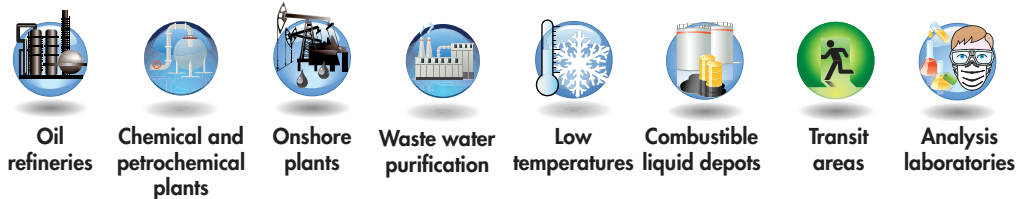




ETH series sirens are used in closed environments where a warning system is needed and where the atmosphere is potentially explosive. ETH sirens are multi-functional. The five different types of sound can be programmed to provide warning in the event of danger or evacuation in the case of fire.

### Application sectors:



### CERTIFICATION DATA

<b>Classification:</b>	Group II	Category 2GD		
<b>Installation:</b> EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)	ETH12	
	zone 1 - zone 2 (Gas)		ETH20	
<b>Marking:</b>	CE  II 2 GD Ex d IIC T6 Ex tD A21 IP65		ETH12	
	CE  II 2 G Ex d IIC - IIB+H2 T4 Gb IP6x		ETH20	
<b>Certification:</b>	ATEX INERIS 02 ATEX 0074X		ETH12	
	ATEX ISSeP 11 ATEX 040X		ETH20	
	TR CU AVAILABLE	All TR CU certification data contact <a href="mailto:comm@antideflagrantiGCE.com">comm@antideflagrantiGCE.com</a>		
<b>Standards:</b>	CENELEC EN 60079-0: 2006/09, EN 60079-1: 2004/07, EN 61241-0: 2006, EN 61241-1: 2004, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 2014/34/UE			
<b>Class temperature:</b>	85°C (T6)	135°C (T4)	200°C (T3)	
<b>Ambient temperature:</b>	-20°C  +55°C	ETH12		
	-50°C  +60°C	ETH20		



### MECHANICAL FEATURES

<b>Body and cover:</b>	Low copper content aluminium alloy
<b>Safety wire:</b>	Steel
<b>Bell housing:</b>	Chrome coloured ABS plastic
<b>Gasket:</b>	Acid, hydrocarbon and high temperature resistant silicone
<b>Bolts and screws:</b>	Stainless steel
<b>Mounting:</b>	Direct to 3/4" entry or with mounting bracket (available on request)
<b>Entries:</b>	1 x 3/4" Rc UNI ISO 7/1
<b>Coating:</b>	Epoxy coating Ral 7000 (squirrel grey)

### ELECTRICAL FEATURES

#### ETH-12 siren

<b>Rated voltage:</b>	12/24 - 48 - 110 - 230 V ac/dc
Frequency:	50/60/0 Hz
Driver impedance:	8 Ω
Operation:	Continuous

#### ETH-20 siren

<b>Rated voltage:</b>	12/24 - 48 - 110 - 230 V ac/dc
Frequency:	50/60/0 Hz
Driver impedance:	16 Ω
Operation:	Continuous

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Cable gland: **sealed type** for armoured or non-armoured cable  
 Adjustable support bracket  
 Epoxy vinyl coating in different colours  
 NPT or ISO M25 threads  
 Body in cast iron EN-GJL-200 or stainless steel AISI 316L



Code	Programmable sounds	Voltage	Rated current	Power input	Sound level		Weight kg	mm
					Frequency	Db/1m		
ETH-12MD/12-24V	32	12 - 24 V ac/dc	0,10 - 0,12 A	7 W	340 - 2000 Hz	109	1,2	230x150x150
ETH-12MD/48VCA	32	48 V ac	0,06 A	7 W	340 - 2000 Hz	107	1,4	230x150x150
ETH-12MD/48VCC	32	48 V dc	0,06 A	7 W	340 - 2000 Hz	107	1,2	230x150x150
ETH-12MD/110VCA	32	110 V ac	0,02 A	7 W	340 - 2000 Hz	109	1,4	230x150x150
ETH-12MD/110VCC	32	110 V dc	0,02 A	7 W	340 - 2000 Hz	109	1,4	230x150x150
ETH-12MD/230VCA	32	230 V ac	0,012 A	7 W	340 - 2000 Hz	109	1,4	230x150x150
ETH-20MD/12-24V	32	12 - 24 V ac/dc	0,10 - 0,12 A	10 W	340 - 2000 Hz	113	3,1	390x280x280
ETH-20MD/48VCA	32	48 V ac	0,06 A	10 W	340 - 2000 Hz	111	3,2	390x280x280
ETH-20MD/48VCC	32	48 V dc	0,06 A	10 W	340 - 2000 Hz	111	3,1	390x280x280
ETH-20MD/110VCA	32	110 V ac	0,02 A	10 W	340 - 2000 Hz	113	3,2	390x280x280
ETH-20MD/110VCC	32	110 V dc	0,02 A	10 W	340 - 2000 Hz	113	3,2	390x280x280
ETH-20MD/230VCA	32	230 V ac	0,012 A	10 W	340 - 2000 Hz	113	3,2	390x280x280

