

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-20-110343
Manufacturer	Consilium SAL Navigation AB
Address	Västberga Allé 36 B SE-126 30 Hägersten Sweden
Directive Reference (No & Item designation)	Directive 2014/90/EU, Regulation (EU) 2019/1397 MED/4.29 Voyage Data Recorder (VDR)
Product Name / Trade Name	SAL SVF-200 / SAL SVF-200

Specified Standards

IMO Resolution A.694(17)	IEC 61996-1 Ed. 2.0 (2013-05) incl. Corr. 1 (2014)
IMO Resolution MSC.191(79)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IMO Resolution MSC.302(87)	IEC 61162-1 Ed. 5.0 (2016-08)
IMO Resolution MSC.333(90)	IEC 61162-2 Ed. 1.0 (1998-09)
IEC 62388 Ed. 2 (2013-06), Annex H.4	IEC 61162-450 Ed1.0 (2011-06) + am1 (2016)
IEC 62923-1 Ed. 1.0 (2018)	IEC 62288 Ed. 2.0 (2014-07)
IEC 62923-2 Ed. 1.0 (2018)	

Date of issue: **2020-03-13** Expiry date: **2021-08-29**
USCG Approval Category: **165.150**

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.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



Signed by Klaus Knörig
Notified Body

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Schedule of Approval

Components necessary for operation:

Component	Description	SAL P/N	Software Version *
Main Unit	SVF-200 Main Unit	80.31.01	Axx
Audio Mixer Unit	AMU	80.31.02	Axx
Remote Control Unit	RCU2	80.32.01	Axx
Microphone	AM2	80.33.01	N/A
Fixed Capsule	PROCAP 32GB	80.35.01	Fxx
Float free Capsule **	Tron 40 VDR	80.35.02	Axx
Float free Capsule ** with heater	Tron 40 VDR with heater	80.35.03	Axx
Underwater Location Beacon	PT9 NINETY	80.35.04	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.)

***) One of the two Float Free Capsules shall be used.

Optional components:

Component	Description	SAL P/N	Software Version *
Video Grabber Unit	VGU	80.31.03	Axx
Video Grabber Unit 2	VGU2	80.31.04	Gxx
Signal converter	DDU	80.31.05	Axx
- Analogue Module 2ch	DDU AI2	80.31.06	
- Digital Module 8ch	DDU DI8-HD	80.31.07	
- Power Distribution 24V	DDU PD 24V	80.31.08	

*) 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.)

Application/Limitation

The VDR supports image formats PNG, JPG and GZIP (BMP).

For Radar and ECDIS screen image capture the VDR supports the interfaces according to IEC 61162-450 and IEC 62388 Ed.1 Annex H.2/IEC 62388 Ed.2 H.4.

Approval documentation

Manuals

Installation Manual SAL SVF-200 Voyage Data Recorder, March 2020, Document No.: 80.36.02-00A12, Part No.: 80.36.02

Installation Drawing, PP14005 Ver. A05, 2015-09-23

Signal Converter DDU Installation Manual, Document No. 5410920-00A04, Part No. 5490920A04, May 2013

User Guide SAL SVF-200 Voyage Data Recorder, March 2020, Document No.: 80.36.01-00A07, Part No.: 80.36.01

Approval documentation

Manuals	VDR / S-VDR Investigative Authority Guide User Guide, March 2020, Document No. 5410062-00C05, Part No. 5410062 VDR / S-VDR Professional Player Guide User Guide, March 2020, Document No.: 5410063-00C04, Part No.: 5410063 User Guide Appendix VDR/S-VDR, Document No. 5410092A04, 2020-03-05
Certificates	EC Type Examination Certificate 4581/001/4292721/15, issued 2015-06-30 by BSH-Cert
Brochures	Consilium VDR F2, Document No. F0086.1911.1
Data Sheets	Main Unit VDR F2, Part no: 5490104-00A, Document No. MP14026A1 Audio Mixer Unit AMU Part no 5490300, Document no. MP12017A1 Video Grabber Unit VGU, Part no 5490200, Document No. MP12018A1 Data Distribution Unit DDU, Part no: 5490940, Document No. MP13026A0 FRM PROCAP, Part no: 5490890-00A, Document no. MP14027A2 Remote Control Unit 2 RCU2, Part no 5491300-00A, Document No. MP14028A1 Microphone AM2, Part no: 5491180, document no. MP14029A1 VGU2, Part number 5490270, document no. MP19014A01

