



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
BG24PTB00001_06

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Kongsberg Maritime AS (Kongsberg)

地址/Address

Kirkegardsveien 45, P.O. Box 483, NO-3601 Kongsberg, Norway

产品名称/Product

康斯伯格驾驶台和导航系统平台
K-Bridge and K-Bridge Standalone system platforms

认可标准/Approval Standard

- 国际海事组织海安会决议MSC. 466(101)《船载航行显示器有关航行信息显示的性能标准》(MSC. 191(79)决议)修正案
IMO MSC.466(101) Amendments To The Performance Standards For The Presentation Of Navigation-Related Information On Shipborne Navigational Displays (Resolution MSC.191(79))
- 国际海事组织海安会决议MSC. 191(79)《船载航行显示器有关航行信息显示的性能标准》
IMO Resolution MSC.191(79) Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
- 国际海事组织大会决议A. 694(17)《作为全球海上遇险和安全系统(遇险和安全系统)组成部分的船载无线电设备和电子助航设备的一般要求》
IMO Resolution A.694(17) General Requirements for Shipborne Radio Equipment Forming Part of The Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids
- IEC 62288:2021 海上导航和无线电通信设备和系统. 船用导航显示器的关于导航信息的显示. 通用要求、测试方法和要求的试验结果
IEC 62288:2021 Maritime navigation and radio communication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results

用于/Intended for

船舶/Ships



证书有效期至/This Certificate is valid until 2029年07月01日/ Jul. 01,2029

发证机构/中国船级社南京办事处
Issued by CCS Nanjing Office

签发日期 2024年12月20日
Date Dec. 20,2024

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。本证书凡是未注明版本的规范，其(发证时)最新版本适用于本证书。
This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices. For Rules with no version indication, their latest version (at the time of issuance of the certificate) applies to the this certificate.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P024-89471073

产品明细/Product Description

综合航行系统 (INS) /Integrated Navigation System (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	K-Bridge and K-Bridge Standalone system	
系统组成/System Component	See "Additional Pages"	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : BG20PPP20002, NP24PPP03655

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : See "Additional Pages"

试验报告日期/ Test Report Date :

试验单位/ Laboratory: See "Additional Pages"

试验单位地址/ Test Address: See "Additional Pages"

认可后的产品检验方式/ Method of Product Inspection after Approval

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:
认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B 模式证书, 且无需颁发船用产品证书/等效证明文件的情况, 证书获得者应接受本社每年一次的定期审核, 定期审核日为认可证书期满之日对应的每一周年日, 检查工作应在周年日的前后三个月内进行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

1. 本证书由原型式认可证书 (No. BG19PTB00028_06) 换新并替代原证书。
This certificate is renewed from and supersedes the previous Type Approval Certificate No. BG19PTB00028_06.
2. This certificate only identifies HW and SW used in K-Bridge and K-Bridge Standalone system, and is intended to be read in conjunction with the individual certificates covering the various K-Bridge and K-Bridge Standalone systems. For details on compliance to system requirements, please see individual system certificates for K-Bridge and K-Bridge Standalone systems where reference is made to this certificate.
3. Installation is to be performed according to the manufactures documentation.
4. Installations which includes optional K-Master as operator station for K-Bridge are subject for separate case-by-case approval.
5. Tests standard:
 - Environmental testing: IEC 60945 (2002) incl Corr.1 (2008)
 - Serial interface testing: IEC 61162-1 (2016) and IEC 61162-1 (2016)
 - Presentation of Navigation information: IEC 62288 (2021)
6. For more detailed description of product, please see "Additional Pages"
7. 本社已审核了产品厂无石棉声明, 但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。
The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

**中国船级社卑尔根办事处
CCS Bergen Office**

注: 本证书含有附页, 共6页
Note: The certificate is attached with additional 6 page(s)

Product description

Kongsberg Maritime K-Bridge and K-Bridge Standalone system platforms comprising the modules listed below (see individual system certificates for information on required configurations).

