SAL NAVIGATION

Class
External

Manufacturer´s Declaration of Conformity

SAL T200
Water / Bottom track speed log

We, the undersigned manufacturer

SAL Navigation AB
Västberga Alle 36B, SE-126 30 Hägersten, SWEDEN

Certify and declare that the equipment listed below has been designed; type approved and is manufactured according to the requirements of Marine Equipment Directive (MED) 2014/90/EU and Implementing Regulation (EU) 2024/1975.

Type of equipment:	Item 4.7 Speed and distance measuring equipment (SDME)
Manufacturer:	SAL Navigation AB
Name:	SAL T200

The equipment has been tested and verified to be in conformance with the following regulations and standards:

IMO Resolution A.694(17)	IEC 61023 Ed. 3.0 (2007-06)
IMO Resolution A.824(19) as amended by IMO Resolution MSC.96(72) and IMO Resolution MSC.334(90)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
	IEC 61162-1 Ed. 5.0 (2016-08)
	IEC 62288 Ed. 3.0 (2021-12)
IMO Resolution MSC.191(79)	IEC 62923-1 Ed. 1.0 (2018-08) *
IMO Resolution MSC.302(87) *	IEC 62923-2 Ed. 1.0 (2018-08) *

*) The equipment is not capable of issuing alerts.

EC type-examination (module B) certificate Notified body	No: PTL-MED-B-23-111244 - 23123127 Phoenix Testlab in Germany (0700)
Quality system (module D) certificate Notified body	No: MEDD00001Y1 DNV AS in Norway (0575)
Marking	

The technical documentation for this equipment is retained at the following address:
SAL Navigation AB, Västberga Alle 36B, SE-126 30 Hägersten, SWEDEN

Date: 25 November 2024
Signature:

Anders Fagergren
Chief Technology Officer

Intentionally blank

EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

Marine Equipment Directive (MED) 2014/90/EU

PHOENIX TESTLAB

Notified Body Number 0700

Recognised by BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE **0800S11/4822/007**

This is to certify that:
PHOENIX TESTLAB 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 Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

Certificate No.	PTL-MED-B-23-111244 - 23123127
Manufacturer	SAL Navigation AB
Address	Västberga Allé 36 B 126 30 Hägersten Sweden
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2022/1157 MED/4.7 Speed and distance measuring equipment (SDME)
Product Name / Trade Name	SAL T2+ / SAL T2+, SAL T200

Specified Standards

IMO Resolution A.694(17)	IEC 61023 Ed. 3.0 (2007-06)
IMO Resolution A.824(19) as amended by	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IMO Resolution MSC.96(72) and	IEC 61162-1 Ed. 5.0 (2016-08)
IMO Resolution MSC.334(90)	IEC 62288 Ed. 3.0 (2021-12)
IMO Resolution MSC.191(79)	IEC 62923-1 Ed. 1.0 (2018-08) *
IMO Resolution MSC.302(87) *	IEC 62923-2 Ed. 1.0 (2018-08) *

*) The equipment is not capable of issuing alerts.

Date of issue:	**2023-08-09**	Expiry date:	**2028-08-08**
USCG Approval Category:	**165.105**		

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

The attached Schedule of Approval forms part of this certificate. This certificate consists of 5 pages.

Seal

Klaus Knörig
09.08.2023

Signed by Klaus Knörig
Notified Body

Phone +49(0)5235-9500-24
Fax +49(0)5235-9500-28
notifiedbody@phoenix-testlab.de

PHOENIX TESTLAB GmbH
Königswinkel 10
D-32825 Blomberg, Germany
www.phoenix-testlab.de

Schedule of Approval

Components necessary for operation

Component	Consilium Description	Consilium P/N	SAL Description	SAL P/N	Software Version *)
Main Unit	SAL T2+ ELC	702200-10	SAL T200 ELC	80.11.02	Axx (STW) Dxx (SOG)
Transducer **)	SAL T TRU 2-2 30M SAL T TRU 2-2 40M SAL T TRU 2-2 50M	704400 704401 704404	SAL T TRU 2-2 30M SAL T TRU 2-2 40M SAL T TRU 2-2 50M	704400 704401 704404	N/A
Master Display ***)	SAL SD4-2	704042	SAL SD4-2	80.12.02	Cxx
Display ****)	SAL SD4-2 or SAL SD4-3 or SAL SD4-4	704042 704043 704044	SAL SD4-2 or SAL SD4-3 or SAL SD4-4	80.12.02 80.12.03 80.12.04	Cxx Cxx Cxx

