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[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: | Nemko 09ATEX 1322X | Issue 4 |
|-----|---|--|-----------------------|
| | | | |
| [4] | Equipment or Protective System: | Loudspeaker | |
| [5] | Applicant/ Manufacturer: | DNH ĀS | |
| [6] | Address: | Gruveveien 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 accordanc certifies that this equipment or protective system has requirements relating to the design and construction potentially explosive atmospheres given in Annex II | s been found to comply with the Essent of equipment and protective systems in | ial Health and Safety |

The examination and test results are recorded in confidential report no. 231606

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

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-18: 2009 and EN 60079-31: 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:

| For DSP-15EExmNs (T) and DSP-15EExmNMs (T) | (Ex) | II 2G II 2D | Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T127°C | $-50^{\circ}\mathrm{C} \le \mathrm{Ta} \le +40^{\circ}\mathrm{C}$ |
|---|------|----------------|---|---|
| For DSP-15EExmN (T) and DSP-15EExmNM (T) | (Ex) | II 2G II 2D | Ex d e mb IIB+H2/IIC T4 Gb Ex tb IIIC T105°C | $-50^{\circ}\mathrm{C} \le \mathrm{Ta} \le +50^{\circ}\mathrm{C}$ |

Oslo, 2013-06-19

Asle lanted

Asle Kaastad Certification Manager , Ex-products

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Office address: Gaustadalléen 30 0373 OSLO Telephone: +47 22 96 03 30 Fax: +47 22 96 05 50 Enterprise number: NO 974404532





[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No Nemko 09ATEX1322X Issue 4

[15] Description of Equipment or Protective System

This Certificate covers a loudspeaker. T in the designation indicates design with transformer. For IIC sintered metal of stainless steel, type SIKA-R 200 is used. For IIB +H2 sintered metal of bronze, type SIKA-B 200 is used.

| Type Designations / Tec | hnical data | | |
|-------------------------|--|--|----------------|
| Туре | Marking | Ambient temperature | Freq. range |
| DSP-15EExmNs(T) | (Ex) | $-50^{\circ}C \le Ta \le +40^{\circ}C$ | 220 – 20000Hz |
| | II 2G Ex d e mb IIB+H2/IIC T4 Gb | | |
| DSP-15EExmNMs(T) | II 2D Ex tb IIIC T127°C | $-50^{\circ}C \le Ta \le +40^{\circ}C$ | 220 – 20000Hz |
| DSI -15EEXIII (WIS(1) | $\langle E x \rangle$ II 2G Ex d e mb IIB+H2/IIC T4 Gb | -50 C - 12 - 140 C | 220 - 20000112 |
| | II 2D Ex tb IIIC T127°C | | |
| DSP-15EExmN(T) | (Fx) | $-50^{\circ}C \leq Ta \leq +50^{\circ}C$ | 150 – 20000Hz |
| | II 2G Ex d e mb IIB+H2/IIC T4 Gb | | |
| DCD 15EEumNIM(T) | II 2D Ex tb IIIC T105°C | $-50^{\circ}C < Ta < +50^{\circ}C$ | 150 20000Uz |
| DSP-15EExmNM(T) | (Ex) II 2G Ex d e mb IIB+H2/IIC T4 Gb | $-50 \text{ C} \le 18 \le +50 \text{ C}$ | 150 – 20000Hz |
| | II 2D Ex the IIIC T105°C | | |
| Voltage: 100V. | | | |
| Current, max.: 0,25A | | | |
| | psulated e-chamber and permanently connected | cable | |
| | e designation indicates long flare. | cubic. | |
| 51 | 5 | | |

Ingress protection: IP66 and IP67 (for e-chamber) according to IEC 60529 Edition 2.1.

[16] Report No. 231606

Descriptive Documents

| Name/Number | Rev. | Date | Title/Description | Sheets/Pages |
|--------------------|------|------------|--|--------------|
| 2205-A3 (Partlist) | 3 | 04.06.2013 | DSP-15EExmN (T) DSP-15EExmNM (T) | 1 |
| 2206-A3 (Partlist) | 3 | 04.06.2013 | DSP-15EExmNs (T) DSP-15EExmNMs (T) | 1 |
| 2205-A3 (Drawing) | 3 | 03.06.2013 | DSP-15EEx m- model / T Gas group: IIB+H2 or IIC | 1 |
| 2206-A3 (Drawing) | 3 | 03.06.2013 | DSP-15EEx s- model / T Gas group: IIB+H2 or IIC | 1 |
| 1188-A4-F | F | 18.10.2010 | LMC170 Variant beskrivelser | 1 |
| 2587-A4 | - | 01.08.2012 | DSP-15EExmmodels | 1 |

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| Issue | Date | Report | Description |
|-------|------------|--------|---|
| 0 | 2010.10.19 | 136857 | Prime Certificate released. |
| 1 | 2011-01-17 | 165713 | Ingress protection implemented in the certificate. |
| 2 | 2011-10-06 | 188675 | The descriptive documents are updated to include IECEx components and |
| Z | | | standards. |
| 3 | 2012-08-06 | 203277 | Conditions of the certificate were introduced and therefore an "X" suffix was added |
| 3 | | | to the certificate number. |
| 4 | 2013-06-19 | 231606 | Removal of specific condition for wiring of transformer T-48. |
| 4 | | | Two new 128°C thermal cutoff are provided. |

[17] Special Conditions for Safe Use

The Loudspeaker shall only be installed in areas where there is a low risk of impact.

[18] Essential Health and Safety Requirements

See item 9

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