1. K-Bridge Operator station

K-Bridge Operator station is available in versions as either Panel Computer with integrated display and backup sensor interface, or Computer with separate Display unit and backup sensor interface, as specified below:

➤ Panel Computer with integrated Display and Sensor Interface:

- 1) Panel PC HD 27T22, Computer with i5/i7 processor, Integrated display, embedded graphical processor and sensor interface (PCA100293-1; 4x NMEA input/output module)
- 2) Panel PC HD 24T22, Computer with i5/i7 processor, integrated display, embedded graphical processor and backup sensor interface (PCA100293-1; 4x NMEA input/output module)

Note: Panel PCs supports utilizing the K-Bridge RADAR CP360 feature, limited to combining the radar image for up to 2 radar antennas.

or

➤ Computer with separate Display Unit and backup sensor interface:

1) Main Computer Unit : Kongsberg MC360 i7 LAN

2) Display Unit:

- Display 27" FHD ECDIS S MK4;
- Display 27" FHD ECDIS KM05 MK4;
- Display 27" FHD ECDIS G MK2;
- Display 32" FHD ECDIS G MK1;
- Display 55" UHD ECDIS G MK1;
- Display 24" FHD NAV-E;
- Display 24" FHD XE MK1;
- Display 27" FHD XE MK2;
- Display 27" FHD NAV-E;
- Display 32" UHD NAV-E;
- Display 43" UHD NAV-E;
- Display 43" UHD NAV-TE;
- Display 55" UHD NAV-E;
- Display 55" UHD NAV-TE.

3) Backup sensor interface: NMEA COM Module HT 00262 OPT-A3

- Sensor Interface: K-Bridge Sensor Integrator SINT, see below
- Input Device : COP-05 Input and COP-05 ALC NAV or TBP Track Ball Panel or TPP Touch Pad Panel or K-Master.
- Operator Panels (optional): COP-05 BU NAV and COP-05 Heading Wheel, or MPID- Multi Purpose Input Device
- Computer Keyboard: Cherry
- Power Unit:
- Phoenix Contact QUINT-PS/1AC/24DC/10
 - Weidmüller Power PRO-PS-2G/1AC/24DC/10A
 - Phoenix Contact PSU TRIO-PS-2G/1A/1AC/24DC/5/B+D
 - Weidmüller Power PRO-PS-2G/1AC/24DC/5A

Note: Power Unit may not be required in configurations where Input Device or Operator Panels are powered via USB from the computer.

- K-Bridge Sensor Integrator SINT:

- 1) Remote Controller: RCU502i
- 2) Serial Line Interface Module, 4 NMEA In/Out: RSER200-4
- 3) RBUS Hub Module: RHUB200-5
- 4) Power Supply:
 - Phoenix Contact QUINT-PS/1AC/24DC/10
 - Weidmüller Power PRO-PS-2G/1AC/24DC/10A

Note: Power Unit may not be required in configurations where Input Device or Operator Panels are powered via USB from the computer.

- 5) Network Switches: Moxa Ethernet Switch EDS-308 or EDS-316 or EDS-316-MM-SC, Up to 16 10/100BaseT(X) ports and 2 100BaseFX ports
- 6) Option:
 - Remote IO modules: RMP420, RDIOR420 and RMP201-8

➤ K-Master Operator station (option, See item 'Remarks' on page 3 of the main certificate)

- 1) Main Computer Unit : Kongsberg MC360 i3 LAN ,MC360 i7 LAN ,MC360 i5 GPU
- 2) Main Display Server :MC360 i5 GPU
- 3) Network Units : Moxa Ethernet Switch IKS-6728A-4GTXSFP-HV-HV-T
- 4) USB Extender : Veinland USB Extender VLC-66298-T/R or VL-66296-T/R
- 5) Power Unit :

- Phoenix Contact QUINT-PS/1AC/24DC/10
- Weidmüller Power PRO-PS-2G/1AC/24DC/10A

Note: Power Unit may not be required in configurations where Input Device or Operator Panels are powered via USB from the computer.

- 6) Operator Interface : TCP,K-Master units (Alarm Panel, I/O Controller),Display 15" FHD XT MK1
- 7) Display Unit :

- Display 27"FHD ECDIS S MK4;
- Display 27"FHD ECDIS KM05 MK4;
- Display 27"FHD ECDIS G MK2;
- Display 32"FHD ECDIS G MK1;
- Display 55"UHD ECDIS G MK1;
- Display 27" FHD XE MK2;
- Display 27" FHD NAV-E;
- Display 32" UHD NAV-E;
- Display 43" UHD NAV-E;
- Display 43" UHD NAV-TE;
- Display 55" UHD NAV-E;
- Display 55" UHD NAV-TE.

