HAMIANFAN

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 80VDC to
   140VDC , 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
Tow 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 dip switches. All inputs are isolated by opto coupler and can be supplied
with any voltage between 48 to 140VDC or 57 to 100VAC depend on customer order
but normally is 110 VDC. The Alarm includes an small keyboard for horn off,
acknowledgment, reset and lamp test push buttons. Any of push buttons can control
other alarms in parallel arrangement.

The outputs are two free contacts relays. One of them is emergency intended for
the acoustic or signaling and another not emergency.

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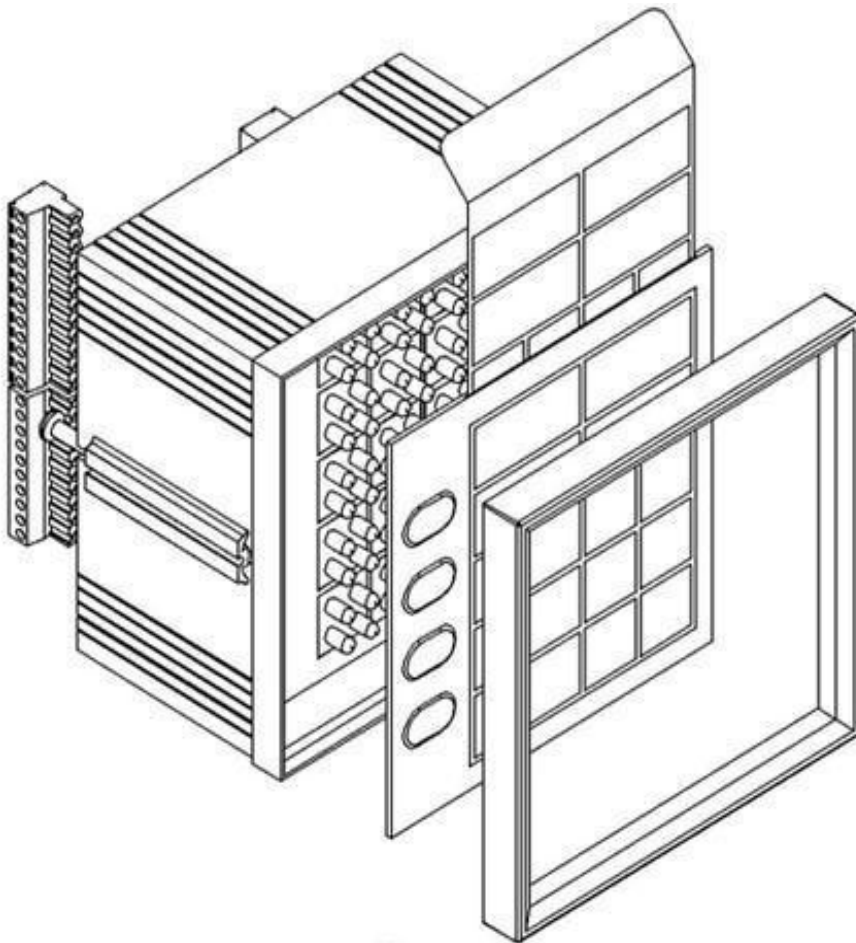
If the twenty windows alarm is selected the number and dimensions of windows can be changed from 1 to 20 windows as shown in picture 2 .

