CERTIFICAT ◆ CERTIFICADO ◆ СЕРТИФИКАТ ◆ 認證證書 ◆ CERTIFICATE ◆ ZERTIFIKAT

Maritime & Coastguard Agency

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.

MSN 1874 Amendment	**Amendment 9**
Certificate Holder and Manufacturer	**SAAB AB** **Låsbblecksgatan 3** **589 14** **Sweden**
Product(s)	**R6 Navigation System**
Product Sector	**Navigation equipment**
Product Type	**UK/4.63 GNSS Equipment (GPS)**

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

Valid from: 16 October 2024 (M J Hardy) Expiry Date: 07 October 2029

TÜV SÜD BABT is a UKAS accredited Certification Body No. 0172.
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

0168

TUV SUD BABT UNLIMITED • Octagon House • Concorde Way • Fareham • Hampshire • PO15 5RL • United Kingdom

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

1 Equipment Description

GPS Receiver

1.1 Models

Model
R6 NAV GNSS System
R6 NAV DGNSS System
R6 NAV DGNSS PRO System
R6 NAV DGNSS PRO RTK System

1.1.1 Display

Model	Description
7000 123-500 (7000 123-100 + SW 1.1.x/1.2.x)	R6 CDU

1.1.2 Receiver Options

Model	Description
7000 118-910 (7000 118-702 + SW 1.4.x/1.5.x)	R5 GNSS Sensor MkIII
7000 118-911 (7000 118-703 + SW 1.4.x/1.5.x)	R5 DGNSS Sensor MkIII
7000 118-912 (7000 118-703 + SW 1.4.x/1.5.x)	R5 DGNSS PRO Sensor MkIII
7000 118-913 (7000 118-703 + SW 1.4.x/1.5.x)	R5 DGNSS PRO RTK Sensor MkIII

1.1.3 Antenna Options

Model	Description
7000 000-555 / 7000 000-780	DGNSS Antenna
7000 000-554	GNSS Antenna

1.2 Software [Note 1]

Identity	Description
R6 CDU	1.1.x & 1.2.x
R5 GNSS Sensor MkIII	1.4.x & 1.5.x
Baseline Operating System	Linux 6.1.30

2 Assessed Requirements

2.1 MSN 1874 Amendment 9 Annex 1

2.2 Compliance Requirements for UK/4.63 Row 2 of 2 [Notes 2 & 3]

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.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.302(87) MO Res MSC.112(73)

Assessed Testing Standards	
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 corr.1 (2008)	IEC 61162-1 Ed. 5.0 (2016)
IEC 61162-2 Ed. 1.0 (1998)	IEC 61162-450 Ed. 2.0 (2018)
IEC 62288 Ed. 3.0 (2021)	IEC 62923-1 Ed. 1.0 (2018)
IEC 62923-2 Ed. 1.0 (2018)	IEC 61108-1 Ed. 2.0 (2003)

3 Technical Documentation

3.1 Declaration of Conformity

7000 125-321 Version P1A1	Modified	2023-09-22

3.2 User Guide

7000 125-304, A1, R6 Navigation System Manual	Modified	2024-10-01

3.3 Test Reports

3.3.1 IEC 60945:2002 incl. IEC 60945 corr.1:2008

F161552E1	Dated	2016-10-24
F211774E2	Dated	2022-04-05
U161552E1	Dated	2016-09-16
U211774E1	Dated	2022-03-28
Certificate No 959	Dated	2016-12-08
Certificate No 1113	Dated	2022-03-28
7000 125-008	Dated	2024-07-01
7000 121-201	Dated	2022-07-13
h10e18a264-IEC945 R1	Dated	2019-02-21
h14e17a177 Release 2	Dated	2018-06-07
H10p5052 Release 1	Dated	2013-06-27

3.3.2 IEC 62288 Ed.3.0:2021

BSH/454.GNSS/011/00002/00004	Dated	2023-03-15
BSH/454.AIS-A/Saab R6 Supreme/1_d	Dated	2022-06-30

3.3.3 IEC 61162-450:2018

BSH/4542/001/4143261/18	Dated	2019-01-18

3.3.4 IEC 61108-1 Ed.2.0:2003

BSH/454.GNSS/001/000003	Dated	2023-03-30
BSH/4542/001/4143072/16	Dated	2017-04-04

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

PT-019-0113	Dated	2019-06-19
PT-022-0265	Dated	2023-05-08
PT-022-0361	Dated	2023-05-08

3.3.6 IEC 61162-1:2016 & IEC 61162-2 Ed. 1.0:1998-09

BSH/4542/001/4143072/16	Dated	2017-04-04

3.4 Build Status

3.4.1 Hardware

7000 118-715 Issue E1	Modified	2021-04-20
7000 118-713 Issue E1	Modified	2024-08-21

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, Certification, Validation and Verification Regulations.

The first two digits in the Software Version indicate Major revisions (1.0, 1.1, etc.), whereas "x" represents Minor revisions which will have no impact on product compliance.

There is no difference in product functionality between the listed software versions, differences relate to product configuration only.

Note 2 The R6 Navigation System meets the requirements of IEC 62923-1 for EUT function type P.

Note 3 The R6 Navigation System has been assessed against IEC 61108-1 standard. The receiver also has the capability to receive other constellations in addition to GPS. These additional constellations have not been assessed but the reception will enhance the accuracy to greater than the IEC 61108-1 standard requirement.

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 TUV SUD BABT or a person appointed by TUV SUD 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 Hardy Date: 16/10/2024

(Michelle Hardy)

On behalf of TUV SUD BABT UNLIMITED