2. K-Bridge Standalone Operator station

K-Nav Operator station is available in versions as either Panel Computer with integrated display and sensor interface, or Computer with separate Display unit and sensor interface, as specified below:

➤ Panel Computer with integrated Display and Sensor Interface:

- 1) Panel PC HD 27T22, Computer with i5/i7 processor, Integrated display, embedded graphical processor and sensor interface (PCA100293-1; 4x NMEA input/output module)

or

- 2) Panel PC HD 24T22, Computer with i5/i7 processor, integrated display, embedded graphical processor and backup sensor interface (PCA100293-1; 4x NMEA input/output module)

➤ Input Device : TBP Track Ball Panel, or TPP Touch Pad Panel

- Operator Panels (optional) : COP-05 Panel NAV Standalone (for Radar only)
- Computer Keyboard: Cherry
- Power Unit:
 - Phoenix Contact QUINT-PS/1AC/24DC/10
 - Weidmüller Power PRO-PS-2G/1AC/24DC/10A
 - Phoenix Contact PSU TRIO-PS-2G/1A/1AC/24DC/5/B+D
 - Weidmüller Power PRO-PS-2G/1AC/24DC/5A

Note: Power Unit may not be required in configurations where Input Device or Operator Panels are powered via USB from the computer.

3. Software modules for K-Bridge and K-Bridge Standalone Operator stations

- Operating System : Windows 10
- K-Bridge System Platform SW : 9.1.x onwards
- K-Master release : 2.1.x update 8 onwards
- Navtor SDK : 3.0.x
- C-Map SDK (for SENC only) : 6.0.x
- NAV WEB HMI Interface : 1.x

Approval Test Report and manual list

No.	Document ID	Rev.	Description
1	454288	A	Report: Kongsberg Maritime, Hardware Compatibility Endurance Test Report, Hatteland HD27T22 Panel PC
2	452405	C	Report: Kongsberg Maritime, Presentation of black box sensor Web- HMI in K-Bridge, System Test Report
3	446464	A	Report: Kongsberg Maritime, Test report for MPID with K-Bridge HCS and TRK
4	P17-0017	2017-07-06	Report: SP, EMC and environmental test report for DuraMON 55 Glass
5	448166	A	Report: Kongsberg Maritime, Display 27" FHD ECDIS S MK4 System Test Report
6	448165	A	Report: Kongsberg Maritime, Display 27" FHD ECDIS KM05 MK4 System Test Report
7	448164	A	Report: Kongsberg Maritime, Display 27" FHD ECDIS G MK2 System Test Report
8	P18-0040	2018-06-18	Report: EKTOS, EMC and environmental test report for DuraMON 27 display
9	355288r00	00	Report: Nemko, Display performance test report for DuraMON 27 GLASS
10	443339	A	Report: Kongsberg Maritime, Display 55" UHD ECDIS G MK1 System Test Report
11	352127r01	01	Report: Nemko, Display performance test report for DuraMON Glass 55
12	E18116.00	00	Report: Nemko, Multi Purpose Input Device (MPID), EMC and Environmental test report
13	E18081.00	00	Report: Nemko, EMC and Environmental test report for RCU502i
14	TL15055	Issue 5	Report: MS Testing, EMC and environmental test report for Moxa IKS-6728A ethernet switch
15	DOC206364-1	01	Report: Hatteland Display, IEC62288 flicker test report for HD 24T22 MMC Maritime Multi Computer
16	21111	1	Report: Applica, EMC and environmental testing of HT B30GH STC-A3x-M13200-ES Compact Fanless Computer
17	20941	0	Report: Applica, EMC and environmental testing of HD 27T22 MEC-CGU-xABR Maritime Multi Computer
18	20885	0	Report: Applica, EMC and environmental testing of HD 27T22 MEC-CGU- AIBR Maritime Multi Computer
19	20747	0	Report: Applica, EMC and environmental testing of HT C02HJ STC- A4H-A010-14 Computer
20	21107	02	Report: Applica, EMC and environmental test report for HD 24T22 MMC-M82-4GP186-ES Maritime Multi Computer
21	435253	A	Report: Kongsberg Maritime, Type Approval System Test Report for Panel PC 24" 16:9 ECDIS T22 IEC 62288 Ed.2.0 Clause 4&7
22	DOC206335-1	02	Report: Hatteland Display, Conformance test report for HD 24T22 MMC-M82-4GP186-ES
23	DOC205958-1	2	Report: Hatteland Display, Minimum brightness test of GDCX rev 5
24	435252	A	Report: Kongsberg Maritime, Type Approval System Test Report for Display 32" FHD ECDIS G MK1 IEC 62288 Ed.2.0 Clause 4&7
25	435251	A	Report: Kongsberg Maritime, Type Approval System Test Report for Display 27" FHD ECDIS G MK1 IEC 62288 Ed.2.0 Clause 4&7
26	331201r00	2017-09-29	Report: Nemko, Display performance test report for DuraMON 32 Glass
27	6P08031	2016-12-14	Report: SP, Type Approval test report for DuraMON 27 Glass
28	P17-0030-1	2017-06-29	Report: SP, Type Approval test report for DuraMON 32 Glass
30	20885	0	Report: Applica, EMC and environmental test report of HD 27T22 MEC-CGU-AIBR Maritime Multi Computer
31	20941	0	Report: Applica, EMC and environmental test report of HD 27T22 MEC-CGU-xABR Maritime Multi Computer
32	425853	A	Report: Kongsberg Maritime, Hardware Compatibility Endurance Test report for K-Nav HD27T22 Panel PC
33	2013-3135	0	Report: DNV, EMC and environmental testing of Maritime Computer HT B22GE STC-C4K-M100
34	E13184.01	1	Report: Nemko, Radiated emission test report for RS422/485 external module HT 00262 OPT-A1
35	20053	1	Report: Applica, EMC, environmental and IEC 61162 testing of RS422/485 external module HT 00262 OPT-A1
36	421169	B	Manual: Kongsberg Maritime, NMEA COM Module HT 00262 OPT-A1 Instruction Manual