Fig 2

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

Horn off
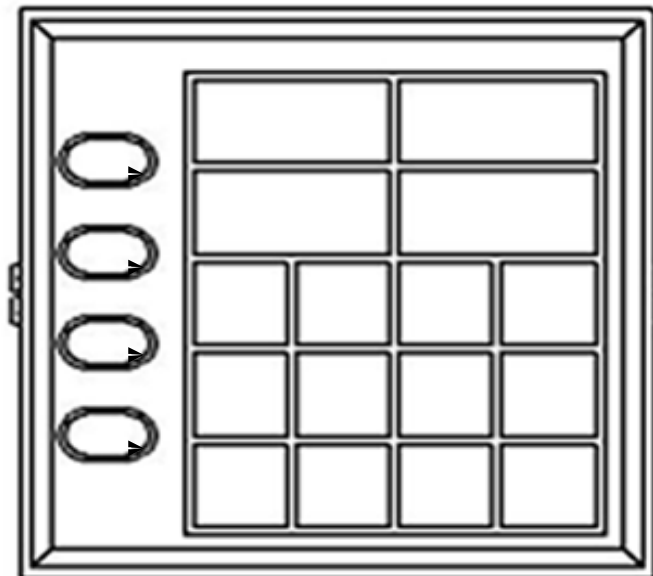
Acknowledge

Reset

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 .
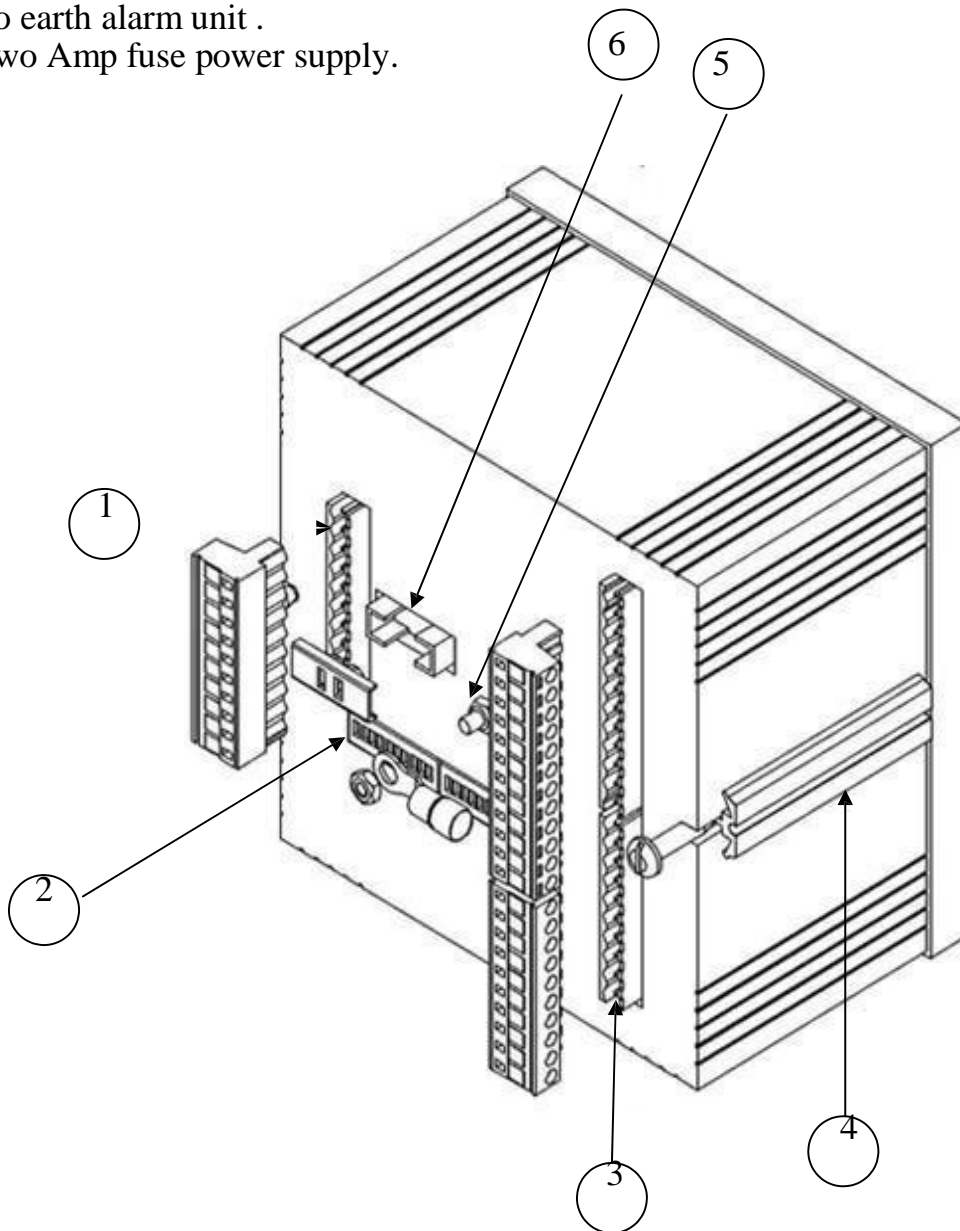5. To earth alarm unit .
6. Two Amp fuse power supply.

