



### [1] EC-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use in Potentially explosive atmospheres
Directive 94/9/EC

[3] EC-Type Examination Certificate Number: Nemko10ATEX1053X Issue 3

[4] Equipment or Protective System: Loudspeaker

[5] Applicant/ Manufacturer: DNH AS

[6] Address: Grueveien 2-6

3770 Kragerø

**Norway** 

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Nemko AS, notified body number 0470 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential D0001529-rev 1 report no.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007 and EN 60079-18: 2009.

- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC.

Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

DSP-25EExmN/T

 $\langle \epsilon_{x} \rangle$ 

II 2G Ex d e mb IIB+H<sub>2</sub>/IIC T5 Gb

-50°C ≤ Ta +55°C

DSP-25EExmNC/T



II 2G E

Ex d e mb IIB+H<sub>2</sub>/IIC T5 Gb -20

-20°C ≤ Ta +40°C

Oslo. 2015-07-03

Arne Hortman

Certification Manager, Ex-products





## [13] Schedule

#### [14] EC-TYPE EXAMINATION CERTIFICATE No Nemko10ATEX1053X Issue 3

#### [15] Description of Equipment or Protective System

This Certificate covers a loudspeaker. T in the designation indicates design with transformer. C indicates that Cabelec plastic is used for enclosure. For IIC sintered metal of stainless steel, type SIKA-R 200 is used. For IIB  $+H_2$ sintered metal of bronze, type SIKA-B 200 is used.

#### Type Designations / Technical Data

Type DSP-25EExmN(T)	Marking  Ex II 2G Ex d e mb IIB+H2 T5 Gb	Ambient temperature -50°C ≤ Ta ≤ +55°C	<b>Freq. range</b> 150 – 20000Hz
DSP-25EExmN(T)	(Ex) II 2G Ex d e mb IIC T5 Gb	-50°C ≤ Ta ≤ +55°C	150 – 20000Hz
DSP-25EExmNC(T) Alternative plastic enclosure	(Ex) II 2G Ex d e mb IIB+H2 T5 Gb	-20°C ≤ Ta ≤ +40°C	150 – 20000Hz
DSP-25EExmNC(T) Alternative plastic enclosure	(Ex) II 2G Ex d e mb IIC T5 Gb	-20°C ≤ Ta ≤ +40°C	150 – 20000Hz

Voltage: 100V Current: 250mA Power: 25W

**Variants:** With encapsulated e-chamber and permanent cable (DSP-25EExmNMF(T).

With moulded monitoring card (DSP-25EExmMN(T).

**Ingress Protection Code: IP67** 

#### [16] Report No. D0001529 - rev 1

#### **Descriptive Documents**

Name/Number	Rev.	Date	Title/Description	Sheets
2501	1	Feb 2015	DSP-25EExmN(T) Alternative models	1
2501	3	04.05.2015	DSP-25EExmNT	2
1188-A4-G	G	04.05.2015	LMC170 Variant beskrivelser	1





#### **Certificate History and Associated Nemko Reports**

Issue	Date	Report	Description
0	2011-03-01	136852	Prime Certificate released
1	2011-06-06	174795	The descriptive documents are updated to include IECEx components and standards
2	2013-04-18	230821	Dust marking removed.
3	2015-07-03	D0001529-rev 1	<ul> <li>Issue 3. Modifications</li> <li>New compound for cemented joint around the magnet and moulding.</li> <li>Update to EN 60079-0: 2012.</li> <li>Thermal fuses limits the temperature to 84°C.</li> <li>"Special conditions for safe use" is updated.</li> </ul>

#### [17] Special Conditions for Safe Use

- The loudspeaker shall only be installed in areas where there is a low risk of impact.
- When the bracket of the loudspeaker is mounted onto the construction, the bracket must be connected to earth potential through the construction.

# [18] Essential Health and Safety Requirements See item 9