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-22-110401 - 22-120751
Manufacturer	SAL Navigation AB
Address	Västberga Allé 36 B 126 30 Hägersten Sweden
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2021/1158 MED/4.6 Echo-sounding equipment
Product Name / Trade Name	SAL E200 / SAL E200, E2d

Specified Standards

IMO Resolution A.694(17)	ISO 9875 (2000) incl. Corr. 1 (2006)
IMO Resolution A.224(VII)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IMO Resolution MSC.74(69) Annex 4	IEC 61162-1 Ed. 5.0 (2016-08)
IMO Resolution MSC.191(79)	IEC 61162-2 Ed. 1.0 (1998-09)
IMO Resolution MSC.302(87)	IEC 61162-450 Ed. 2.0 (2018-05)
	IEC 62288 Ed. 2.0 (2014-07)
	IEC 62923-2 Ed. 1.0 (2018-08)
	IEC 62923-2 Ed. 1.0 (2018-08)

Date of issue: **2022-07-28** Expiry date: **2027-07-27**
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This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.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.

BENANNTE STELLE PHOENIX TESTLAB NOTIFIED BODY Seal

Klaus Knörig
28.07.2022

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

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	
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

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

Phone +49(0)5235-9500-24
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Specification	Laboratory	Test Report Number / Version
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) IEC 61162-2 Ed. 1.0 (1998-09)	BSH	BSH/454.ESE/Consilium R1Ed/4, 2022-01-20
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 IEC 60945 Ed. 4.0 (2002), Section 6.1, 6.2	BSH	454.ESE/Consilium R1ED/2_c, 2021-07-20
IEC 62923-1 ed. 1.0: 2018 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

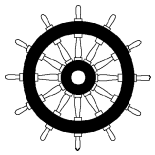
Restrictions

- 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.

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