



Manufacturer's Declaration of Conformity

SAL E200 Echo-sounding equipment

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 4.6 Echo sounding equipment
Manufacturer:	SAL Navigation AB
Name:	SAL E200

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

IMO Res. A.224(VII)	ISO 9875 (2023)
IMO Res. A.694(17)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IMO Res. MSC.36(63)	IEC 61162-1 Ed. 5.0 (2016-08)
IMO Res. MSC.97(73)	IEC 61162-2 Ed. 1.0 (1998-09)
IMO Res. MSC.74(69) Annex 4	IEC 61162-450 (2018-05)
IMO Resolution MSC.191(79)	IEC 62288 Ed. 3.0 (2021)
IMO Resolution MSC.302(87)	IEC 62923-1 Ed. 1.0 (2018-08)
	IEC 62923-2 Ed. 1.0 (2018-08)

EC type-examination (module B) certificate Notified body	No: PTL-MED-B-24-111260 - 24-122772 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

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EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

Marine Equipment Directive (MED) 2014/90/EU

PHOENIX TESTLAB
Notified Body Number **0700**

Recognised by



0800S11/4822/007

BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

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-24-111260 - 24-122772
Manufacturer	SAL Navigation AB
Address	Västberga Allé 36 B 126 30 Hägersten Sweden
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2024/1975 MED/4.6 (Row 3 of 3): Echo-sounding equipment
Product Name / Trade Name	SAL E200 / SAL E200, E2d

Regulations SOLAS 74, as amended

Regulations V/18, V/19, X/3, IMO Res. A.224(VII), A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.74(69) Annex 4, IMO Res. MSC.302(87)

Testing Standards

ISO 9875 (2023)	IEC 61162-450 Ed. 2.0 (2018-05)
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	IEC 62288 Ed. 3.0 (2021)
IEC 61162-1 Ed. 5.0 (2016-08)	IEC 62923-1 Ed. 1.0 (2018-08)
IEC 61162-2 Ed. 1.0 (1998-09)	IEC 62923-2 Ed. 1.0 (2018-08)

Date of issue: **2024-09-16** Expiry date: **2029-09-15**
USCG Approval Category: **165.107**

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 3 pages.



Signed by Klaus Knörig
Notified Body

Schedule of Approval

System Components

Component	SAL E200 Branded for SAL Navigation		E2d Branded for Consilium		Software Version***
	Description	P/N	Description	P/N	
Main Unit	SAL TIC	80.11.04	TIC	5400200	Axx
Transducer**	TRU EW1 SV 200kHz*	2492330	TRU EW1 SV 200kHz*	2492330	Bxx
	TRU ES1 SV 200kHz	2492335	TRU ES1 SV 200kHz	2492335	
	TRU EW1 ET 200kHz Lower Part*	2492342	TRU EW1 ET 200kHz Lower Part*	2492342	
	TRU EW1 ET 200kHz Upper Part*	2492346	TRU EW1 ET 200kHz Upper Part*	2492346	
	TRU EW1 ET 200kHz Upper Part WTC*	2492341	TRU EW1 ET 200kHz Upper Part WTC*	2492341	
	TRU ES1 ET 200kHz Lower Part	2492352	TRU ES1 ET 200kHz Lower Part	2492352	
	TRU ES1 ET 200kHz Upper Part	2492356	TRU ES1 ET 200kHz Upper Part	2492356	
	TRU ES1 ET 200kHz Upper Part WTC	2492351	TRU ES1 ET 200kHz Upper Part WTC	2492351	
	TRU EW1 SV 50kHz*	2492310	TRU EW1 SV 50kHz*	2492310	
	TRU ES1 SV 50kHz	2492315	TRU ES1 SV 50kHz	2492315	
	TRU EW1 ET 50kHz Lower Part*	2492322	TRU EW1 ET 50kHz Lower Part*	2492322	
	TRU EW1 ET 50kHz Upper Part*	2492326	TRU EW1 ET 50kHz Upper Part*	2492326	
	TRU EW1 ET 50kHz Upper Part WTC*	2492321	TRU EW1 ET 50kHz Upper Part WTC*	2492321	
	TRU ES1 ET 50kHz Lower Part	2492362	TRU ES1 ET 50kHz Lower Part	2492362	
	TRU ES1 ET 50kHz Upper Part	2492366	TRU ES1 ET 50kHz Upper Part	2492366	
	TRU ES1 ET 50kHz Upper Part WTC	2492361	TRU ES1 ET 50kHz Upper Part WTC	2422361	
Display	ESD4	80.12.07	ESD4	5494300	Bxx