### Main sounds

(32 selectable sounds, view safety maintenance and mounting instructions)

**TWIN TONE:** 440 Hz / 0.4 sec alternated with 554 Hz / 0.1 sec

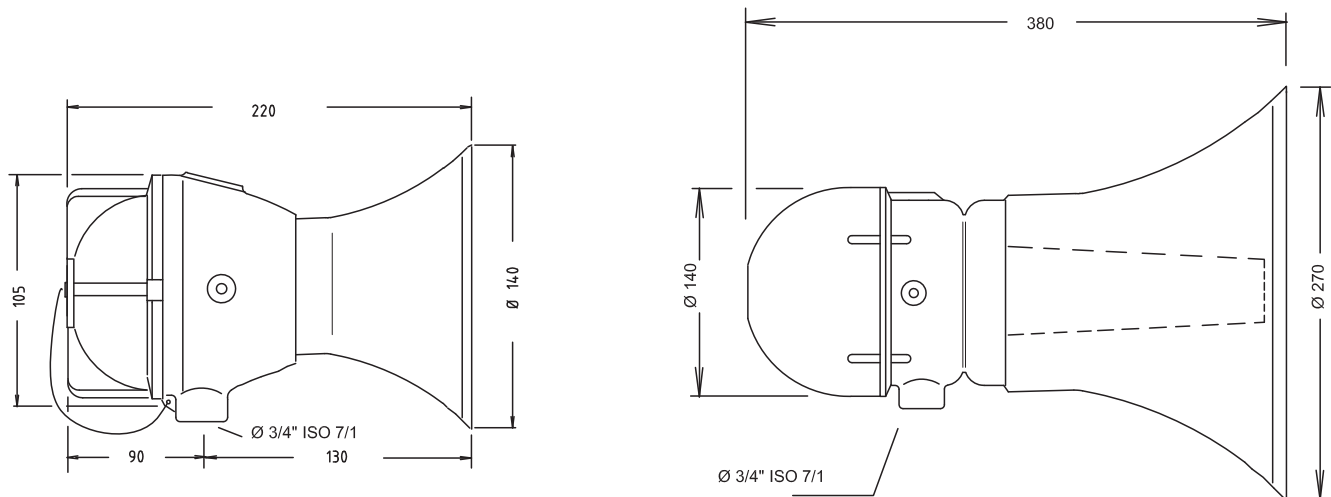
**YELP:** Increasing and decreasing scale. Fast from 650 to 1600 Hz

**WAIL:** Increasing and decreasing scale. Slow from 650 to 1600 Hz







**INTERMITTENT:** 554 Hz, 1 sec ON - 1 sec OFF

**FIXED NOTE:** 554 Hz continuous.

### DIMENSIONAL DRAWINGS



Dimensions in mm

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Adjustable support bracket	ETH-12	Material: galvanised steel	K-340	 
		ETH-20		K-340/1	
	Cable gland	BARRIER TYPE	For cable gland models and codes visit our web site <a href="http://www.antideflagrante.com">www.antideflagrante.com</a>		 



The international standards for safety in industrial environments establish the mandatory installation of suitable audible warning device that can be activated in case of alarm, emergency or danger for the safety of workers which operate at the modern manufacturing processes. The explosion-proof loudspeakers ETH20MDLOUD series have been designed for use in potentially explosive atmospheres in presence of explosive gases and dusts. They have a high degree of protection (IP66) to withstand the harsh off-shore and on-shore plants environmental conditions. They are suitable for connection to standard amplification system with output 100V, to alarm systems and for public address.

The chamber of acoustic compression is separated from the outer atmosphere through a special filter of sintering. They are equipped with a transformer offering the possibility to adapt and select the sound level according to the real needs of the installation point.