*) Capital letters in the Software Version indicate Major revisions (A, B, C, etc.), whereas "xx" represent Minor revision numbers (01, 02, 03, etc.) with no impact on type approved functionality. ("N/A" means there is no software in the component.)
**) In a speed log system, only one (1) of the transducers shall be used.
***) Speed Log Master Display is a mandatory component of the STW device
****) Second Display is a necessary component only for the SOG device.

Optional Components

Component	Consilium Description	Consilium P/N	SAL Description	SAL P/N	Software Version *
Processing Unit	SAL LPU2	704500	SAL LPU2	80.11.03	Bxx
NMEA Buffer	1N4B	704160	1N4B	704160	N/A
Displays	SAL SD4-2 SAL SD4-3 SAL SD4-4 SAL SD4-5 SIA-3-8	704042 704043 704044 704045 701692	SAL SD4-2 SAL SD4-3 SAL SD4-4 SAL SD4-5 SIA-3-8	80.12.02 80.12.03 80.12.04 80.12.05 701692	Cxx Cxx Cxx Axx N/A
Mounting Box	SD4 BMB	704080	SD4 BMB	704080	N/A

*) Capital letters in the Software Version indicate Major revisions (A, B, C, etc.), whereas "xx" represent Minor revision numbers (01, 02, 03, etc.) with no impact on type approved functionality. ("N/A" means there is no software in the component.)

Approval documentation

User Guide/ Installation Manual	Consilium document P/N 702270, SAL T2+ Manual
	SAL document P/N 80.16.02, SAL T200 Manual
Manuals	701695, SIA-3-8 Technical Manual
Statements	Statement on SD4-, LPU2-, T2r and WTU-Assy software, Document Id. TP19010B01, 2019-02-26 Statement on MED Implementing Regulation 2018-773, Document Id. TP19047A01, 2019-02-25 Summary of adaptions made to SD4 to comply with 62288 ed 2.0, Document Id. TP15047A01, 2015-02-19

Phone +49(0)5235-9500-24
Fax +49(0)5235-9500-28
notifiedbody@phoenix-testlab.de

PHOENIX TESTLAB GmbH
Königswinkel 10
D-32825 Blomberg, Germany
www.phoenix-testlab.de

Statements	Summary of adaptions made to SD4 to comply with 62288 ed 2.0, Document Id. TP15047A01, 2015-02-19 SAL T2+ / SAL T200 components and part numbers, Document Id. TP20150D, 2023-08-09 S-16571 Risk Assessment LPU2 SW B7, Document Id. TP20181, 2020-12-22 T2RV2 overview of changes from T2R, Document Id. TP23090A01, 2023-07-07 Risk and Consequence Analysis T2RV2 PCB, Document Id. TP23064A02, 2023-06-30

Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 11.2, Compass Safe Distance	BSH	Certificate No. 445, 2005-07-04, AA05074
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	Intertek	1122354-1 Ed. 2, 2012-04-27, AA12025
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.7, 8.2 – 8.4, 12.1, Environmental	Intertek	1209547-2, 2012-03-30, AA12028
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.7, Environmental	Innventia	273 152 A, rev. 1, 2012-01-17, AA12031
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.2, 8.4, Environmental	Intertek	1209547-3, 2012-04-02, AA12030
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, EMC	Jan Linders AB	TP16064 Ver. A01, 2016-04-01
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, EMC	Jan Linders AB	TP16065, 2016-03-23
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.2 – 8.4, Environmental	Intertek	913128, 2009-10-30, (1N4B) AA10053
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	SP Technical Research	F917800-A, 2009-12-14, (1N4B) AA10054
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, EMC	Prevas AB	ASL2378m01-01, 2023-06-22, TP23084A1
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Sections 4.3.1, 4.3.2, 4.3.3	Intertek	1811910STO-001, 2018-09-18, AA18093
IEC 61023 Ed. 2.0 (1999-07) IMO Res. MSC.96(72)	BSH	4612/4070407/06, 2006-11-28, AA06081
IEC 61023 Ed. 3.0 (2007-06) IEC 61162-1 Ed. 4.0 (2010-11)	BSH	4612/4071896/11, 2011-02-16, AA11054

