



Danmark

Marine Equipment Directive EC Type Examination Module B Certificate

This is to certify that TÜV SÜD DANMARK ApS did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Marine Equipment Directive (2014/90/EU) requirements, under the following Implementing Regulation for the listed types of equipment

Implementing Regulation	(EU)2023/1667
Certificate Holder and Manufacturer	Japan Radio Co., Ltd. Nakano Central Park East 4-10-1, Nakano, Nakano-ku Tokyo, 164-0001 Japan
EC Representative	JRC Newdigate-Dublin, 77 Camden Street Lower St Kevin's Dublin 2 Ireland D02 XE80
Product(s)	JFE-400
Product Sector	Navigation Equipment
Product Type	MED/4.6 Echo-Sounding Equipment

and on the basis of the Technical Data and information detailed in the Annex to this certificate.

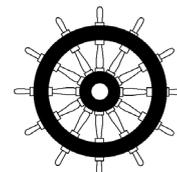
Valid from: 22 February 2024 (Andy Little)

Expiry Date: 28 April 2026

This certificate has been issued in accordance with the TÜV SÜD Testing, Certification Validation and Verification Regulations and constitutes page 1 of the combined Certificate and Annex.

The Conditions for the validity of this certificate are listed in the Annex.

For further details, related to this certification please contact BABT@tuvsud.com

**2443**

Issued by TÜV SÜD DANMARK ApS under document number: DK-MED000140 Issue 03

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TÜV SÜD DANMARK ApS • Strandvejen 125 • 2900 Hellerup • Denmark



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1 Equipment Description

Echo-sounder

1.1 Models

Model
JFE-400

1.1.1 System Components

Model	Description
NWZ-1650	Display Unit
NQA-4327	Processing Unit
NKF-349 or NKF-341 ^{Note 1&2}	200kHz Transducer and Mounting with:
NQD-2597 or AW-154F ^{Note 3}	Matching/Junction Box for 200kHz
NKF-350 or NKF-345 ^{Note 1&2}	50kHz Transducer and Mounting with:
NQD-2598 or AW-154F-50 ^{Note 3}	Matching/Junction Box for 50kHz

1.1.2 Optional Components

Model	Description
NKG-901, NKG-91 or DPU-414	Printer

1.2 Software

Identity	Description
V1.00	JFE-400 Software

2 Assessed Requirements

2.1 Implementing Regulation (EU)2023/1667^{Notes 5 & 6}

2.2 Compliance Requirements for MED/4.6 Row 2 of 2

Performance Requirements	International Testing Standards	
Resolution A.224(VII) Resolution MSC.74(69), Annex 4	ISO 9875:2001 inc ISO Tech Corr.1:2006	Ships and marine technology — Marine echo-sounding Equipment
	ISO 9875:2023	Ships and marine technology — Marine echo-sounding Equipment
Resolution MSC.191(79)	IEC 62288:2021	Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays
Resolution A694(17)	IEC 60945:2002	General Requirements for Marine Navigation Equipment (Inc. Corr1:2008)

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Performance Requirements	International Testing Standards	
	IEC 61162-1:2016	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 1: Single talker and multiple listeners
	IEC 61162-450:2018	Maritime navigation and radiocommunication equipment and systems — Digital Interfaces – Part 450 Ethernet Interface
Resolution MSC.302(87)	IEC 62923-1:2018	Maritime navigation and radiocommunication equipment and systems – Bridge alert management Part 1: Operational and performance requirements, methods of testing and required test results
	IEC 62923-2:2018	Maritime navigation and radiocommunication equipment and systems – Bridge alert management Part 2: Alert and cluster identifiers and other additional features

3 Technical Documentation

3.1 Declaration of Conformity

MED-DoC-JFE-400 Modified 2024-01-04

3.2 User Guide

JFE-400 Echo-sounder Instruction Manual, US24ZZ0209B, 2024-02-12
JFE-400 Echo-sounder Installation Manual, US24ZZ0209D, 2024-02-14

