



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

Certificate No.:	IECEx DNV 22.0039X	Page 1 of 6	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2025-02-20) Issue 0 (2023-07-07)
Date of Issue:	2026-08-21		
Applicant:	KONGSBERG MARITIME AS Skonnertvegen 1 7053 Ranheim Norway		
Equipment:	Radar Communication Module RCM-300 and HART Communication Module HCM-300		
Optional accessory:			
Type of Protection:	Intrinsic safety		
Marking:	[Ex ia Ga] IIC -15°C≤Ta≤+70°C Um: 250VAC See Annex for intrinsically safety parameters.		

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

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 or use of this QR Code.



Certificate issued by:

DNV Product Assurance AS
Veritasveien 1
1363 Høvik
Norway





IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 22.0039X**

Page 2 of 6

Date of issue: 2026-08-21

Issue No: 2

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

Manufacturing
locations: **KONGSBERG MARITIME AS**
Skonnertvegen 1
7053 Ranheim
Norway

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 60079-11:2023](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:7.0

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 Reports:

[NO/DNV/ExTR22.0044/01](#)

[NO/DNV/ExTR22.0044/02](#)

Quality Assessment Report:

[NO/PRE/QAR18.0016/05](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 22.0039X**

Page 3 of 6

Date of issue: 2026-08-21

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Associated power barrier, Communication Module

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The separation distance of minimum 50mm between intrinsically and non-intrinsically safe circuits has to be observed for the final installation in a cabinet.
2. The RCM-300, HCM-300 has to be installed in a cabinet with a degree of protection of at least IP20
3. The RS-485 circuit of RCM-300 (X1/p3,p4) has a safety open voltage $U_o = 7V$ with a maximum voltage 5V for load and thermal assessments.



IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 22.0039X**

Page 4 of 6

Date of issue: 2026-08-21

Issue No: 2

Equipment (continued):

RCM-300 is an associated apparatus for power supply and communication for level gauging radar sensors and auxiliary HART pressure and temperature transmitters. The power and RS-485 are for connection to the level gauging radar sensor. The HART circuit for pressure and temperature transmitters. The HCM-300 is a variant of the RCM-300 where the RS-485 input is substituted with a HART input, resulting in a dual HART board. More than one HART transmitter may be connected to the HART circuit so far as the sums of capacitance and inductance of the transmitters and cables are less than or equal to the Co and Lo for the RCM-300/HCM-300.



IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 22.0039X**

Page 5 of 6

Date of issue: 2026-08-21

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This update of certificate concern upgrade to latest standard of IEC 60079-11: 2023 7th edition.

Minor change of schedule document which do not affecting the safety part.



IECEx Certificate of Conformity

Certificate No.: **IECEx DNV 22.0039X**

Page 6 of 6

Date of issue: 2026-08-21

Issue No: 2

Additional information:

The manufacturer performs specific routine verification for the conformal coating as part of the intrinsic safety protection according to clause 10.4 IEC 60079-11:2023

Annex:

[ANNEX to IECEx certificate number IECEx DNV 22.0039X.pdf](#)

Annex to certificate: IECEx DNV 22.0039X

Electrical Safety Data:

Type designation: RCM-300 (with radar and HART interface)

Maximum safe voltage U_m : 250V AC

Power supply, terminals X1 p1 (+10V) - X1 p2 (0V/GND)

	IIB	IIC
Maximum output voltage	U_o : 12.63VDC	12.63VDC
Maximum output current	I_o : 330mA	330mA
Maximum output power	P_o : 1.92W	1.92W
Maximum external capacitance	C_o : 7.4 μ F	1.15 μ F
Maximum external inductance	L_o : 200 μ H	50 μ H
Maximum external inductance to resistance ratio	L_o/R_o : 74 μ H/ Ω	18.5 μ H/ Ω

Note:

The output circuit has a trapezoidal resistive characteristic with voltages U_s : 23.5 V and U_o : 12.63 V

X1 p3 (RS-485 A-) – X1 p4 (RS-485 B+)

	IIB	IIC
Maximum output voltage	U_o : 7.0VDC	7.0VDC
Maximum output current	I_o : 68mA	68mA
Maximum output power	P_o : 85mW	85mW
Maximum external capacitance	C_o : 300 μ F	15.7 μ F
Maximum external inductance	L_o : 30mH	7.5mH

X2 p1 (HART+) – X2 p2-p4 (HART- / GND)

	IIB	IIC
Maximum output voltage	U_o : 25.20VDC	25.20VDC
Maximum output current	I_o : 108mA	108mA
Maximum output power	P_o : 0.68W	0.68W
Maximum external capacitance	C_o : 820nF	107nF
Maximum external inductance	L_o : 7.2mH	1.8mH

Type designation: HCM-300 (with dual HART interface)

Maximum safe voltage U_m : 250V AC

X1/X2 p1 (HART+) – X1/X2 p2-p4 (HART- / GND)

	IIB	IIC
Maximum output voltage	U_o : 25.20VDC	25.20VDC
Maximum output current	I_o : 108mA	108mA
Maximum output power	P_o : 0.68W	0.68W
Maximum external capacitance	C_o : 820nF	107nF
Maximum external inductance	L_o : 7.2mH	1.8mH