



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)2024/1975
Certificate Holder and Manufacturer	Japan Radio Co., Ltd. 4-10-1, Nakano Nakano Central Park East 3F Nakano-Ku Tokyo 164-0001 Japan
EC Representative	JRC Dublin 77 Camden Street Lower St Kevin's Dublin 2 DO2 XE80 Ireland
Product(s)	JMR-9200 Series Radar Systems
Product Sector	Navigation Equipment
Product Type	MED/4.64 Radar Equipment (CAT 1, Chart and High Speed Craft Options)

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

Valid from: 18 August 2025

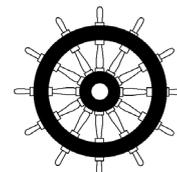
(Andy Little)

Expiry Date: 10 June 2029

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-MED000060 Issue 17

Page 1 of 8

TÜV SÜD DANMARK ApS • Johanne Møllers Passage 1, 3. sal • 1799 Copenhagen V • Denmark



Danmark

Annex to Marine Equipment Directive Module B Type Examination Certificate

1 Equipment Description

Shipborne Radar Equipment and Radar Equipment with Chart Option

1.1 Models

Model
JMR-9200 Series Radar Systems

2 Assessed Requirements

2.1 Implementing Regulation (EU)2024/1975

2.2 Compliance Requirements for MED/4.64 Row 1 of 1 Note 6

Type approval requirements	Carriage and Performance Requirements
SOLAS 74 Reg V/18 SOLAS 74 Reg. X/3 IMO Res.MSC.36(63)-(1994 HSC Code) 13 IMO Res.MSC.97(73)-(2000 HSC Code) 13	SOLAS 74 Reg. V/19 IMO Res. A.278(VIII) IMO Res. A.694(17) IMO Res. MSC.36(63)-(1994 HSC Code) 13 IMO Res. MSC.97(73)-(2000 HSC Code) 13 IMO Res. MSC.191(79) IMO Res. MSC.192(79) IMO Res. MSC.302(87) IMO MSC.1/Circ.1349 ITU-R M.1177-4 (04/11)
Assessed Testing Standards	
IEC 62388 Ed. 2.0: 2013-06 incl. IEC 62388 Corr 1:2014*	IEC 62288 Ed. 3.0:2021
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008	IEC 61162-1:2016
IEC 62923-1:2018	IEC 61162-2 Ed.1.0:1998-09
IEC 62923-2:2018	IEC 61162-450:2018
*Full requirement for Chart Radar are integrated into the IMO Resolution and IEC Standard and form an optional enhancement on standard radar	



Danmark

Annex to Marine Equipment Directive Module B Type Examination Certificate

3 System Components

3.1 Main System Components

		X-Band 25kW						X-Band 10kW	X-Band 600W			
		JMR-9225-7X3	JMR-9225-9X3	JMR-9225-6X	JMR-9225-9X	JMR-9225-9X2	JMR-9225-7X2	JMR-9225-6XH	JMR-9210-6X	JMR-9210-6XH	JMR-9296-6X	JMR-9296-9X
Radar Display Unit incorporating:		X	X	X	X	X	X	X	X	X	X	X
26 " or 27" Colour LCD Monitor	NWZ-208 or NWZ-233 <small>Note 1</small>	X	X	X	X	X	X	X	X	X	X	X
Track ball operation unit	NCE-5605	X	X	X	X	X	X	X	X	X	X	X
Central control unit	NDC-1590 or NDC-1590A <small>Note 1</small>	X	X	X	X	X	X	X	X	X	X	X
Power supply unit	NBD-913	X	X	X	X	X	X	X	X	X	X	X
25kW Bulkhead Mount Transceiver and Turning Unit c/w 7ft antenna	NTG-3225 and NKE-1129-7 or NTG-3225 and NKE-1129A-7	X										
25kW Bulkhead Mount Transceiver and Turning Unit c/w 9ft antenna	NTG-3225 and NKE-1129-9 or NTG-3225 and NKE-1129A-9		X									
25kW Transceiver/Turning Unit c/w 6ft antenna	NKE-1125-6 or NKE-1125A-6			X								
25kW Transceiver/Turning Unit c/w 9ft antenna	NKE-1125-9 or NKE-1125A-9				X							
25kW Transceiver/Turning Unit c/w 9ft antenna	NKE-2254-9					X						
25kW Transceiver/Turning Unit c/w 7ft antenna	NKE-2254-7						X					
25kW Transceiver/HSC Turning Unit c/w 6ft antenna	NKE-2254-6HS							X				
10kW Transceiver/Turning Unit c/w 6ft antenna	NKE-2103-6								X			
10kW Transceiver/HSC Turning Unit c/w 6ft antenna	NKE-2103-6HS									X		
600W Solid State Transceiver/ Turning Unit c/w 6ft antenna	NKE-1696-6										X	
600W Solid State Transceiver/ Turning Unit c/w 9ft antenna	NKE-1696-9											X