Fig 4

Dimensions of windows :

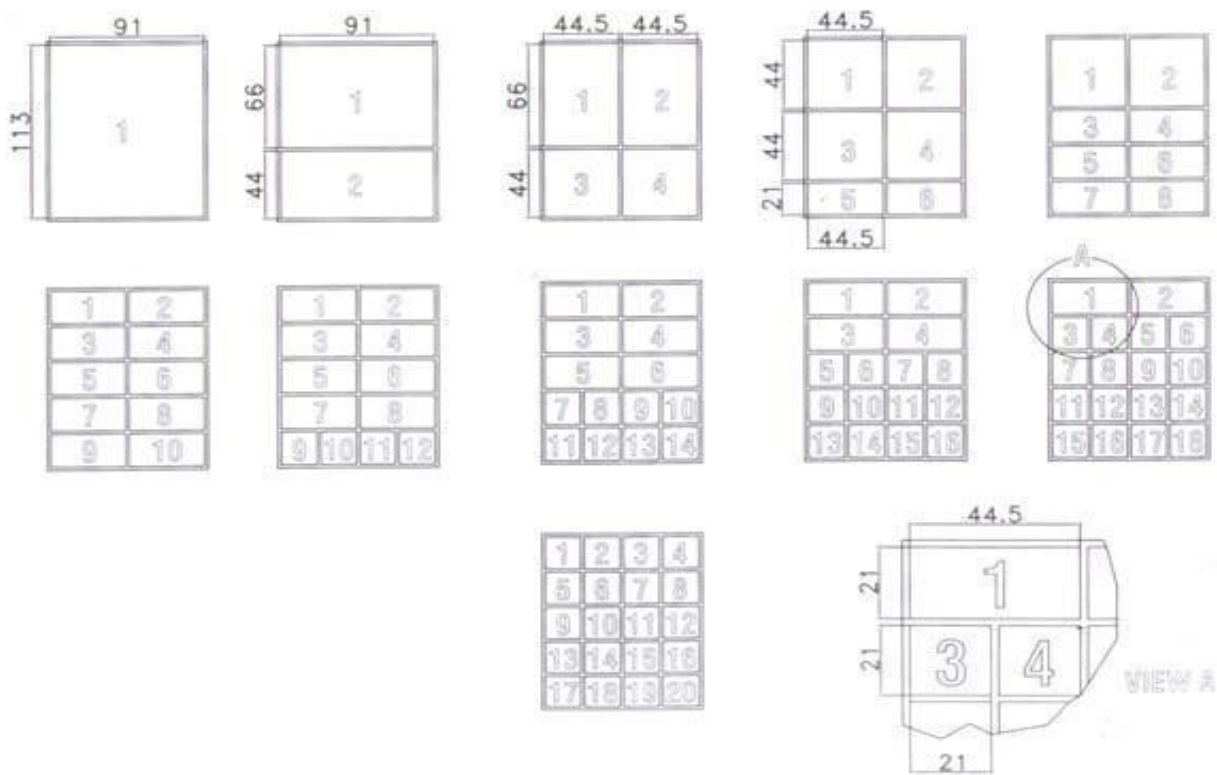The state and dimensions of the windows are shown in fig 5 .

