



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX NEM 05.0005X** issue No.: **5**
Status: **Current**
Date of Issue: **2016-04-06** Page 1 of 5

Certificate history:

Issue No. 5 (2016-4-6)
Issue No. 4 (2015-7-2)
Issue No. 3 (2013-6-19)
Issue No. 2 (2012-8-6)
Issue No. 1 (2011-10-25)
Issue No. 0 (2006-7-3)

Applicant: **DNH AS**
Gruveveien 4
N-3770 Kragerø
Norway

Electrical Apparatus: **Loudspeaker**
Optional accessory:

Type of Protection: **d e mb tb**

Marking: DSP-15EExmN(T): Ex d e mb IIB+H2/IIC T4 Gb
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +60°C
DSP-15EExmNM(T): Ex d e mb IIB+H2/IIC T4 Gb
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +60°C
LH3-UC25XS: Ex d e mb IIB+H2 T4 Gb
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +60°C
LH3-UC25XL: Ex d e mb IIB+H2 T4 Gb
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +60°C

Approved for issue on behalf of the IECEx
Certification Body:

Arne Hortman

Position:

Certification Manager, Ex-products

Signature:
(for printed version)

Date:

2016-04-06

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

NEMKO
Gaustadalleen 30
Oslo N-0314
Norway





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Manufacturer: **DNH AS**
Gruveveien 2-6
N-3770 Kragerø
Norway

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identifying documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

IECEX ATR:	File Reference:
NO/NEM/05/63165	63165
NO/NEM/ExTR11.0028/00	188675
NO/NEM/ExTR11.0028/05	231606



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Loudspeaker with or without transformer. T in the type designation indicates design with transformer. Terminal and transformer in Ex e-enclosure. Transformer may be encapsulated in Ex e-enclosure.

Flameproof enclosure has sinter metal in sound opening and cemented joints.

The loudspeaker has sintered metal of bronze for use in gas group IIB + H2 or alternatively stainless steel for use in gas group IIC.

Voltage: 100V.

Current, max.: 0,25A

Ingress protection: IP66 and IP67 according to IEC 60529 Edition 2.1.

Variants: With encapsulated e-chamber and permanently connected cable. "L" in type designation indicates long flare

The variants (LH3-UC25XS and LH3-UC25XL) are limited to the following:

- Ex d e mb IIB+H2 T4 Gb and Ex tb IIIC T105°C

- 100V trafo

- S: Short flare

- L: Long flare

- Alternative power tapplings from transformer

- Two additional wires from secondary side of transformer for impedance measurement when it is not operational

CONDITIONS OF CERTIFICATION: YES as shown below:

Schedule of limitations

- 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.



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EQUIPMENT(continued):

Type	Marking	Amb. temp.	Freq. range
DSP-15EExmN(T)	Ex d e mb IIB+H2/IIIC T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +60°C	150-20000HZ
DSP-15EExmN(T)	Ex d e mb IIB+H2/IIIC T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +60°C	150-20000HZ
LH3-UC25XS	Ex d e mb IIB+H2 T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +60°C	150-20000HZ
LH3-UC25XL	Ex d e mb IIB+H2 T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +60°C	150-20000HZ



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue1. Ingress protection added

Issue2. Update of documents and components.

Issue3. Conditions "X" to certificate added.

Issue4. Changes concerning transformer and thermal fuses.

Issue5. This issue update is made due to inclusion of the alternative variants LH3-UC25XS and LH3-UC25XL.