Danmark

Annex to Marine Equipment Directive Module B Type Examination Certificate

3.2 Main System Components

		S-Band 30kW		S-Band 250W		
		JMR-9230-S3	JMR-9230-S	JMR-9272-S	JMR-9282-S	JMR-9282-SH
Radar Display Unit incorporating:		X	X	X	X	X
26 " or 27" Colour LCD Monitor	NWZ-208 or NWZ-233 <small>Note 1</small>	X	X	X	X	X
Track ball operation unit	NCE-5605	X	X	X	X	X
Central control unit	NDC-1590 or NDC-1590A <small>Note 1</small>	X	X	X	X	X
Power supply unit	NBD-913	X	X	X	X	X
30kW Bulkhead Mount Transceiver and Turning Unit c/w 12ft antenna	NTG-3230 and NKE-1139 or NTG-3230 and NKE-1139A	X				
30kW Transceiver/Turning Unit c/w 12ft antenna	NKE-1130 or NKE-1130A		X			
250W Solid State Transceiver/ Turning Unit c/w 12ft antenna	NKE-1632 or NKE-1632A			X		
250W Solid State Transceiver/ Turning Unit c/w 8ft antenna	NKE-2632 or NKE-2632A				X	
250W Solid State Transceiver/ HSC Turning Unit c/w 8ft antenna	NKE-2632-H					X

Annex to Marine Equipment Directive Module B Type Examination Certificate

3.3 Optional Components

These units have been tested and assessed for use in any JMR-9200 series radar system.

Model	Description
NCE-5625	Keyboard Operation Unit (OPU) ^{Note 1}
CWA-246	26/27" Display Unit Mount Kit ^{Note 1}
CWB-1595	26/27" Desktop Frame ^{Note 1}
CWB-1660	26/27" Desktop Frame ^{Note 1}
CWB-1596	OPU Desktop Frame
AlphaScreen 46 (DV4624-002)	46" Colour LCD Monitor
AlphaScreen 26 (FDU2603W)	26" Colour LCD Monitor
AlphaScreen 27 (MDF2701W)	27" Colour LCD Monitor
NQA-2443 or NQA-2443A	Sensor LAN switch unit
NQE-1143	Junction box
NJU-84	Performance Monitor
NJU-85	Performance Monitor
NQE-3141-4A	4 unit switching inter-switch
NQE-3141-8A	8 unit switching inter-switch
NQE-3167	Power control unit
HD19T27 JED-MA4-xxxx	19" Display ^{Note 7}
HD24T27 JED-MA4-xxxx	24" Display ^{Note 7}
HD27T27 JED-MA4-xxxx	27" Display ^{Note 7}
HD32T40 JED-MA4-xxxx	32" Display ^{Note 7}
HD43T40 JED-MA4-xxxx	43" Display ^{Note 7}

