



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 10
Certificate Holder and Manufacturer	Jotron AS Ringdalskogen 8 3270 Larvik Norway
Product(s)	Tron AIS TR-8000 MkII
Product Sector	Navigation equipment
Product Type	UK/4.32 Universal automatic identification system equipment (AIS)

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

Valid from: 22 September 2025 (M J Hardy)

M Hardy

Expiry Date: 04 December 2027

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



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

1 Equipment Description

Universal automatic identification system equipment (AIS)

1.1 Models

Model
103650 Tron AIS TR-8000 MkII Transponder Unit ^{Note 1}
103660 Tron AIS TR-8000 MkII Class A complete with GPS antenna
103670 Tron AIS TR-8000 MkII complete IMO package

1.1.1 System Components

Model	Description
103708	TR-8000 Transponder Unit
85400	TR-8000 Display Unit
86853	GPS Antenna, std
86581	Power cable, Display unit

2 Assessed Requirements

2.1 MSN 1874 Amendment 10 Annex 1

2.2 Compliance Requirements for UK/4.32 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.74(69) IMO Res MSC.191(79) MO Res MSC.302(87) ITU-RM 1371-5 (02-2014) Note: ITU-RM 1371-5 (02-2014) shall only be applicable in accordance with requirements of IMO Res MSC.74(69)
Assessed Testing Standards	
IEC 60945:2002 incl. 60945 corr.1:2008	IEC 61162-1:2016
IEC 61162-2 Ed.1.0:1998- 09	IEC 61993-2:2018
IEC 62288 Ed 3.0:2021	IEC 62923-1:2018
IEC 62923-2:2018	-

3 Technical Documentation

3.1 Declaration of Conformity

10.09.2025_v.44 Tron AIS TR8000MkII DoC

Modified

2025-09-10

3.2 User Guide

103836 Rev.A TR8000 MkII - Quick Reference Guide
103839 Rev.B TR8000 MkII - Operation and Installation Manual
103840 Rev.6 TR8000 Technical Manual

Dated
Dated
Dated

2021-08-26
2025-09-10
2020-12-17

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3.3 Test Reports

3.3.1 IEC 60945:2002 inc. Corr.1:2008

161140/2	Dated	2011-12-28
BSH/46121/4321890/12-6	Dated	2012-04-18
BSH/46121/4321890/12-4	Dated	2012-04-20

3.3.2 IEC 61993-2:2018

BSH/454.AIS-A/Jotron Tron TR-8000/4	Dated	2021-06-18
BSH/46121/4321890/12-1	Dated	2012-04-19
BSH/4543/001/4322981/15-1	Dated	2015-12-02
BSH/46121/4321890/12-4	Dated	2012-04-20
150521	Dated	2012-04-18
BSH/454.AIS-A/Jotron Tron TR-8000/5	Dated	2022-11-18

3.3.3 IEC 62288 Ed. 2.0:2014-07

BSH/46121/4321890/12-3	Dated	2019-04-12
BSH/4543/001/4322981/15-3	Dated	2015-12-02
BSH/454.AIS-A/Jotron Tron TR-8000/5	Dated	2022-11-18
Delta-IEC-62288-ED2-ED3	Modified	2025-09-10

3.3.4 IEC62923-1:2018 and IEC62923-2:2018

BSH/454.AIS-A/Jotron Tron TR-8000/4	Dated	2021-06-18
Statement BAM - TR-8000MkII	Dated	2022-11-21

3.3.5 IEC 61162-1:2016 and IEC 61162-2 Ed.1.0:1998-09

BSH/4543/001/4322725/14-1	Dated	2014-07-09
BSH/46121/4321890/12-1	Dated	2012-04-19
BSH/4543/001/4142941/15	Dated	2015-12-07
BSH/454.AIS-A/Jotron Tron TR-8000/5	Dated	2022-11-18

3.4 Build Status

3.4.1 Hardware

Schematics_TR8000 MkII Controller Drawing 85301	Dated	2009-10-16
BOM TR8000 MkII rev 2036	Dated	2021-06-14
EngineeringPartRevision85400TR8000DisplayUnit 221018-125151	Dated	2022-10-18

3.4.2 Software

Software display	01.02
Software transponder	01.02

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

3.5 Notes

- Note 1 An additional minimum keyboard and display (MKD) is required to meet the requirements of MSN 1874 Amendment 10 item UK/4.32.
- Note 2 Ethernet port is only for connection between TR8000 transceiver and TR8000 display(s).
- Note 3 The products listed meet the requirements of IEC 62923-1 for EUT function type P.
- 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.

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
(M J Hardy)

Date:

22/09/2025

On behalf of TUV SUD BABT UNLIMITED