

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 14 ATEX 5412X** **Issue 4**

[4] Product: **Associated power and signal unit for level gauging radar sensor**

[5] Manufacturer: **Kongsberg 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 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" listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the technical design 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 Ta: -15°C to +70°C**

Date of issue:
2025-09-19



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.



[13]

Schedule

[14] **EU-Type Examination Certificate No:**

Presafe 14 ATEX 5412X

Issue 4

[15] **Description of Product**

GLK-300 is an associated apparatus for power supply and communication for level gauging radar sensors and auxiliary pressure and temperature transmitters. The power and RS-485 are for connection to the level gauging radar sensor. Hart circuit for pressure and temperature transmitters. More than one transmitter may be connected to the Hart circuit so far as the sums of capacitance and inductance of the transmitters and cables are less or equal to the Co and Lo for GLK-300.

Type designation

GLK-300

Electrical Data

Maximum safe voltage Um: 250V AC

Power supply, terminals X2 & X3: p4 - X1& X4: p4

IIB

IIC

Maximum output voltage.

Uo:

14.3VDC

14.3VDC

Maximum output current.

Io:

360mA

360mA

Maximum output power.

Po:

2.1W

2.1W

Maximum external capacitance.

Co:

4.28μF

680nF

Maximum external inductance.

Lo:

168μH

42μH

Maximum ratio

Lo/Ro

68μH/Ω

17μH/Ω

X1 & X4: p5-p6 (HART)

IIB

IIC

Maximum output voltage.

Uo:

25.8VDC

25.8VDC

Maximum output current.

Io:

115mA

115mA

Maximum output power.

Po:

0.74W

0.74W

Maximum external capacitance.

Co:

780nF

100nF

Maximum external inductance.

Lo:

9mH

1.6mH

X2 & X3: p5- p6 (RS-485)-X1&X4: p4 (0V-ref.)

IIB

IIC

Maximum output voltage.

Uo:

7VDC

7VDC

Maximum output current.

Io:

70mA

70mA

Maximum output power.

Po:

88mW

88mW

Maximum external capacitance.

Co:

300μF

15.7μF

Maximum external inductance.

Lo:

25mH

7mH

X1, X2, X3 &X4: p1-p3 (0V/ GND)

Degrees of protection (IP Code)

IP20

Ambient temperature:

-15°C to +70°C

Routine tests

The manufacturer performs specific routine verifications and tests of the shunt assemblies of the power supply.
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.

- [16] **Report No.:** PRJN-198864-2020-PA-NOR/01
Project No.: PRJN-198864-2020-PA-NOR/01

[17] **Specific Condition(s) of Use**

1. The separation distance of minimum 50mm between intrinsically and non-intrinsically safe circuits must be observed for the final installation in a cabinet.
2. The GLK-300 must be installed in a cabinet with a degree of protection of at least IP20
3. The ambient temperature range for the GLK-300 is $-15^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$
4. The power output circuit has a resistive trapezoidal output characteristic with a maximum U1 voltage 23,5V.
5. The RS-485 circuit has a safety open voltage U_o : 7V with a maximum voltage 5V for load and thermal assessments.

[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
GL-2735	GLK-300 Safety Control dwg	G	14.08.2025
E-2693	Sticker for GLK-300 Detail dwg	G	12.11.2020
GL-2534	GLK-300 Dimensional sketch	C	24.11.2011
UL RCF1006FR	Datasheet plastic in housing	-	05.03.2009
BUILDUP_GLK-300_9212-459.pdf	GLK-300 Main Board, PCB, 8 Layer, 1.6 mm	-	05.02.2001
7212-459.900	GLK-300 Main Board, PCB Specifications	A	24.01.2012
GL-2464	GLK-300 Main Board, Schematics	B	23.01.2012
BUILDUP_GLK-300_9212-460 0.pdf	GLK-300 Piggyback Board, 4 Layer, 1.6 mm	-	11.04.2001
7212-460.900	GLK-300 Piggyback Board, PCB Specifications	B	11.05.2015
GL-2465	GLK-300 Piggyback Board, Schematics	A	23.01.2012
7212-459.901	BOM GLK-300 Main Board	D	21.08.2025
7212-460.901	BOM GLK-300 Piggyback Board	D	04.09.2025
7212-459.000	GLK-300 Main Board, PCB Layout Drawings	A	07.02.2011
7212-460.000	GLK-300 Piggyback Board, PCB Layout Drawings	A	28.05.2009
399336	GLK-300 SPU coating procedure	D	16.09.2025

[20] Certificate History

Issue	Description	Issue date	Report no.
1	Original issue	2014-11-27	D0001576/00
2	New company address	2017-08-29	D0001576/01
3	Update to new standard EN IEC 60079-0:2018, Notified Body number updated on marking label drawing, Bill of material for GLK-300 Main Board upgraded for component replacement items U559 og U560, non-safety critical component. GLK-300 Main Board and Piggyback Board, PCB Layout Drawings are unchanged content.	2020-11-18	PRJN-198864-2020-PA-NOR/00
4	Update to new standard EN IEC 60079-11:2024 and minor update of documents that do not affect safety parts.	2025-09-19	PRJN-198864-2020-PA-NOR/01

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

END OF CERTIFICATE