

ETH20MDLOUD

- Zones 1, 2, 21, 22
- Output from 100 dB to 112 dB
- Ex d protection
- IP66



Entry for connection



ETH20MDLOU series Loudspeakers

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:



Oil refineries



Chemical and petrochemical plants



Onshore plants



Waste water purification



Aircraft storage facilities
Hangars



Combustible liquid depots



Transit areas



Analysis laboratories

CERTIFICATION DATA

Classification:

Group II

Category 2G

Installation: EN 60079.14

zone 1 - zone 2 (Gas)

Marking:

CE Ex II 2 G - Ex db IIB+H₂ T5/T6 Gb - Ex tb IIIC T85°C/T100°C Db IP66

Certification:

ATEX

INERIS 09 ATEX 0024X

Standards:

CENELEC EN 60079-0: 2012, EN 60079-1:2014, EN 60079-31:2014 y a la DIRECTIVA EUROPEA 2014/34/UE

Class temperature:



85°C (T6)



100°C (T5)

Ambient temperature:



Standard
-20°C +40°C



Special
-20°C +60°C

Degree of protection:

IP66

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

ETH20MDLOUD series Loudspeaker



MECHANICAL FEATURES

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

ELECTICAL FEATURES

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

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

Class D audio amplifier ETH20MDLOUD24VDC 24 - 48Vdc

Input signal: 0dB at 600ohm

Input sensitivity: 40mV / 150Kohm

Power supply: from 24Vdc to 48Vdc

Absorption at maximum power: 0,8A@48V - 1,2A@24Vdc

Piloting: 8ohm loudspeakers


Output power: 30W

Total harmonic distortion + noise: (f= 1Khz, PO= 20W) 0,2%

Signal report / noise: (f= 1Khz, Gain= 20dB) 102dB

Frequency response: from 20Hz to 20Khz

ETH20MDLOUD series selection chart

Code	Rated voltage	Output	Sound level		Weight kg	
			Frequency level	Db (1mt)		
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	112	3,5	

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Mounting bracket in stainless steel

Cable gland: NEVB2B for armoured cable or NAVB2B for 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

DIMENSIONAL DRAWING

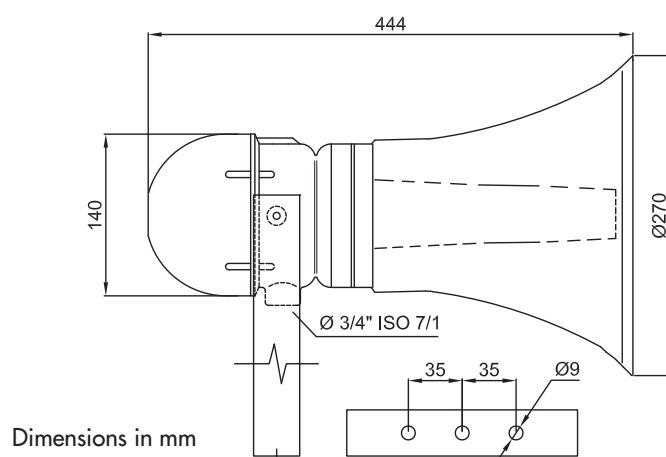



ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Cablegland		For models and codes, visit www.cortemgroup.com	NAVB2B NEVB2B	