



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx PRE 16.0020** Page 1 of 4 Certificate history:  
Status: **Current** Issue No: 2 [Issue 1 \(2017-08-31\)](#)  
[Issue 0 \(2016-04-08\)](#)  
Date of Issue: 2021-01-28  
Applicant: **KONGSBERG MARITIME AS**  
Skonnertvegen 1  
Ranheim 7053  
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:

**Asle Kaastad**

Position:

**Certification 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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**DNV GL Presafe AS**  
Veritasveien 3  
1363 Høvik  
Norway





# IECEx Certificate of Conformity

Certificate No.: **IECEx PRE 16.0020**

Page 2 of 4

Date of issue: 2021-01-28

Issue No: 2

Manufacturer: **KONGSBERG MARITIME AS**  
Skonnertvegen 1  
Ranheim 7053  
Norway

Additional  
manufacturing  
locations:

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 equipment 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 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

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

This Certificate **does not** indicate compliance with 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/ExTR16.0014/02](#)

Quality Assessment Report:

[NO/PRE/QAR18.0016/02](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx PRE 16.0020**

Page 3 of 4

Date of issue: 2021-01-28

Issue No: 2

## **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  $U_m$ : 250VAC

Maximum output voltage,  $U_o$ : 26.5VDC

Maximum output current,  $I_o$ : 112mA

Maximum output power,  $P_o$ : 0.74W

Maximum external capacitance,  $C_o$ : 95nF

Maximum external inductance,  $L_o$ : 2.8mH

Maximum external inductance to resistance ratio,  $L_o/R_o$ : 48 $\mu$ H/ $\Omega$

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.



# IECEx Certificate of Conformity

Certificate No.: **IECEx PRE 16.0020**

Page 4 of 4

Date of issue: 2021-01-28

Issue No: 2

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

Changes concern update of latest standard of IEC 60079-0: 2017, correction of postal address and new reference of QAR.