



DECLARATION CE of CONFORMITY

We :

APPARECCHIATURE ELETTRICHE DI SICUREZZA s.a.s

Via per S. Angelo 1, S. Giuliano Mil. (Mi) – Italy
www.aes-antideflagranti.it

Hereby declare that the product :

Acoustic signaller ETH 20 MD-* with marking



II 2GD Ex d IIC T3/T4 Gb, Ex tb IIIC T150°C/T130°C IP6X Db

is in conformity with the following harmonized comunitary directives and with the relevant national laws :

94/9/EC

and that the following harmonized standards have been applied :

EN 60079-0:2009 / EN 60079-1:2007 / EN 60079-31:2009
(IEC 60079-0 :2007) (IEC 60079-1 :2007) (IEC 60079-31 :2008)

CE type certificate
ISSeP 11ATEX040X

Notified body INERIS 0080 - Parc technologique ALATA France



S.Giuliano Mil. – Mi. 15-12-2011

Firma/Signature : G. Maragnani



ACOUSTIC SIGNALLER ETH 20MD/AP60MD

INSTALLATION AND MAINTENANCE INSTRUCTION in accordance to :

CENELEC EN 60079-0 EN 61241-0

A.E.S via per S. Angelo, 1 S. Giuliano Mil. – Tel. 39.029834794 – 0298232740

Fax - 39.029834137 info @ aes-antideflagranti.it

Assures and guarantees that this product is built in according to : EN60079-0:2009
EN60079-1:2007, EN60079-31:2009

The apparatus must be installed and maintenance in conformity to the following :
EN 60079-14 and EN 60079-17 or in accord to the relevant national law.

SAFETY CHARACTERISTICS :

Group II category GD

Material destined to the surface industries with presence of explosive gas and explosive dust.

II 2GD Ex d IIC T3/T4 GB Ex tb IIIC T150°C/T130°C IP6X Db

Class of superficial temperature of the housing determined by the inside electric : **T3** or **T4**

Al lthis in accordance with ATEX 94/9CE specific for electrical apparatus destined to be used in potentially explosive environments.

NOTES FOR THE TECHNICIAN

INSTRUCTIONS FOR SAFETY AND SERVICE START UP

The electrical apparatus shall be installed in absence of damages.

Before every opening of the housing be sure to remove the electric feed.

Before closing the enclosure check that joint were lubricated and free of foreign matters and deformations.

Only certified cable entries are permitted for use. Cable entries with protection degree lower than IP 6X reduce the whole protection of the apparatus.

Must be used cable compatible with a temperature of **115 °C**

The electric characteristics to be respected are :

Max dissipated power	:	ETH 20MD : 10 watt / AP 60MD : 30watt
Voltage	:	6 - 230Vac/Vcc
Ambient temperature	:	- 50°C + 60°C

Threaded entry is identified by the letter following ETH 20MD type:

G= 3/4" GK - N= 3/4" NPT - M= M 25x1,5mm

The apparatus is provided with terminals suitable to connect wires up to 1,5 sqmm.

Do not change or modify internal electric because this would compromise te certification features.

Repairs and replacements of damaged or faulty parts must be carried out by skilled and experienced personnel with spare parts supplied by A.E.S

Repairs that effect explosion proof protection may only be carried out by A.E.S

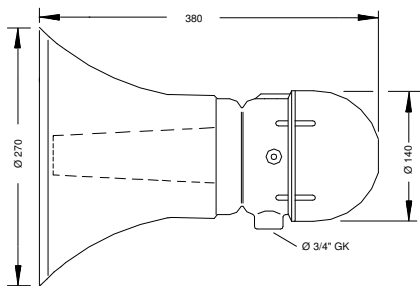
This electrical apparatus must be used for its intended purpose.

Observe the electrical features indicated on the apparatus.

These operating instruction must be kept in safe place for later consultation.

For skilled and experienced personnel according with the national laws, the relevant standards and where applicable.

WARNING : DO NOT DISPOSE THE APPARATUS AND HIS COMPONENTS IN THE ENVIRONMENT.



