

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB00009AR
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Voyage data recorder (VDR)

with type designation(s)
SAL SVF-200

Issued to

SAL Navigation AB
Hägersten, Sweden

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 10**,

item No. UK/4.29. SOLAS 74 as amended, Regulations V/18, V/20 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO Res. MSC.333(90)

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2030-03-27**.

Issued at **London** on **2025-03-28**

DNV local unit:
Finland CMC



for **DNV UK Ltd.**

Approval Engineer:
Steinar Kristensen

Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

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 the approved body named on this certificate.

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. In case limitations of use apply, these should be indicated in the Annex.

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.

Product description

The SAL SVF-200 VDR comprises combinations of the following components:

Unit	Model Name	Part No.	SW Version	Location
Main Unit	SVF-200 Main Unit	80.31.01	Axx	Protected
Audio Mixer Unit	AMU	80.31.02	Axx	Exposed
Remote Control Unit	RCU2	80.32.01	Axx	Exposed
Microphone	AM2	80.33.01	N/A	Protected
Fixed Capsule	PROCAP32GB	80.35.01	Fxx	Submerged
Float Free Capsule ¹⁾	Tron40 VDR AIS	80.35.06	Axx	Exposed
	or Tron40 VDR AIS with heated bracket	80.35.07	Axx	
Underwater Location Beacon	PT9 NINETY	5491380	N/A	Submerged

Options

Video Grabber Unit	VGU	80.31.03	Axx	Protected
Video Grabber Unit 2	VGU2	80.31.04	Gxx	Protected
Signal Converter	DDU	80.31.05	Axx	Protected
- Analogue Module 2 ch	DDU AI2	5490963		
- Digital Module 8 ch	DDU DI8-HD	5490968		
- Power Distribution 24V	DDU PD 24V	5490967		

1) Separate certificate is required for EPIRB where the Float free is to be used to comply with carriage requirements for EPIRB.

Application/Limitation

- The SAL SVF-200 equipment shall be installed in compliance with the installation instructions of Pub. No. 80.36.02-00A16, Rev. A16 or later versions. Fixed Data Recording Unit capacity is 32GB.
- The SAL SVF-200 is in compliance with IMO Res. MSC.333(90), as amended by Res. MSC.494(104), when installed with Float Free Capsules Tron 40VDR AIS or Tron 40VDR AIS with heated bracket
- Float free Tron 40VDR AIS (with optional heated bracket) is tested for compliance with IEC 61996-1 (2013) +A1 (2021) using a Galileo GNSS receiver in accordance with IEC 61108-3 (2010).
- Local Area Network connection may be used for transfer of screen images from ECDIS and Radar using LAN interface protocols in IEC 61996-1, Annex E.

Tests carried out

- Performance: IEC 61996-1 (2013) + A1 (2021)
- Serial Interface: IEC 61162-1 (2016)
- Serial Interface: IEC 61162-2 (1998)
- Presentation: IEC 62288 (2021)
- Environmental: IEC 60945 (2002) incl. Corr.1 (2008)
- Bridge Alert Management: IEC 62923-1 (2018) and IEC 62923-2 (2018)