Specification	Laboratory	Test Report Number / Version
IEC 61023 Ed. 3.0 (2007-06) IMO Res. MSC.334(90)	BSH	46122/4072359/13, 2013-04-23, AA13036
IEC 61023 Ed. 3.0 (2007-06)	BSH	4612/4061984/11, 2011-09-30, AA13034
IEC 61023 Ed. 3.0 (2007-06)	BSH	4612/4071593/10-1, 2010-03-17, AA18063
IEC 61023 Ed. 3.0 (2007-06)	SAL Navigation	TP23079A01, 2023-06-26
IEC 61162-1 Ed. 2.0 (2000-07)	Consilium	TP02111A0, 2002-04-24
IEC 61162-1 Ed. 3.0 (2007-04)	BSH	46162/0041158/09, 2010-03-22, (1N4B) AA10049
IEC 61162-1 Ed. 4.0 (2010-11)	BSH	4612/4071842/11, 2011-01-12, AA19077
IEC 61162-1 Ed. 5.0 (2016-08)	Consilium	TP19060, 2019-03-21
IEC 62288 Ed. 1.0 (2008-07)	BSH	4612/4071593/10, 2010-03-17, AA17030
IEC 62288 Ed. 1.0 (2008-07)	Consilium	TP09093B, 2009-10-28
IEC 62288 Ed. 2.0 (2014-07)	Consilium	TP15047A01, 2015-02-20
IEC 62288 Ed. 3.0 (2021-12)	SAL Navigation	TP23093A01, 2023-08-08

Application/Limitation

The equipment complies with the requirements for measuring speed through the water and speed over ground and can be operated as two independent devices for measuring speed through the water and speed over the ground.

The SAL T2+ and SAL T200 products comply as secondary source with the applicable Marine echo-sounding equipment requirements for Range Performance, Pulse Repetition Rate, Roll and Pitch, and Accuracy in accordance with

- IMO Resolution A.224 (VII) as amended by IMO Resolution MSC.74(69) Annex 4 and
- ISO 9875 Ed.3.0, 2000 incl. Corr. 1, 2006

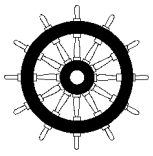
When using this function, the products may only be used in conjunction with type approved echo-sounding equipment. Data is transmitted according to IEC 61162-1 depth sentence ($VDDPT). This certificate does not cover full approval of the equipment as an echo-sounding equipment (MED/4.6).

The equipment is not capable of issuing alerts.

Notes

1. This certificate will not 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 PHOENIX TESTLAB.

2. Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

3.  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 ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

U.S. Coast Guard Approval
This equipment is covered by the scope of the “Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment” signed February 27th, 2004 and amended by Decision No.1/2008 dated February 18th, 2019 according to U.S. Coast Guard approval category 165.105.

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) as allowed by the MRA.

PHOENIX TESTLAB GmbH
Königswinkel 10
D-32825 Blomberg, Germany
www.phoenix-testlab.de

Phone +49(0)5235-9500-24
Fax +49(0)5235-9500-28
notifiedbody@phoenix-testlab.de

QS - CERTIFICATE OF ASSESSMENT - EC (MODULE D)

Certificate no.:
MEDD00001Y1
Revision No:
11

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as “Forskrift om Skipsutstyr” by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the Quality System for the products

with type designation(s) as specified in the Appendix to this Certificate

issued to

SAL Navigation AB
Hägersten, **Sweden**

is found to comply with the applicable requirements.
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2024/1975.

