



UK Approved Body Authorised  
by the MCA



## Marine Equipment UK Assessment Module B Type Examination Certificate

This is to certify that TUV SUD BABT UNLIMITED did undertake the relevant type approval procedures for the type of equipment identified below, which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, under Annex 1 of the listed Amendment of MSN 1874 for the types of equipment identified.

<b>MSN 1874 Amendment</b>	<b>Amendment 7</b>
<b>Certificate Holder and Manufacturer</b>	<b>Thrane &amp; Thrane A/S Lundtoftegaardsvej 93 D 2800 Kgs. Lyngby Denmark</b>
<b>Product(s)</b>	<b>SAILOR 7222 VHF DSC Class A</b>
<b>Product Sector</b>	<b>Radiocommunications Equipment</b>
<b>Product Type</b>	<b>UK/5.1 VHF radio capable of transmitting and receiving DSC and radiotelephony UK/5.2 VHF DSC watch-keeping receiver</b>

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

Valid from: 08 August 2023

(Signature) *M Hardy*

Expiry Date: 07 August 2028

This certificate has been issued in accordance with the TÜV SÜD Testing and Certification 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](mailto:BABT@tuvsud.com)



# Annex to Marine Equipment UK Conformity Assessment Module B Type Examination Certificate

## 1 Equipment Description

VHF Class A radio capable of transmitting and receiving DSC and radiotelephony

### 1.1 Models

Model
SAILOR 7222

#### 1.1.1 System Components

Model	Description
TT-7224A	SAILOR 7224 VHF DSC Control Unit
TT-7226A	SAILOR 7226 VHF Transceiver Unit

#### 1.1.2 Optional Components

Model	Description
TT-6201A	SAILOR 6201 Handset
TT-6204A	SAILOR 6204 Control Speaker Microphone
TT-6207A	SAILOR 6207 Accessory Connection box
TT-6208A	SAILOR 6208 Control Unit Connection box
TT-6209A	SAILOR 6209 Connection box
TT-6103A	SAILOR 6103 Multi Alarm Panel

### 1.2 Software <sup>Note 1</sup>

Identity	Description
1.10	Radio Firmware

## 2 Assessed Requirements

### 2.1 MSN 1874 Amendment 7 Annex 1

### 2.2 Compliance Requirements for UK/5.1 and UK/5.2 <sup>Note 2</sup>

IMO Resolutions	International Testing Standards	
IMO Res. A.385(X) IMO Res. A.524(13) IMO Res. A.803(19) IMO COMSAR/Circ.32 ITU-R M.489-2 (10/95) ITU-R M.493-15 (01/19) ITU-R M.541-10 (10/15) IMO MSC/Circ.862	IEC 61097-3:2017	Global maritime distress and safety system (GMDSS) - Part 3: Digital selective calling (DSC) equipment - Operational and performance requirements, methods of testing and required test results
	IEC 61097-7:1996 with A1:2018	Global maritime distress and safety system (GMDSS) - Part 7: Shipborne VHF radiotelephone transmitter and receiver - Operational and performance requirements, methods of testing and required test results
	IEC 61097-8:1998	Global maritime distress and safety system (GMDSS) - Part 8: Shipborne watchkeeping receivers for the reception of digital selective calling (DSC) in the maritime MF, MF/HF and VHF bands - Operational and performance requirements, methods of testing and required test results
	IMO MSC/Circ.862	Clarifications of certain requirements in IMO performance standards for GMDSS equipment

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IMO Resolutions	International Testing Standards	
IMO Res. A.694(17)	IEC 60945:2002 incl. Corr. 1:2008	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results
IMO Res. 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
-	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: Multiple talkers and multiple listeners - Ethernet interconnection

## 3 Technical Documentation

### 3.1 Declaration of Conformity

99-182796-A Declaration of Conformity SAILOR 7222 VHF DSC Modified 2023-01-24

### 3.2 User Guide

S7222\_UM\_98-171832-C Dated 2022-11-21  
S7222\_VHF\_IM\_98-171833-C Dated 2022-11-22

### 3.3 Test Reports

#### 3.3.1 IEC 60945:2002 incl. Corr. 1:2008

E21110.00 Dated 2021-09-16  
REP010633B Dated 2023-05-08  
99-183988-A Dated 2021-10-15

#### 3.3.2 IEC 61162-1 2016

99-179428-A Dated 2021-12-19  
99-179411-A Dated 2021-12-19  
99-179851\_A Dated 2021-12-13  
E21110.00 Dated 2021-09-16  
433520-02 Dated 2021-12-22  
99-184397-A Dated 2023-06-20

#### 3.3.3 IEC 61097-7: 1996 with A1: 2018

99-179428-A Dated 2021-12-19  
99-177558-A Dated 2021-12-09  
99-183988-A Dated 2021-10-15  
99-177557-A Dated 2021-12-09  
433520-01 Dated 2021-12-22

#### 3.3.4 IEC 61162-450:2018

75956772 Report 01 Issue 01 Dated 2023-01-10

#### 3.3.5 IEC 62923-1:2018 and IEC 62923-2:2018

433520-03 Dated 2022-12-22  
75956772 Report 02 issue 01 Dated 2023-01-10  
99-179411-A Dated 2021-12-19

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## 3.3.6 IEC 61097-8:1998

99-177558-A	Dated	2021-12-09
E21110.00	Dated	2021-09-16
99-177557-A	Dated	2021-12-09
433520-01	Dated	2021-12-22
99-183988-A	Dated	2021-10-15

## 3.3.7 IEC 61097-3: 2017

99-177558-A	Dated	2021-12-09
99-179428-A	Dated	2021-12-19
99-177557-A	Dated	2021-12-09
433520-01	Dated	2021-12-22
E21110.00	Dated	2021-09-16
99-179411-A	Dated	2021-12-19

## 3.4 Build Status

### 3.4.1 Hardware

93-166437-E CU Interface Board	Dated	2023-03-02
93-166436-b01 PSU diagram	Modified	2020-07-06
93-166438-c01 PSU_CU	Modified	2021-04-12
93-166440-C CU Control Board	Modified	2023-03-02
93-166435-D03 TU Modem Board	Dated	2022-06-14
60-166437 CU Interface Board - SAILOR 7224 Control Unit BOM Rev B10	Modified	2023-04-26
60-166438_CU PSU Module - SAILOR 7224 Control Unit_BOM_Rev A_04	Modified	2023-04-26
60-166436 TU PSU Module - SAILOR 7226 VHF Transceiver BOM Rev A04	Modified	2023-04-26
60-166435 TU Modem Board - SAILOR 7226 VHF Transceiver BOM Rev D04	Modified	2023-04-26
59-166440 CU Control Board - SAILOR 7224 Control Unit BOM Rev A04	Modified	2023-04-26

## 3.5 Notes

Note 1 This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing and Certification Regulations.

Note 2 The SAILOR 7222 meets the requirements of IEC 62923-1 for EUT function type P.

## 4 Conditions of Validity

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with TÜV SÜD BABT or a person appointed by TÜV SÜD BABT to perform that role.

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.

Signature:

  
(M J Hardy)

Date:

08/08/2023

On behalf of TÜV SÜD BABT UNLIMITED