No.	Document ID	Rev.	Description
37	DOC205812-1	02	Report: Hatteland, IEC62288 flicker test report for HD27T22 MMC
38	418200	A	Report: Kongsberg Maritime, K-Bridge & K-Nav Radar and ECDIS Image transfer to VDR
39	419851	A	Report: Kongsberg Maritime, IEC 62288 test report for HD27T22 MEC panel computer
40	419849	A	Report: Kongsberg Maritime, IEC 62288 test report for MD24 ECDIS Glass display
41	319321	01	Report: Nemko, IEC 62288 (2014) test report for ISIC DuraMON 27 Classic and 27 Glass
42	5P05962	1	Report: SP, EMC and environmental testing of ISIC DuraMON 24 Glass, DuraMON 26, DuraMON 26 Glass, DuraMON 19 Glass and DuraMON 27 displays
43	DOC102331-1	1	Report: Hatteland Display, Conformance test report HD 27T22 MEC-CGU- AABR
44	3FO16798	A	Report: SP, IP protection tests for Pointer Carrier Panel (PCP)
45	E12103.01	2012-10-22	Report: Nemko, EMC and environmental test report for KM Touchpad Large, Heading wheel and Joystick
46	T208006-8a	A	Report: Delta, EMC and environmental test report for E38-96A29D- E002 trackball
47	3P08182	2	Report: SP, EMC and environmental test report for PCP Pointer Carrier Panel
48	416662	A	Report: Kongsberg Maritime, Presentation testing, IEC 62288 (2014) K-Master 2.1.0
49	3P00307	2013-05-02	Report: SP, EMC and environmental test report for 24", 27" and 22" DuraMon WS monitors
50	05192-075 A	A	Manual: ISIC, User Reference manual for DuraMON19, 26 and 27
51	391995	B	KM Statement, K-Master Pilot Chair test statement (K-Master Pilot Chairs).
52	391780	A	Test Report: TI 3000-14-015548 Rev.- (K-Master Pilot Chair).
53	DANAK-198195	1	Test Report: DELTA, Type Approval testing of KM Common Operator Panels (COP-05)
54	DANAK-1910979	1	Test Report: DELTA DANAK-1910979, Project no.: A506924-1 (COP-05 Input Panel)
55	387155	C	Maintenance Manual: K-Master Pilot Chair.
56	391977	B	Test Report: K-Bridge ECDIS with K-Master MDS and ISIC.
57	391976	B	Test Report: K-Master FWD Bridge Fallback Modes and Effects.
58	391979	B	Test Report: K-Bridge with K-Master TCP as Input Device.
59	326403	B	Hardware Module Description: Phoenix contact QUINT-PS/1AC/24DC/10.
60	370398	A	Test Report: Nemko no. E12059.00 (K-Master Bridge Chair)
61	357261	B	Test Report: Nemko no. E11024.03 (K-Master Panel System)
62	385171	A	Report: Type Examination Test Report K-ECDIS sensor interface
63	373032	2012-06-21	Report: Kongsberg, K-Bridge ECDIS with ISIC monitor verification test report
64	DNV-2012-05-14	2012-05-14	Report: DNV, Verification tests for K-Bridge SW 6.0 and R-BUS SINT
65	2010-08-0107	2008-04-14	Report: TI, Vibration test report of ELDON MAS 120830x KM01 cabinet
66	DANAK-198508	2007-10-17	Report: Delta, Environmental tests for RCU501, RSER200-4, RHUB200-5 and RMP200-8
67	DANAK-198696	2007-03-15	Report: Delta, Environmental testing of RMP420 and RDIOR420
68	3010-05-0052	2011-12-22	Report: TI, Environmental test of KM-05 operator station 650
69	69187	2011-12-19	Report: NEMKO, IEC 60529 / EN 60529 testing
70	309397	2011-12-19	Report: K-Bridge Sensor Integrator – Time Latency Test
71	2006-3459	01	Report: DNV, IP22 Testing of Heading Wheel
72	2006-3460	01	Report: DNV, IP22 Testing of Tracker Ball