This Certificate is valid until **2029-11-20**.

Issued at **Høvik** on **2024-11-21**

DNV local unit:
Finland CMC

Approval Engineer:
Steinar Kristensen

Notified Body No.:
0575

for **DNV AS**

Digitally signed by Elter, Frederik Tore
Location: DNV Høvik, Norway

Mydlak-Röder, Christine
Head of Notified Body

The manufacturer is allowed to affix the U.S. Coast Guard approval number(s) as stated in the appendix attached hereto and as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

0575/yyyy

0575: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed

NORWEGIAN ACCREDITATION PROD 019

The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate authorizes the manufacturer in conjunction with the valid EC Type Examination (Module B) Certificate(s) of the equipment listed before to affix the Mark of Conformity (wheelmark) to the product described herein.
This certificate loses its validity if the manufacturer makes any changes to the approved quality system which have not been notified to and agreed with the notified body named on this certificate. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
The Manufacturer has to apply for periodical audits to verify the maintenance and application of the quality system every 12 months.

APPENDIX

Item no. MED/4.29 Voyage data recorder (VDR)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
SAL SVF-200[1]	PTL-MED-B-23-111388 - 23-123467	2028-10-17	0700	165.150/EC0700 /PTL-MED-B-23-111388 - 23-123467 /EC0575
Consilium VDR F2[1]	PTL-MED-B-22-111810 - 22-123932	2027-12-14	0700	165.150/EC0700 /PTL-MED-B-22-111810 - 22-123932 /EC0575

Item no. MED/4.47 Simplified voyage data recorder (S-VDR)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
SAL SVS-200[1]	PTL-MED-B-23-111395 - 23-123477	2028-10-17	0700	165.151/EC0700 /PTL-MED-B-23-111395 - 23-123477 /EC0575
Consilium S-VDR S2[1]	PTL-MED-B-22-111811 - 22-123933	2027-12-14	0700	165.151/EC0700 /PTL-MED-B-22-111811 - 22-123933 /EC0575

Item no. MED/4.6 Echo-sounding equipment

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
SAL E200, E2d[1]	PTL-MED-B-24-111260 - 24-122772	2029-09-15	0700	165.107/EC0700 /PTL-MED-B-24-111260 -24-122772 /EC0575
SAL T3[1]	PTL-MED-B-23-111243 - 23-123126	2028-09-28	0700	165.107/EC0700 /PTL-MED-B-23-111243 - 23-123126 /EC0575

Item no. MED/4.7 Speed and distance measuring equipment (SDME)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
SAL R200, R1d[1]	PTL-MED-B -24-111261-24-122773	2029-09-15	0700	165.105/EC0700 /PTL-MED-B -24-111261-24-122773 /EC0575
JLN-900[1]	PTL-MED-B-23-111867 - 23-124640	2028-11-17	0700	165.105/EC0700 /PTL-MED-B-23-111867 - 23-124640 /EC0575
SAL T3[1]	PTL-MED-B-23-111243 - 23-123135	2028-09-28	0700	165.105/EC0700 /PTL-MED-B-23-111243 - 23-123135 /EC0575
SAL T2+, SAL T200[1]	PTL-MED-B-23-111244 - 23123127	2028-08-08	0700	165.105/EC0700 /PTL-MED-B-23-111244 - 23123127 /EC0575
SIMRAD R1 Easy Tank[1]	PTL-MED-B-21-111358	2026-09-30 a)	0700	165.105/EC0700 /PTL-MED-B-21-111358 /EC0575
SAL R1a[1]	PTL-MED-B-21-110911	2026-08-05 a)	0700	165.105/EC0700 /PTL-MED-B-21-110911 /EC0575
SAL R1a, SAL R100[1]	PTL-MED-B-21-110103	2026-01-19 a)	0700	165.105/EC0700 /PTL-MED-B-21-110103 /EC0575

Places of production

1.SAL Navigation AB, Västberga allé 36 B, Hägersten, Sweden

a) According to Commision Implementing Regulatoin (EU) 2024/1975, the last date for placing on board a vessel for this product is 2025-07-01