*) Combined transducer shared with SDME system. SDME and Echosounder functions have separate signal cables and transducer elements that work independently.

**) Only one transducer is necessary for operation.

***) 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

Manuals	802600A04, SAL E200 User Manual 802601A02, SAL E200 Installation Manual
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Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
ISO 9875:2000 incl. ISO Technical Corr. 1:2006,	BSH	Assessment Report 4532/006/1, 2021-06-23
ISO 9875:2000 incl. ISO Technical Corr. 1:2006,	SAL Navigation	TP21067A02, 2021-04-21
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 11.2, Compass Safe Distance	BSH	Certificate No. 1090, 2021-06-03
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.7	Intertek	2025111JAR-201, 2021-02-02
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.9	Intertek	2025111STO-202, 2021-08-27
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.2, 8.3, 8.4, 12.1	Intertek	2025111STO-201, 2021-02-09
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10	Intertek	2020363STO-101, 2020-12-18
IEC 61162-1 Ed. 5.0 (2016-08)	BSH	BSH/454.ESE/Consilium R1Ed/4, 2022-01-20
IEC 61162-2 Ed. 1.0 (1998-09)	BSH	BSH/454.ESE/Consilium R1Ed/1, 2021-10-12
IEC 61162-450 Ed. 2.0 (2018-05)	BSH	BSH/454.ESE/Consilium R1Ed/1, 2021-10-12
IEC 62288 Ed. 2.0 (2014-07)	PHOENIX TESTLAB	F201933E1, 2020-02-05
IEC 62288 Ed. 2.0 (2014-07), Sections 4, 7	BSH	454.ESE/Consilium R1ED/2_c, 2021-07-20
IEC 60945 Ed. 4.0 (2002), Section 6.1, 6.2	BSH	BSH/454.ESE/Consilium R1Ed/3.b, 2021-10-08
IEC 62923-1 ed. 1.0: 2018	BSH	BSH/454.ESE/Consilium R1Ed/3.b, 2021-10-08
IEC 62923-2 ed. 1.0: 2018	BSH	BSH/454.ESE/Consilium R1Ed/3.b, 2021-10-08
IEC 62923-1 ed. 1.0: 2018	SAL Navigation	TP22046A01, 2022-03-25
IEC 62923-1 ed. 1.0: 2018	SAL Navigation	TP22047A01, 2022-03-25
ISO 9875:2023	BSH	Assessment Report 4532/006/3, 2024-03-24
ISO 9875:2023	SAL Navigation	TP23160A03, 2024-03-12
IEC 62288 Ed. 3.0 (2021)	SAL Navigation	TP23093A01, 2023-08-08
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9.2	Prevas	ASL2378m01-02, 2024-04-12

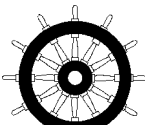


Restrictions

- None -

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. 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 of the Commission Implementing Regulation may change, therefore the product conformity may need to be re-assessed by the Notified Body.

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.

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 165.107.

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.

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.

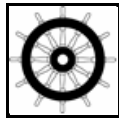
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2024/1975.

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

Issued at **Høvik** on **2024-11-21**

DNV local unit:
Finland CMC

Approval Engineer:
Steinar Kristensen

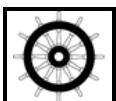


Notified Body No.:
0575

for **DNV AS**

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



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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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