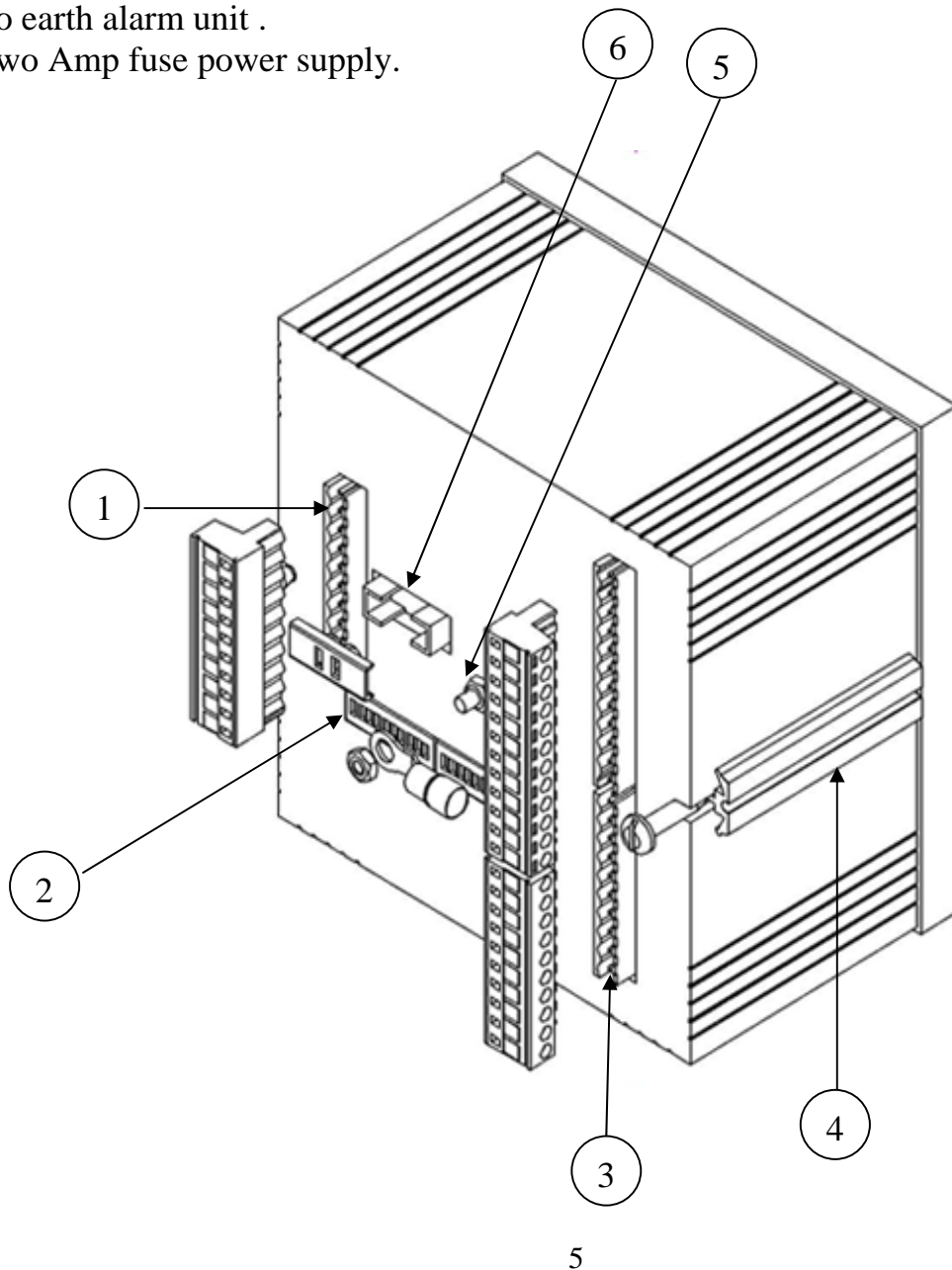


Fig 4

Dimensions of windows :

The state and dimensions of the windows are shown in fig 5 .

