



# 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](http://www.iecex.com)

Certificate No.: **IECEx NEM 05.0005** issue No.:1  
Status: **Current**  
Date of Issue: **2011-10-25** Page 1 of 5

Certificate history:  
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-15EExmNs(T): Ex d e mb IIB+H2/IIIC T4 Gb,  
Ex tb IIIC T127°C, -50°C ≤ Ta ≤ +40°C,  
DSP-15EExmNmS(T): Ex d e mb IIB+H2/IIIC T4 Gb  
Ex tb IIIC T127°C, -50°C ≤ Ta ≤ +40°C  
DSP-15EExmN(T): Ex d e mb IIB+H2/IIIC T4 Gb  
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +50°C  
DSP-15EExmNM(T): Ex d e mb IIB+H2/IIIC T4 Gb  
Ex tb IIIC T105°C, -50°C ≤ Ta ≤ +50°C**

Approved for issue on behalf of the IECEx  
Certification Body:

Arne Hortman

Position:

Principal Engineer

Signature:  
(for printed version)

Date:

2011-10-25

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

#### 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 identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-18 : 2009</b> Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
<b>IEC 60079-7 : 2006-07</b> Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

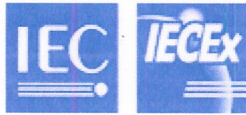
*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

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

IECEx ATR:  
**NO/NEM/05/63165**  
**NO/NEM/ExTR11.0028/00**

File Reference:  
**63165**  
**188675**



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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.

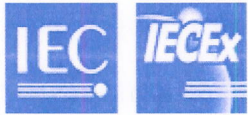
Current, max.: 0,25A

Variants: With encapsulated e-chamber and permanently connected cable.

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

### CONDITIONS OF CERTIFICATION: NO

Schedule of limitations



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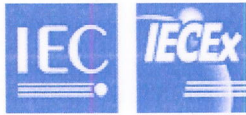
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## EQUIPMENT(continued):

Type	Marking	Ambient temperature	Freq. range
DSP-15EExmNs(T)	Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T127°C	-50°C ≤ Ta ≤ +40°C	220 – 20000Hz
DSP-15EExmNMs(T)	Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T127°C	-50°C ≤ Ta ≤ +40°C	220 – 20000Hz
DSP-15EExmN(T)	Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +50°C	150 – 20000Hz
DSP-15EExmNM(T)	Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T105°C	-50°C ≤ Ta ≤ +50°C	150 – 20000Hz



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

Update to new standards and minor changes in the descriptive documents.