Fig 5

Dimensions of structure alarm windows :
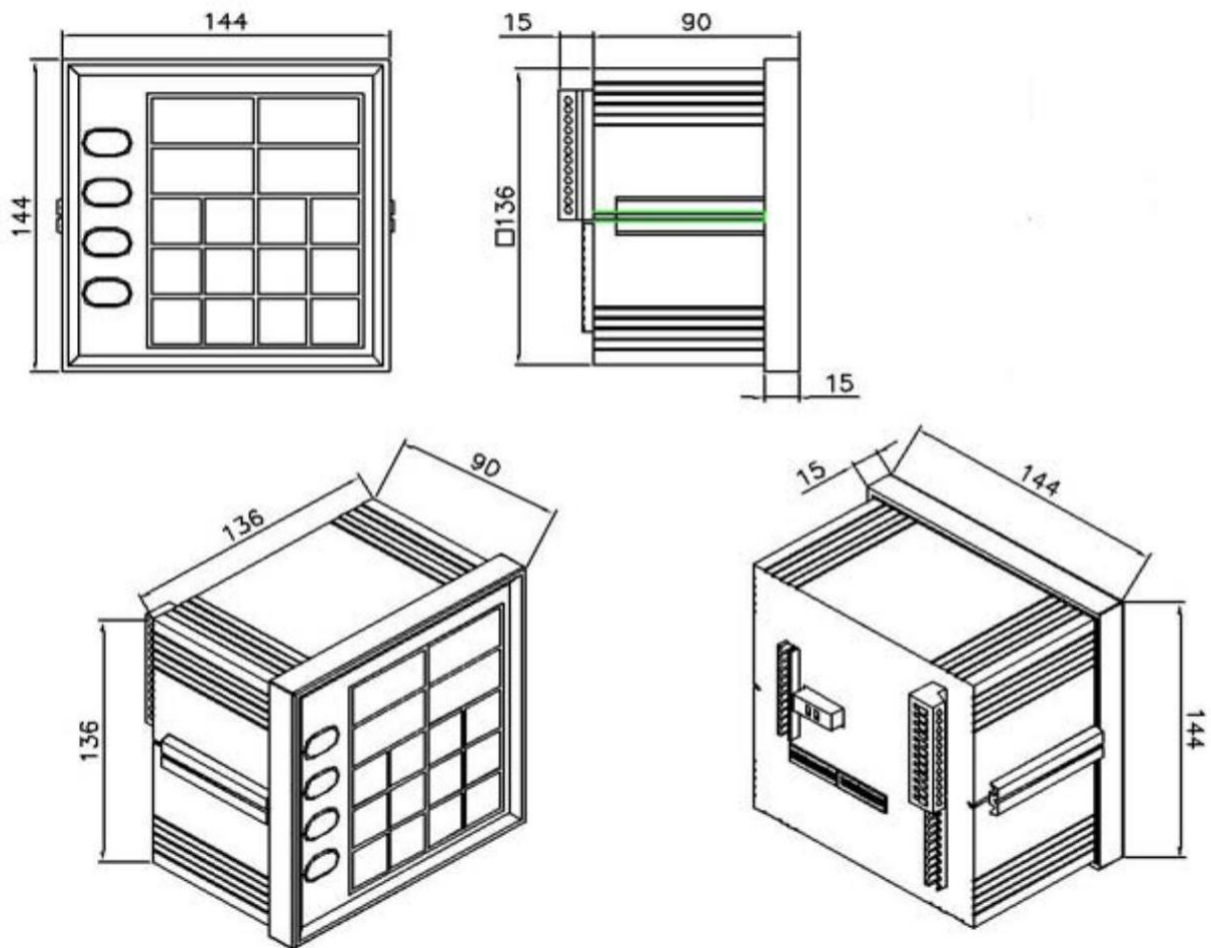
Top , bottom and side dimensions are shown in fig 6 .

Fig 6

Technical Data

WINDOW
Window Dimension.
Type: White LEDs
Colours: Any Coloured by printing on paper
Windows Flash

TYPE OF MOUNTING   flush Mounting

AUXILIARY POWER INPUT
 Fuse protected.

AEG SAM   80-140 V DC or 57-100 V AC. **other voltage according to customers order**
Power consumption   AEG10 : 6 W, AEG20: 8 W

ALARM CONTACT INPUTS
Opto-coopler isolated inputs
AEG SAM-A   80-140VDC by order Customer
                    24-40VDC or 220VAC

                    80-140 V DC or 57-100 V AC.
Input current   2.5 mA typical

TWO 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 (57VAC-100VAC)
Self consumption	Max. 3VA
Inputs	1-20 alarm inputs (N.O)
	5 inputs for rear push buttons Inputs
Voltage	48 to 140 Vdc (by order customer for inputs)
outputs	2 N.O. relay, for acoustic signal (acknowledgeable alarm)
outputs max. Power	3 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 for inputs
watchdog hardware	Relay
Protection degree	IP 51 front –IP 30 enclosure
Storage temperature	-20÷ 75 ℃
Working temperature	-10÷ 50 ℃ 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