3.4 Software ^{Note 3}

Identity	Description
Central Control Unit (NDC-1590 or NDC-1590A)	01.60

4 Technical Documentation

4.1 Declaration of Conformity

160p) MED-DoC-JMR-9200 2024-1975

Dated

2025-03-31

4.2 User Guide

Marine Radar Equipment Instruction Manual (Basic Operation) 7ZPNA4446M, Jan 2025 Edition 16

Marine Radar Equipment Instruction Manual (Function) 7ZPNA4447K, Jan 2025 Edition 13

Marine Radar Equipment Instruction Manual (Reference) 7ZPNA4448M, Jan 2025 Edition 17

Marine Radar Equipment/ECDIS/Conning Display Installation Manual 7ZPNA4466N, April 2025 Edition 21

Annex to Marine Equipment Directive Module B Type Examination Certificate



Danmark

4.3 Test Reports

IEC 60945:2002 (inc Corr.1)	75923142 Report 02 Issue 2, 2014-01-22	YN0708005-11, 2008-03-28
	75923142 Report 01 Issue 3, 2014-01-22	YN0708005-12, 2008-03-28
	75923142 Report 05 Issue 3, 2014-01-22	YN0712002-1, 2007-12-18
	Corrosion Report, 2013-12-16	YN0801004-1, 2008-03-13
	Z071C-13420, 2013-12-11	YN0706005-1, 2007-11-13
	13-326(E), 2013-10-15	YN0706005-2, 2007-11-13
	75901288 Report 01 Issue 1, 2007-07-10	YN0706005-3, 2007-11-13
	75901288 Report 02 Issue 1 2001-07-10	YN0706005-11, 2007-12-11
	75901288 Report 03 Issue 1 2001-07-10	YN0706005-12, 2007-12-11
	YN0708005-1, 2007-12-07	YN0706005-13, 2007-12-11
	YN0708005-2, 2007-12-07	YN0709007-1, 2008-01-31
	YN0801004-3, 2008-03-28	YN0709007-11, 2007-11-13
	YN0801004-5, 2008-03-28	YN0712004-1, 2008-02-27
	YN0801001-1, 2008-06-10	YN0712004-2, 2008-02-27
	007-511(E), 2008-01-31	CSD 08-311(E), 2008-10-08
	713047988, 2014-11-25 Salt Mist	9065-15-49778-174, 2015-11-02
	69859-47988-2 Ed. 1, 2014-12-01	FLI 12-14-053, 2014-07-03
	69859-47988-1, 2014-11-28	F153910E1, 2015-12-10
	BSH Cert No. 889, 2014-11-20	FDS1904_FDU2603W Declaration Corrosion Sign.pdf, 2016-07-05
	DPS-16-00027, 2016-07-01	DPS-16-00034 Modified 2016-07-15
	WW-000001398, 2015-03-06	19-354E, 2019-11-12
	19-348E, 2019-11-12	JPX-TR-19268-0, 2019-08-23
	75953086 Report 01 Issue 01, 2021-12-22	RD21ZZ1102A, 2021-11-02
	21-370(E), 2021-11-11	JPX-TR-21285-0, 2021-11-15
	DOC-AP-000071, 2024-09-13	400-240092-1, 2024-09-10
	LIC 12-23-119, 2023-09-06	DOC-AP-000073, 2024-09-27
	23-131(E), 2023-06-26	24-455(E), 2024-12-25
	LIC 12-23-117, 2023-09-06	24-438(E), 2024-12-24
	LIC 12-23-118, 2023-09-06	24-164(E), 2024-08-22
	17-05-EAT-054-E00 2, 017-05-17	CEBDLB-WTW-P24070081, 2024-09-06
	ME7D0801, 2018-04-11	240620002T, 2024-09-18
	170421001TR1, 2018-04-09	240905001T, 2024-09-18
	31607-2, 2024-12-04	CEBDLB-WTW-P23070246, 2023-08-25
	VS-TV-060502-01, 2017-05-07	20931 Rev1, 2017-02-10
CEBDLB-WTW-P24070081, 2024-09-06	230911001T, 2024-02-05	
240620003T, 2024-09-06	210519001T, 2021-08-19	
DOC208309-1 Revision 08, 2025-07-09	-	
IEC 62388:2013	75924011 Report 01 Issue 1, 2014-04-11	Magnetron Evaluation Report (Sea and Rain Clutter), 2014-01-24
	User Performance Evaluation, 2013-12-06	Solid State Evaluation Report (Sea and Rain Clutter), 2014-01-30
	Evaluation of LCD Monitor Rev 1.0, 2013-10-04	75928362 Report 01 Issue 1, 2015-02-17
	75933710 Report 01 Issue 01, 2016-07-21	RD21ZZ0617A, 2021-06-18
	75953010 Report 01 Issue 01, 2021-11-22	RD21ZZ0618A, 2021-06-21
	JX22AS0421E, 2022-04-26	JX22AS0421B, 2022-04-25
	JX22AS0421C, 2022-04-25	75955145 SoT 02 Issue 1, 2022-05-30
	JX22AS0421F, 2022-04-26	75955145 SoT 03 Issue 1, 2022-05-30
	DOC-AP-000061, 2024-08-08	75963591-01 Issue 01, 2025-04-07
	75963690-01 Issue 01, 2025-06-05	-

