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 PRE 16.0020

Issue No: 1

Certificate history:
Issue No. 1 (2017-08-31)
Issue No. 0 (2016-04-08)

Status: **Current**

Date of Issue: **2017-08-31**

Applicant: **Kongsberg Maritime AS**
Skonnertvegen 1
Trondheim
Norway

Equipment: **Diode Safety Barrier**
Optional accessory:

Type of Protection: **Intrinsic safety**

Marking:
[Ex ia Ga] IIC -20°C≤Ta≤+70°C

Approved for issue on behalf of the IECEx Certification Body: Bjørn Spongsveen

Position: Certificatin Manager

Signature:
(for printed version)

Date:

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.

Certificate issued by:

DNV GL Nemko Presafe AS
Veritasveien 3
1363 Høvik
Norway

A DNV GL & NEMKO COMPANY

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Manufacturer: **Kongsberg Maritime AS**
Skonnertvegen 1
Trondheim
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 identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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

Test Report:

NO/PRE/ExTR16.0014/01

Quality Assessment Report:

DE/TUN/QAR12.0010/04

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The DZ-120 is a single channel shunt diode safety barrier, intended for protecting a 2-wire, 4-20 mA/HART signal transmitter installed in hazardous area. The Zener Barrier is installed in safe area, designed to limit the amount of energy that could appear in an electric circuit that connects to instrumentation located in hazardous area.

Type: DZ-120

Electrical Safety Parameters:
Maximum voltage Um: 250VAC
Maximum output voltage, Uo: 26.5VDC
Maximum outputcurrent, Io: 112mA
Maximum output power, Po: 0.74W
Maximum external capacitance, Co: 95nF
Maximum external inductance, Lo: 2.8mH

Maximum external inductance to resistance ratio, Lo/Ro: 48μH/Ω

Degrees of protection (IP code): IP20

Routine tests:
Manufacturer shall carry out routine test according to IEC 60079-11: 2011 clause 11.1.1

SPECIFIC CONDITIONS OF USE: NO

None.

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

Change of manufacturer address.