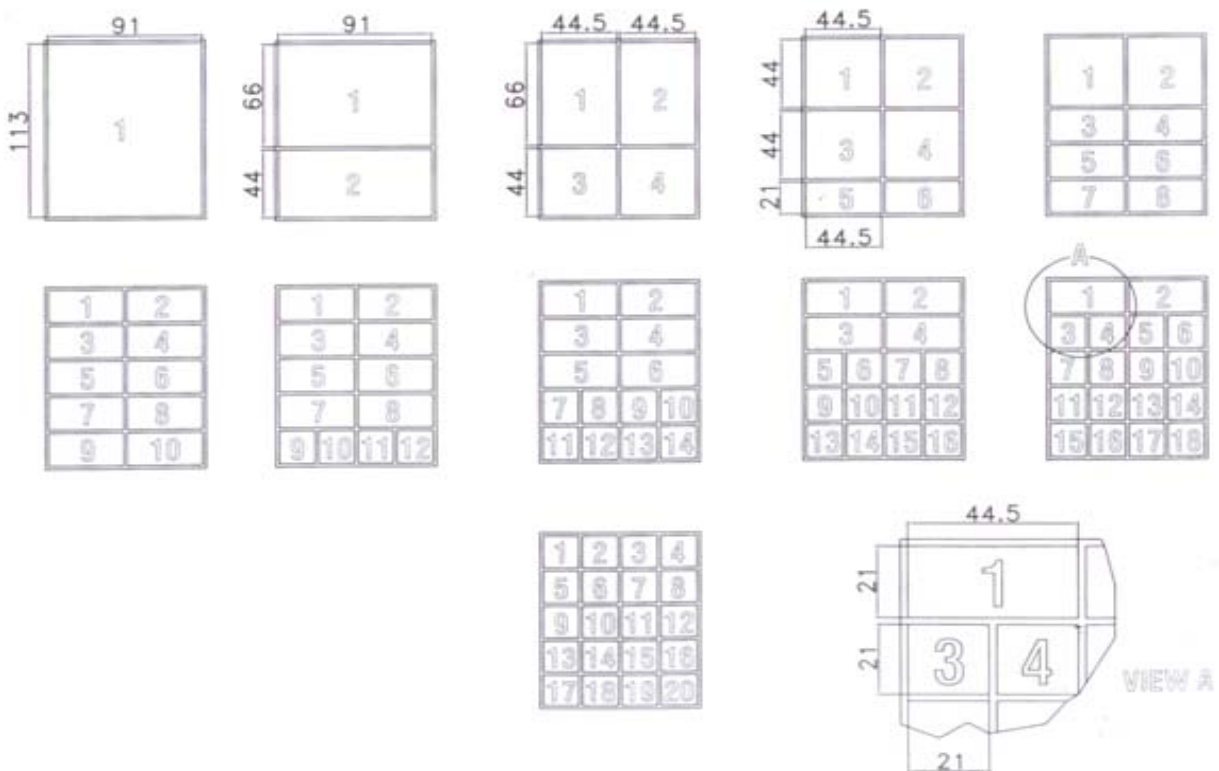


Fig 5

Dimensions of structure alarm windows :

Top , bottom and side dimensions are shown in fig 6 .