Type Examination documentation

DNV No	Document ID	Rev.	Description
2	MTkP904761	2009-08-25	Report: SP, Compass safe distance test report for Consilium VDR F1 S-VDR S1 (SAL doc. no AA09118)
3	DANAK-1910777	2010-01-28	Report: Delta, IEC 60945 and IEC 61996-1 Test report for ProCap VDR Capsule (SAL doc. no AA10060)
4	1302125	Ed.2	Report: Intertek, EMC test report for Data Distribution Unit (DDU) with 120 digital and 8 analog inputs (SAL doc. no AA13043)
5	1305247-1	2013-06-07	Report: Intertek, Vibration, temperature and protection test report for Data Distribution Unit (DDU) (SAL doc. no AA13051)
6	809	2013-05-27	Report: BSH, Compass safe distance for Data Distribution Unit (DDU) (SAL doc. no AA13052)
7	878	2014-08-20	Report: BSH, Compass safe distance for AM2 VDR microphone (SAL doc. no AA14076)
8	1400771	Ed. 1	Report: Intertek, EMC Test report for VDR F2 Main Unit, AMU and AM2 (SAL doc. no AA14005)
9	1400260	2014-02-03	Report: Intertek, Temperature, vibration and protection test report VDR F2 Main Unit and VDR AM2 (SAL doc. no AA14006)
10	1719591STO-002	Ed. 1	Report: Intertek, EMC Test Report for Video Grabber Unit VGU2 (SAL doc. no AA18022)
11	E16049.00	00	Report: Nemko, Vibration, Shock, IP and Salt mist test for FBH-40 Float-free bracket, automatic release, with heating (SAL doc. no AA16066)
12	BSH/4543/001/4 292646/13-1	2014-08-12	Report: BSH, IEC 60945 Ergonomics and HMI, Hardware and Software test report for VDR F2 (SAL doc. no AA14070)
13	1122208	2011-11-04	Report: Intertek, Low temperature test report for PROCAP/ PROCAP S and Microphones AM1 (SAL doc. no AA11065)
14	1317383-2	2014-01-15	Report: Intertek, IP-test water ingress report for VDR Microhone AM2 (SAL doc. no AA14002)
15	900659	2009-08-26	Report: Intertek, Mechanical and Climatic testreport Consilium VDR F1/ S-VDR S1 (SAL doc. no AA09116)
16	279 480	2009-08-12	Report: Innventia, Vibration test report for VDR F1/ S-VDR S1 (SAL doc. no AA09117)
17	1023172-1	2010-12-06	Report: Intertek, EMC Test Report for VDR F1/ S-VDR S1 incl AM1, AMU, VGU and RM4.3 (SAL doc. no AA10070)
18	10231030-3	2010-10-28	Report: Intertek, Storage temperature test for VDR F1/ S-VDR S1 incl AM1, AMU, VGU, RM4.3, CM4.3 and PROCAP (SAL doc. no AA10072)
21	1914940JAR-002	2019-10-01	Report: Intertek, VGU2 Temperature Test report (SAL doc. no AA19135)
22	1914940JAR-001	2019-09-12	Report: Intertek, Vibration test report for VGU2 (SAL doc. no AA19136)
23	1406514STO-001	2014-05-23	Report: Intertek, Low fire test PROCAP 32GB (SAL doc. no AA14042)
24	DANAK-19/15230	2015-05-07	Report: Delta, Fire tests and deep sea test of PROCAP (SAL doc. no AA15057)
25	E13261.06	06	Report: Nemko, IEC 61097-2, IEC 60945 and IEC 61996-1 test report for Tron 40VDR (SAL doc. no AA15058)
26	BSH/46121/4292 377/12	2013-06-17	Report: BSH, Assessment report for IEC 61996-1 (2007) and IEC 61996-2 (2007) for VDR F1/ S-VDR S1 (SAL doc. no A13113)
27	BSH/4543/001/4 292646/13	2014-08-14	Report: BSH, IEC 61996-1 (2013) and IEC 61162-1 (2010)/-2 (1998) test report for VDR F2 (SAL doc. no AA14069)
28	BSH/4543/001/4 292910/15-1	2015-06-25	Report: BSH, IEC 62388 Annex H.4 (image transfer) test report for VDR F2 (SAL doc. no AA15077)
29	BSH/4543/001/4 292910/15	2015-06-25	Report: BSH, IEC 61162-450 (2011) (image transfer) test report for VDR F2 (SAL doc. no AA15076)
30	454.VDR/Consilium (S)-VDR F2/1	2020-01-27	Report: BSH, IEC 61996-1 (2013) and IEC 61162-1 (2016) test report for VDR F2/ S-VDR F2 (SAL doc. no AA20003)
31	454.VDR/Consilium (S)-VDR F2/1-2	2020-01-27	Report: BSH, IEC 61162-450 (2011) +A1 (2016) (image transfer) test report for VDR F2/ S-VDR F2 (SAL doc. no AA20004)
32	454.VDR/Consilium (S)-VDR F2/1-1	2020-01-27	Report: BSH, IEC 62923-1/-2 (2018) test report for VDR F2/ S-VDR F2 (SAL doc. no AA20005)

DNV No	Document ID	Rev.	Description
33	900659/2	2009-07-03	Report: Intertek, Visual ergonomics test report for Consilium VDR F1/ S-VDR S1 (SAL doc. no AA09119)
34	BSH/4543/001/4 292646/13-2	2014-08-12	Report: BSH, IEC 62888 (2014) test report for VDR Display RCU2 (SAL doc. no AA14071)
36	75950873-07	03	Report: TÜV SÜD, IEC 61097-2 test report for Tron 40VDR AIS EPIRB (SAL doc. no AA22035)
39	80.36.01-00A09	A09	Manual: SAL Navigation, User Guide for SAL SVF-200 VDR and SAL SVS-200 S-VDR
40	80.36.02-00A16	A16	Manual: SAL Navigation, Installation Manual for SAL SVF-200 VDR and SVS-200 S-VDR
41	5410062-00C06	Nov. 2020	Manual: SAL Navigation, VDR/ S-VDR Investigative Authority Guide, User Guide

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to at least one part of the product. In addition the various equipment shall be marked with serial number. Safe distance to magnetic compass and power consumption and/or supply voltage may be stated in the individual installation manuals.