



TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00001MY
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Bridge Navigational Watch Alarm System (BNWAS)

with type designation(s)
K-Bridge BNWAS

Issued to

Kongsberg Maritime AS
Kongsberg, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 9,**

item No. UK/4.57. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.694(17), IMO Res. MSC.128(75), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1474

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-10-24**.

Issued at **London** on **2024-10-14**

DNV local unit:
East & South Norway CMC



for **DNV UK Ltd.**

Approval Engineer:
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Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

"The Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Kongsberg Maritime K-Bridge BNWAS is implemented within the Kongsberg K-Bridge system platform, and comprises the following modules :

Hardware:	Model/Type:
• K-Bridge Operator Station	: As defined in separate certificate*)
• Main Alarm Reset Panel	: 308358
or	
BNWAS Main Panel	: 425293
• Pre-Warning Reset Panel	: 8100319
or	
BNWAS Reset Panel	: 440700
• Alarm Buzzer (Bridge)	: 3700825
• Alarm Buzzer (Cabins)	: 3700688
Option:	
• Kongsberg Motion Sensor PA6810E	: 378592

Software modules:

K-Bridge System Platform SW	: As defined in separate certificate*)
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*) Certificate TAA00000FJ for K-Bridge and K-Bridge Standalone system platforms (see Type Examination documentation below) in its latest revision at the date of placing the system on the market is part of this certificate. For the relevant revision see also <https://approvalfinder.dnv.com/>.

Application/Limitation

- Installation to be performed according to the manufacturer's documentation. See Type Examination documentation below for details.
- The K-Bridge BNWAS may be delivered in K-Bridge Console KM05 or as built-in version for other consoles incl. KM18.
- K-Bridge BNWAS may fulfil the additional DNV requirements for BNWAS used onboard ships with DNV NAUT notifications, depending on system configuration and installation.

Tests carried out

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| • Performance testing: | IEC 62616 (2010) and DNV Rules Pt.6 Ch.3 (July 2022) |
| • Environmental testing: | IEC 60945 (2002) incl. Corr.1 (2008) |
| • Serial interface testing: | IEC 61162-1 (2016) |
| • Presentation of Navigation information: | IEC 62288 (2021) |
| • Bridge Alert Management: | IEC 62923-1 (2018) and IEC 62923-2 (2018) |

Type Examination documentation

DNV No	Doc. Id	Rev.	Description
59	455906	A	Manual: Kongsberg Maritime, ECDIS and Radar Display Distances, Installation Manual
58	110-0054815	A	Manual: Kongsberg Maritime, K-Bridge BNWAS, Operator Manual, Release 9.1
57	110-0052052	A	Report: Kongsberg Maritime, K-Bridge test Report IEC 62288 Ed.3 (2021)
55	463842	C	Manual: Kongsberg Maritime, K-Bridge BNWAS Operator Manual, Release 9.0
53	477915	C	Report: Kongsberg Maritime, K-Bridge and K-Nav CAM BAM Type Approval test report
51	HA462878	A	Drawing: Kongsberg Maritime, BNWAS Prewarning/reset panel IP56
50	440691	B	Drawing: Kongsberg Maritime, BNWAS Reset Panel flush mounted, Layout drawing
49	425294	A	Drawing: Kongsberg Maritime, BWMAS Main Panel Flush
48	329349	A	Drawing: Kongsberg Maritime, BWMAS Panel Sint 500 D Standard
44	463299	A	Report: Kongsberg Maritime, Motion detector Takex PA6810E, K-Bridge BNWAS Function Test
42	E14056.00	00	Report: Nemko, EMC and environmental test report for Passive IR sensor type 378592 (KM doc. no 254128)
38	E09778.00	00	Report: Nemko, EMC and environmental test report for PA6810E Motion Sensor
29	429327	D	Manual: Kongsberg Maritime, K-Bridge BNWAS, Operator Manual Release 8.2
27	TAA00000FJ	Latest rev.	Certificate: DNV, Type Approval certificate for K-Bridge and K-Nav system platforms
24	419028	A	Report: Kongsberg Maritime, K-Bridge BNWAS renewal test report
10	2011-10-25		Report: Kongsberg, K-Bridge BNWAS 4.0.x Type Approval System
9	2011-10-25		Report: Kongsberg, K-Bridge 5.1.x BNWAS Type Approval System
7	DANAK-1910004	2008-01-09	Report: DELTA, Type Approval testing of SONF1DC24G
3	334399	E	Manual: Kongsberg Maritime, K-Bridge BNWAS, Installation Manual

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.