Applied Standards and Test Reports

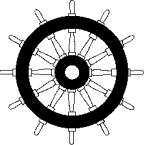
Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 11.2, Compass Safe Distance	SP Technical Research	MTkP904761, 2009-08-25
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) EMC, Environmental, Compass Safe Distance	DELTA	DANAK-1910777, 2010-01-28
IEC 61996-1 Ed. 1.0 (2000-07) IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	Intertek	1302125, Ed. 2, 2013-06-28
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section, 8.2 – 8.4, 8.7, 12.1	Intertek	1305247-1, 2013-06-07
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 11.2, Compass Safe Distance	BSH	Certificate No. 809, 2013-05-27
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 11.2, Compass Safe Distance	BSH	Certificate No. 878, 2014-08-20
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	Intertek	1400771, Ed.1, 2014-02-19



Specification	Laboratory	Test Report Number / Version
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section, 8.2 – 8.4, 8.7, 12.1.	Intertek	1400260, 2014-02-03
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 9, 10, EMC	Intertek	1719591STO-002, Ed. 1, 2018-02-12
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.7, 8.8, 8.12	Nemko	16049.00, 2016-04-18
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Sections 6, 11.1, 13-15	BSH	BSH/4543/001/4292646/13-1, 2014-08-12
IEC 60945 Ed. 4.0 (2002) incl. IEC 60945 Corr. 1 (2008), Section 8.6 Low Temperature	Intertek	1122208, 2011-11-04
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.8 Rain and spray.	Intertek	1317383-2, 2014-01-15
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.2 – 8.4, 8.7, 12.1	Intertek	900659, 2009-08-26
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.7	INNVENTIA	279 480, 2009-08-12
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 10.6	Intertek	1023172-1, 2010-12-06
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.2, 8.4	Intertek	1023130-1, 2010-10-27
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.2, 8.4	Intertek	1023130-3, 2010-10-28
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 10.6	Intertek	1111384-1, 2011-03-23
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.2, 8.3, 8.4	Intertek	1914940JAR-002, 2019-10-01
IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008) Section 8.7	Intertek	1914940JAR-001, 2019-09-12
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014)	Intertek	1406514STO-001, 2014-05-23
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014)	DELTA	DANAK-19/15230, 2015-05-07
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014) IEC 61097-2 Ed. 3 (2008-01) IEC 60945 (2002) Ed.4	Nemko	E13261.06, 2015-03-03
IEC 61996-1 Ed. 1.0 (2007-11) IEC 61996-2 Ed. 2.0 (2007-11)	BSH	BSH/46121/4292377/12, 2013-06-17

Specification	Laboratory	Test Report Number / Version
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014) IEC 61162-1 Ed. 4.0 (2010-11) IEC 61162-2 Ed. 1.0 (1998-09)	BSH	BSH/4543/001/4292646/13, 2014-08-12
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014) IEC 62388 Ed. 2 (2013), Annex H.4	BSH	BSH/4543/001/4292910/15-1, 2015-06-25
IEC 61162-450 Ed1.0 (2011-06)	BSH	BSH/4543/001/4292910/15, 2015-06-25
IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014) IEC 61162-1 Ed. 5.0 (2016-08)	BSH	454.VDR/Consilium (S)-VDR F2/1, 2020-01-27
IEC 61162-450 Ed.1 (2011-06) incl. AM1 (2016)	BSH	454.VDR/Consilium (S)-VDR F2/1-2, 2020-01-27
IEC 62923-1 Ed. 1.0 (2018) IEC 62923-2 Ed. 1.0 (2018)	BSH	454.VDR/Consilium (S)-VDR F2/1-1, 2020-01-27
IEC 62288 Ed. 1.0 (2008-07)	Intertek	900659/2, 2009-07-03
IEC 62288 Ed. 2.0 (2014-07)	BSH	BSH/4543/001/4292646/13-2, 2014-08-12

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 165.150.

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.