3.3 Test Reports

3.3.1 ISO 9875:2001 inc ISO Tech Corr.1 (2006)

NA20ZZ1215A	Issued	2021-03-31
RM615529/02 Issue 1	Issued	2006-12-13
US23ZZ1010D	Dated	2023-10-10
US23ZZ1011A	Dated	2023-10-11

3.3.2 ISO 9875:2023

US24ZZ0125A	Dated	2024-01-29
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3.3.3 IEC 62288:2021

NA21ZZ0222B	Issued	2021-04-06
T2018-01	Issued	2018-12-19
US24ZZ0125A	Dated	2024-01-29

3.3.4 IEC 60945:2002 inc. Corr1:2008

NA20ZZ1215A	Issued	2021-03-31
EMC21014	Issued	2021-03-12
ENV21002	Issued	2021-02-24
ENV18022	Issued	2018-08-23
ENV20032	Issued	2020-11-25
20-256(E)	Issued	2020-10-29
20-255 (E)	Issued	2020-11-19



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21-027 (E)	Issued	2021-04-19
17-402 (E)	Issued	2018-01-26
17-338 (E)	Issued	2017-11-06
17-401 (E)	Issued	2018-01-26
RM900340C	Issued	2000-08-21
RM900340B	Issued	2000-03-21
YN0608002-01	Issued	2006-11-17
JRC_corrosion_test_report	Issued	2014-12-01
ER-AK-1486	Modified	2021-04-27
ER-AK-1518	Modified	2021-04-28
ENV-8E23006-1	Issued	2023-11-29
23-422(E)	Issued	2023-11-10
23-369 (E)	Issued	2023-12-20

3.3.5 IEC 61162-1:2016 & IEC 61162-450:2018

NA21ZZ0129C	Issued	2021-04-02
NA21ZZ0222A	Issued	2021-03-31

3.3.6 IEC 62923-1:2018 & IEC 62923-2:2018

NA21ZZ0222C	Issued	2021-03-31
NA21ZZ0123A	Issued	2021-03-31

3.4 Build Status

3.4.1 Hardware

NA21ZZ0128A	Dated	2021-02-25
SJNKF5707E	Modified	2024-02-09

3.5 Notes

- Note 1 This echo sounder can display information from 1 or 2 transducers (Bow and Stern) each of which may be either 50kHz or 200kHz operating frequency.
- Note 2 The NKF-345 and NKF-350 assemblies contain the UT50MD transducer (50 kHz). The NKF-341 and NKF-349 assemblies contain the UT200ND transducer (200 kHz).
- Note 3 The appropriate matching /junction box for 50 or 200 kHz should be used with matching Transducer.
- Note 4 This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing, Certification, Validation and Verification Regulations.
- Note 5 The JFE-400 meets the requirements of IEC 62923-1 for EUT function type P.
- Note 6 The JFE-400 maintains compliance with both ISO 9875:2001 inc ISO Tech Corr.1:2006 and ISO 9875:2023.

4 U.S. Coast Guard Number

This product has been assigned U.S. Coast Guard Module B number

165.107/EC2443

To note type approval to Module B only as it pertains to obtaining US Coastguard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", Decision No. 1/2023 signed May 26th, 2023.

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5 Conditions of Validity

This certificate ceases to 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 TÜV SÜD DANMARK ApS or a person appointed by TÜV SÜD DANMARK ApS to perform that role.

During the period of validity of this certificate the applicable regulations (international conventions and relevant resolutions and circulars of the IMO) and testing standards of the Commission Implementing Regulation may change, therefore the product conformity may need to be re-assessed by TÜV SÜD DANMARK ApS.

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 the directive is fully complied with and controlled by a written inspection agreement with a notified body.

Signature: 

Date: 22/02/2024

(Andy Little)

On behalf of TÜV SÜD DANMARK ApS