Annex to Marine Equipment Directive Module B Type Examination Certificate



Danmark

Test Reports - continued

IEC 62388:2013 Annex B & ITU-R M.1177-4	QINETIQ/14/00249/1.1, 2014-03-06	QinetiQ/EMEA/TS/CR0803478/2, 2008-04-01
	QinetiQ/MS/EES/TSTR0800603/1, 2008-06-19	QINETIQ/14/01532 V1.2, 2014-06-17
	QINETIQ/14/01531 V1.1, 2014-06-13	QINETIQ/14/01527 V1.3, 2014-06-17
	QINETIQ-21-03748, 2021-11-24	-
IEC 62288:2021	75924011 Report 01 Issue 1, 2014-04-11	75928362 Report 02 Issue 1, 2015-02-17
	9065-15-49778-174, 2015-11-02	DPS-16-00034 Modified 2016-07-15
	75933710 Report 01 Issue 01, 2016-07-21	F153910E1, 2015-12-10
	DPS-16-00027, Modified 2016-07-01	75924108 Report 02, 2014-02-25
	JX22AS0421A, 2022-04-25	75955145 SoT 01 Issue 2, 2022-05-31
	JX22AS0421D, 2022-04-26	75958884 Report 02, 2023-11-29
	DOC-AP-000061, 2024-08-08	75963591-01 Issue 01, 2025-04-07
	DOC206081-1, 2017-11-22	DOC209275-1, 2022-12-09
	DOC210531-1, 2024-08-13	DOC209273-1, 2022-12-09
	DOC210588-1, 2025-02-05	DOC209274-1, 2022-12-09
	DOC210529-1, 2024-08-13	DOC209419-1, 2022-12-07
	DOC206156-1, 2017-12-21	DOC209420-1, 2022-12-08
	DOC210527-1, 2024-08-14	DOC209421-1, 2022-12-07
	DOC209276-1, 2022-12-09	75963690-01 Issue 01, 2025-06-05
IEC 62923-1 (2018)	NA21ZZ0212B, 2021-02-22	RD20ZZ1211A, 2020-12-17
IEC 62923-2 (2018)	NA20AS1007B, 2020-12-08	-
IEC 61162 Series	75924011 Report 01 Issue 1, 2014-04-11	NA19AS0417B, 2019-04-24
	Declaration of conformity to IEC 62388 & IEC 61162-1/2, 2014-02-28	75937370 Report 03 Issue 2, 2017-06-05
	NA19AS0417A, 2019-04-24	75923142 Report 03 Issue 2, 2014-01-21
	WW-000001056, 2014-05-16	NA21ZZ0212C, 2021-02-22
	NA20AS1007A, 2020-10-23	-

