

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **Presafe 14 ATEX 4368** **Issue 5**

[4] Product: **Diode Safety Barriers**

[5] Manufacturer: **Kongsberg Maritime AS**

[6] Address: **Skonnertvegen 1
7053 Ranheim
Norway**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-11:2012**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 **II (1) G** **Ex [ia Ga] IIC**

Date of issue:
2026-06-24



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



[13]

Schedule

[14]

EU-Type Examination Certificate No:

Presafe 14 ATEX 4368

Issue 5

[15]

Description of Product

The DZ-110/U Transmitter is a single channel shunt diode safety barrier intended for energizing a 2-wire, 4 to 20 mA signal transmitter in hazardous areas, powered from an uncritical 24 VDC supply (18 to 35VDC). Base made of insulating material for rail mounting. Earth strap shall be connected to separate earth rail.

Type designation

DZ-110/U

Electrical Safety Parameters

Maximum voltage Um: 250V AC

Maximum output voltage.	Uo:	25,2V DC
Maximum output current.	Io:	116mA
Maximum output power.	Po:	0,73W
Maximum external capacitance.	Co:	107nF
Maximum external inductance.	Lo:	2,6mH
Maximum external inductance to resistance ratio.	Lo/Ro:	48,8μH/Ω

Degrees of protection (IP Code)

IP20 accordance with IEC 60529

Ambient temperature:

-20°C to +70°C

Routine tests

The manufacturer performs specific routine verification for the conformal coating as part of the intrinsic safety protection according to clause 10.4 EN IEC 60079-11:2024.

The Manufacturer shall carry out routine test according to EN IEC 60079-11: 2024 clause 10.2

[16]

Report No.: 2026-3145

Project No.: PRJN-198929-2020-PA-NOR/05

[17]

Specific Conditions of Use

None

[18]

Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

Product also complies with EN IEC 60079-11:2024.

[19] Drawings and documents

Number	Title	Rev.	Date
7212-496.900	PCB specification	A	2015-10-23
DZ-059	Schematics dwg	A	2015-10-19
7212-496.000	PCB layout dwg	A	2015-10-23
7212-496.901	PCB BOM	A	2015-10-26
BOM DZ-110/U	Unit BOM	A	2016-01-29
E-2761	Marking label	D	2021-01-05
410221	DZ-110/U and DZ-120 coating info	B	2026-03-06
428616	Marking of DZ-110/U	A	2017-08-25

[20] Certificate History

Issue	Description	Issue date	Report no.
1	Original issue of principal ATEX certificate	2015-04-17	D0000975
2	Adding modified model DZ-110/U	2016-02-16	D0000975 Rev.1
3	Change of manufacturer address	2017-08-28	D0000975 Rev.2
4	Changes concern update to latest standard of IEC 60079-0:2018 and correction of postal address.	2021-01-12	PRJN-198929-2020-PA-NOR
5	Update to new standard EN IEC 60079-11:2024 and minor update of documents that do not affect safety parts.	2025-06-24	PRJN-198929-2020-PA-NOR/05

END OF CERTIFICATE