Voltage	V	12÷24Ac/Dc	48-115-230 Vac
Power	A.	0,20 ÷ 0,80	0,15 ÷ 0,07
Sound level	Db	110	110
Acoustic freq.	Hz	440 ÷ 2000	440 ÷ 2000
Service		continous	continous
Weight	Kg/lbs	1,5/7,50	1,5/7,50
Colour	RAL	7000	7000

Periodically check this device to verify that there are no foreign substances in, or in front of, speaker which will reduce its effectiveness. Read and understand all instructions before performing maintenance on this unit. The nameplate, which contain cautionary or other information of importance to maintenance personnel, should not be obscured if exterior of device is painted. The speaker can be mounted on any relatively flat surface capable of supporting the speaker's weight. Conduit connections can be made to the 3/4" **NPT-3/4" GK** or **M25x1,5mm** threaded openings at bottom of the housing. Mount the unit so the speaker projector is pointed horizontally or slightly downward. Provide a copy of these instructions for the Safety Engineer, system operator(s) and maintenance personnel. A.E.S will service your equipment or provide technical assistance with any problem that cannot be handled locally.

Acoustic horn ETH 20 MD is painted epoxyvinil **RAL 7000**
 Internal and external screws in stainless steel 310
 Connecting only supply clamps, the horn sounds a **KEY TONE** :
 440 Hz / 0,4 sec – alternate with 554 Hz / 0,1 sec.(AFNOR NF 32 001) Evacuation Alarm

To have other tones :

TONE	DIP SWITCH	TONE DESCRIPTION APPLICATION	Number of tones : 32	
			• ON	o OFF
	1 2 3 4 5			
1	o o o o o	554Hz, 0.1 s/ 440Hz,0.4s (AFNOR NF 32 001) Evacuation Alarm France		
2	• o o o o	650Hz – 1600Hz YELP Alternate fast two- tone		
3	o • o o o	650Hz – 1600Hz WAIL Alternate slow two- tone		
4	• • o o o	554Hz/1s ON – 1s OFF Intermittent Tone		
5	o o • o o	554Hz Continuous Note		
6	• o • o o	1000Hz Continuous Note Toxic Gas		
7	o • • o o	1000Hz Interrupted tone 1s ON – 1s OFF General Alarm		
8	• • • o o	800Hz – 1000Hz/0,25s Intermittent – ISO 8201 International Evacuation Alarm		
9	o o o • o	1200 – 500Hz, 1sec Reverse sweep Evacuation alarm Germany (PAPA)		
10	• o o • o	500 – 1200Hz,3,5s/0,5s OFF (NEN 2575:2000) Dutch Slow Whoop		
11	o • o • o	800 – 1000Hz/0,5s Alternate two tone – Fire Alarm		
12	• • o • o	1000 – 2000Hz/0,5s Alternating - Alarm Singapore		
13	o o • • o	1000Hz, 1 s ON – 1s OFF 7 times then ON for 7s OFF for 1s Emergency Alarm		
14	• o • • o	422Hz to 775Hz/0,85s (3x) 1s OFF repeat NFPA Whoop		
15	o • • • o	970Hz 1s OFF/1s ON Pulsed (Apollo Fire System Alert Tone)		
16	• • • • o	970Hz/0,5s – 630Hz/0,5s Alternating (Apollo Fire System Evacuation Tone)		
17	o o o • o	500 – 1200Hz/3,75s – 0,5s OFF		
18	• o o • o	420Hz/0,625s ON – 0,625s OFF (Australia AS 1670 Alert Tone)		
19	o • o • o	500Hz- 1200Hz/3,75s – 0,25s OFF (Australia AS 1670 Evacuation Tone)		
20	• • o • o	340Hz Continuous Note		
21	o o o • o	400Hz Continuous Note		
22	• o o • o	660Hz Continuous Note		
23	o • o • o	750Hz Continuous Note		
24	• • o • o	840Hz Continuous Note		
25	o o o • o	1200Hz Continuous Note		
26	• o o • o	1480Hz Continuous Note		
27	o • o • o	770Hz/1s – 1s OFF Intermittent Tone		
28	• • o • o	550Hz/0,33s – 1000Hz/0,7s		
29	o o • • o	Simulated Belt		
30	• o • • o	970Hz/0,5s ON 0,5s OFF (3x) followed 1,5s silence then repeat (ISO 8201)		
31	o • • • o	440Hz Continuous Note		
32	• • • • o	700Hz Continuous Note		

The PFEER sound signals recommended by UKOOA are :

General Alarm	Sound Signal 7	Interrupted tone 1000Hz
PAPA	Sound Signal 9	Reverse Sweep 1200- 500Hz
Toxic Gas	Sound Signal 6	Continuous Tone 1000Hz