**Application sectors:**



**CERTIFICATION DATA**

<b>Classification:</b>	Group II	Category 2G		
<b>Installation:</b> EN 60079.14	zone 1 - zone 2 (Gas)			
<b>Marking:</b>	CE Ex II 2 G - Ex db IIB+H2 T5/T6 Gb - Ex tb IIIC T85°C/T100°C Db IP66			
<b>Certification:</b>	ATEX	INERIS 09 ATEX 0024X		
<b>Standards:</b>	CENELEC EN 60079-0: 2012, EN 60079-1:2014, EN 60079-31:2014 y a la DIRECTIVA EUROPEA 2014/34/UE			
<b>Class temperature:</b>	85°C (T6)	100°C (T5)		
<b>Ambient temperature:</b>	Standard -20°C +40°C	Special -20°C +60°C		
<b>Degree of protection:</b>	IP66			

This equipment can be used in an environment containing explosive atmosphere and with the presence of hydrogen.



### MECHANICAL FEATURES

<b>Body, cover and horn cone:</b>	Light aluminium alloy
<b>Gasket:</b>	EPDM acid, hydrocarbon resistant
<b>Bolts and screws:</b>	Stainless steel
<b>Mounting:</b>	Adjustable galvanized steel bracket
<b>Entries:</b>	1 x 3/4" Rc UNI ISO 7/1 for entries with conduit or cable gland
<b>Coating:</b>	Epoxy coating Ral 7000 (Squirrel grey)

### ELECTICAL FEATURES


<b>Rated voltage:</b>	100 V			
<b>Audio line:</b>	16 Ohm			
<b>Output:</b>	6 W	12 W	20 W	25 W
<b>Sound level:</b>	100 ÷ 102 dB	104 ÷ 106 dB	107 ÷ 108 dB	109 ÷ 112 dB
<b>Frequency range:</b>	650 ÷ 10000 Hz	450 ÷ 9000 Hz	400 ÷ 9000 Hz	350 ÷ 10000 Hz

<b>Rated voltage:</b>	24 - 48 Vdc (Loudspeaker with incorporate amplifier)			
<b>Audio line:</b>	8 Ohm			
<b>Output:</b>	1,57 W	5,4 W	21,5 W	30,4 W
<b>Sound level:</b>	20 dB	26 dB	32 dB	36 dB

### ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Mounting bracket in stainless steel  
 Cable gland: SEALED TYPE for armoured or non-armoured cable  
 Epoxy vinyl coating in different colours  
 Special execution Ex 2GD Ex d IIC T6/T5 Gb  
 Different threads  
 Horn cone in anodized aluminium



Code	Rated voltage	Output	Sound level		Weight kg	
			Frequency level	Db		
ETH20MDLOUD/TR	100 V	6W-12W-20W-25W	650 - 10000 Hz	100 - 112	3,5	
ETH20MDLOUD24VDC	24 - 48 Vdc	1,57W-5,4W-21,5W-30,4W	20 - 20000 Hz	20 - 36	3,5	

### DIMENSIONAL DRAWING

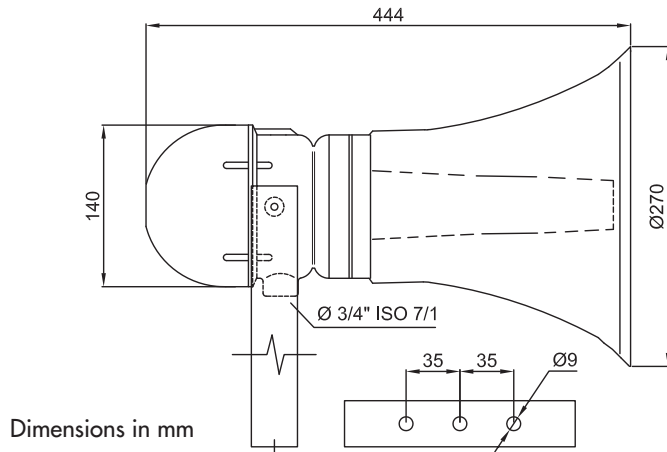


ILLUSTRATION	DESCRIPTION	FOR MODEL AND CODE	KEY
	Cable gland	<p><a href="mailto:comm@antideflagranti.com">comm@antideflagranti.com</a></p> <p>Visit our web site</p> <p><a href="http://www.antideflagranti.com">www.antideflagranti.com</a></p>	 