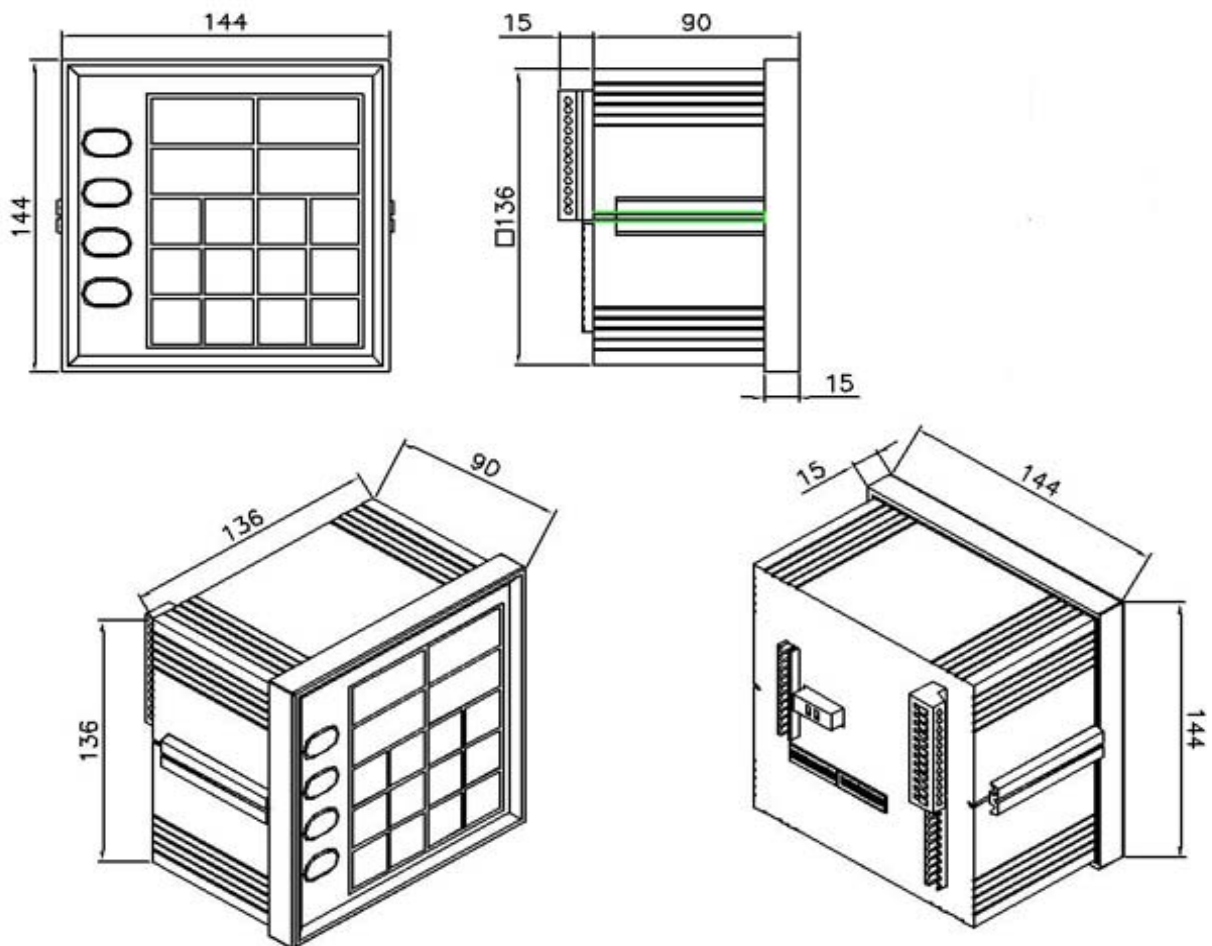


Fig 6

Technical Data

WINDOW

Window Dimension.

Type: White LEDs

Colours: Any Coloured by printing on paper

Windows Flash

ALARM SEQUENCES M, A, R, R-12, F1A, F1M, F2A, F2M, F3A, F3M, Follower

TYPE OF MOUNTING flush Mounting

AUXILIARY POWER INPUT

Fuse protected.

AEG SAM.1 24-36 V DC or 17-26 V AC.

AEG SAM.2 88-140 V DC or 63-100 V AC.

Power consumption AEG10 : 6 W, AEG20: 8 W

ALARM CONTACT INPUTS

Opto-coopler isolated inputs

AEG SAM-A 24-36 V DC or 18-27 V AC.

95-140 V DC or 64-100 V AC.

Input current 2.5 mA typical

RELAY OUTPUTS

Repeat relays Potential free for each alarm point.

3 A at 250 V AC, 1 A at 30 V DC. Resistive load.

TERMINALS

All are plug in

ENVIRONMENT

Operation temperature -10°C to 50°C

Storage temperature - 40°C to 75°C

Humidity 95%

ENVIRONMENTAL CONDITIONS

Temperature : -10°C to +60°C

Humidity : 56 days at 93% RH and 0°C

Auxiliary voltage supply	80VDC-140VDC (65VAC-100VAC)
Self consumption	Max. 3VA
Inputs	1-20 alarm inputs (N.O) 5 inputs for rear push buttons
Inputs Voltage	95 to 140 Vac/dc (by order other voltages)
outputs	1 N.O. relay, for acoustic signal (acknowledgeable alarm)
outputs max. Power	5 A 250 V resistive load
Optical Signaling	Could be choose any colour by PC
Alarms signaling sequences	according with ISA S18.1 standard
Internal fuse	2A delayed
Input current	2,5 mA max
Time detection of alarms	8 ms max
watchdog hardware	Fuse
Protection degree	IP 52 front –IP 30 enclosure
Storing temperature	-20÷ 80 °C
Working temperature	-10÷ 60 °C relative humidity max 90%
Enclosure	Self extinguishing
Dimensions	144×144×90 mm
Instruction Dimension	136×136 mm
Weight	300 g
Insulation resistance	1.2 KV
Standard	I EC 839-1-3
ESD	I EC 839-1-3
Current of alarms fault	2mA max

Customer order

AEG SAM Alarm 

