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 PRE 18.0086X**

Page 1 of 4

Certificate history:
Issue 0 (2020-04-24)

Status: **Current**

Issue No: 1

Date of Issue: 2022-03-16

Applicant: **Kongsberg Maritime AS**
Skonnertvegen 1
7353 Ranheim
Norway

Equipment: **SENTRY GB-300 Wireless Temperature Measuring System**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: Ex db [ia Ga] IIC T6 Gb -20°C≤Ta≤+60°C

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 3
Hovik 1363
Norway

IECEx Certificate of Conformity

Manufacturer: **Kongsberg Maritime AS**
Skonnertvegen 1
7353 Ranheim
Norway

Manufacturing locations: **Kongsberg Maritime AS**
Skonnertvegen 1
7353 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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
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/ExTR18.0098/01

Quality Assessment Report:

NO/PRE/QAR18.0016/03

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The system is based on radar technology. This enables the possibility of using high quality wireless passive sensors with no need for external power sources. The signal-processing unit generates a low energy and high frequency radar pulse, which is transmitted to the wireless sensor via the stationary antenna. When the wireless sensor passes the stationary antenna it is hit by this radar pulse and immediately reflects a pulse back to the signal-processing unit. The temperature of the sensor uniquely determines the shape and characteristics of this reflected pulse. A software algorithm then calculates the temperature and transmits this to the engine monitoring and control system.

Type designation SENTRY SPU - GBP300/abccdefg is explained in attached Annex to certificate.

Electrical Data

Power supply: 24VDC nom. (18-32VDC) / 10W

Maximum safe voltage Um: 250Vrms

Max RF pulse power out 100mW , mean RF power 140 µW, 856MHz

SPECIFIC CONDITIONS OF USE: YES as shown below:
* The equipment does not fulfil the dielectric strength requirement according to Clause 6.3.13 of IEC 60079-11:2011. Special consideration must be taken under installation. See Safety Control Drawing no. GB-1233.

* The width of the flameproof joints is superior to those specified in the tables of IEC 60079-1 standard: contact the original manufacturer for any repairs of the flameproof joints.

* Separate IECEx / ATEX certified Ex db IIC Gb IP66/67 cable gland or plugs shall be used.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Updated of documentation as marking plate, instructions, bill of materials and safety control drawing.

Annex:

ANNEX to IECEx certificate number IECEx PRE 18.0086X.pdf

DNV Product Assurance AS
Veritasveien 3
1363 Høvik
Norway

Annex to certificate: IECEx PRE 18.0086X Issue No.1

Type designation and explanation of order key:

GBP300/abccdefg