4.4 Build Status

4.4.1 Hardware

Marine Radar Equipment/ECDIS/Conning Display Installation Manual 7ZPNA4466K	Modified	2019-11-05
Parts Lists:		
NKE1632_Parts Lists.pdf	Modified	2013-12-04
NKE2632_Parts Lists.pdf	Modified	2013-12-03
NKE2632H_Parts Lists.pdf	Modified	2013-12-03
Parts List_Display Unit.xls	Modified	2013-12-06
Parts List_Display Unit.xls	Modified	2017-07-12
NKE-2254-H_Parts.pdf	Modified	2014-05-15
CBD-2400 H-7EPRD0043_schematic+parts.pdf	Modified	2021-01-15
PartsList_NKE1696.pdf	Modified	2021-11-24
NWZ-233 Build state	Modified	2025-04-09
DOC210617-1 HD 19T27 MMD - IEC 60945 & IACS E10 Statement_R03	Dated	2024-12-20
DOC210615-1 HD 24T27 MMD - IEC 60945 & IACS E10 Statement_R03	Dated	2024-12-20
DOC210612-1 HD 27T27 MMD - IEC 60945 & IACS E10 Statement_R03	Dated	2024-12-20
DOC210004-1 HD 32T40 MVD - IEC 60945 & IACS E10 Statement_R01	Dated	2023-10-06
DOC209665-1 HD 43T40 MVD - IEC 60945 & IACS E10 Statement_R04	Dated	2024-09-23



Danmark

Annex to Marine Equipment Directive Module B Type Examination Certificate

4.5 Notes

- Note 1 NWZ-208 and NWZ-233 are flush mount Displays for console / panel mounting or can be mounted in a CWB-1595/1660 Desktop Frame for Desktop use, or a CWA-246 Display Unit Mount Kit along with the NDC-1590(A) Central Control Unit as a Stand-alone Deckmount Radar.
- Note 2 This approval remains valid for equipment including subsequent minor software amendments (Maintenance No. 01.60.020 or later) which have been formally accepted in accordance with the TÜV SÜD Testing, Certification, Validation and Verification Regulations.
- Note 3 JRC declare the hardware/software forms a Multi-Function workstation. This means the operator may switch between Radar, Chart Radar, ECDIS and Conning Display (All share identical Hardware elements) as limited and controlled by a JRC supplied licence. The approval status conferred by this certificate only applies when the operation mode is set to Radar or Chart Radar.
- Note 4 This equipment is a Multi-Function workstation and shares identical hardware with the JAN-9201 ECDIS. The installed operational software covers Radar and ECDIS functions. This allows the operator to 'Switch' between fully functional Chart Radar (IEC 62388) and ECDIS (IEC 61174) modes. The Approval status conferred by this certificate only applies to operation in the 'Chart Radar' mode. Module B Certificate BAPT-MED000062, issued on 18 December 2023 gives formal recognition to the ECDIS and ECDIS Back-up modes as the JAN-9201, conforming to IEC 61174 Ed4, including Annex F "Back-up arrangements". Ships operating plan approval by Flag Administration or Classification Society may be appropriate for Multi-Function workstation and Back-up ECDIS operation.
- Note 5 The JMR-9200 Series Radar has been separately assessed by DNV-GL against INS requirements (Integrated Navigation System : Software 02.20 [JRC factory internal maintenance software ref: 02.20.001 or later]) for use within a Track Control System (TCS).
- Note 6 The JMR-9200 meets the requirements of IEC 62923-1 for EUT function type P. An additional Alert Management System licensing option is available which is outside of the scope of this certificate.
- Note 7 The appropriate sized monitor should be used dependent upon the category of radar being installed.

5 U.S. Coast Guard Number

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

165.115/EC2443 (Category 1 and Category 1C Radar)
165.216/EC2443 (Category 1H and Category 1HC Radar)

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.

6 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:

(Andy Little)

Date:

18/08/2025

On behalf of TÜV SÜD DANMARK ApS