No.	Document ID	Rev.	Description
73	DELTA-A504697-1	2011-12-19	Report: DELTA, Type Approval testing of SONF1DC24G-K and Indicating and reset panels
74	677684301	A	Report: CCS, FAT report for K-Bridge Sun Yat-sen H2639, Kongsberg ref. No:6776843
75	404702	A	Manual: Kongsberg Maritime, Display 55" UHD ECDIS MK1- Installation Manual
76	404684	A	Manual: Kongsberg Maritime, Display 55" UHD ECDIS MK1- Instruction Manual
77	161170	D	Manual: Kongsberg Maritime, Cabling- General Requirement, Installation Manual
78	161012	K	Manual: Kongsberg Maritime, Kongsberg 700 Family Specification of Earthing, Shielding and Power distribution principles
79	422928	D	Manual: Kongsberg Maritime, Display MDxx ECDIS, Instruction Manual
80	362307	H	Manual: K-Bridge (R-Bus) SINT Cabinet Maintenance Manual
81	361286	F	Manual: K-Bridge R-Bus SINT Cabinet Installation Manual
82	110-004215	A	Test Report: K-Bridge v 9HMI Test report
83	110-0013148A	A	Test Report: Maritime Multi Display; HD 27T40 KMD-AA4-FABP-ES; 220801001T
84	110-0024927A	A	Test Report: DOC209436-1 Conformance Test Report of LCD for use in RADAR and ECDIS HD 27T40 KMD-AA4-FABP
85	110-0028171A	A	Test Report: DOC206371-1 IEC62288 Flicker Test Report HD 27T22 MMC
86	110-0028173A	A	Test Report: DOC209419-1 PCA200856-1#04 Minimum brightness test of buttons and status indicators
87	110-0038633A	A	Test Report: Thinkstation P360 Tiny Workstation, 30FF; 30.00.21562-1
88	110-0052052	A	Test Report: K-Bridge 9 Test Report
89	110-0065587B	B	Test Report: DOC209183-1;Conformance Test Report of LCD for use in RADAR and ECDIS HD 55T40 MVD-MA1-CAJG-ES02
90	110-0066326B	B	Test Report:DOC209185-1; IEC62288 flicker test report HD 55T40 MVD-MA1-CAJG-ES02
91	110-0066386A	A	Test Report: DOC209274-1;Conformance Test Report of LCD for use in RADAR and ECDIS HD 43T40 MVD-MA1-CAJG-ES01
92	110-0066393A	A	Test Report: DOC209273-1 IEC62288 flicker test report HD 43T40 MVD-MA1-CAJG-ES01
93	110-0088582A	A	Test Report: DOC209275-1 Conformance Test Report of LCD for use in RADAR and ECDIS HD 32T40 MVD-MA1-CAJA-ES01
94	110-0088584A	A	Test Report: DOC209276-1 IEC62288 flicker test report HD 32T40 MVD-MA1-CAJA-ES01
95	110-0088635A	A	Test Report: DOC209420-1 HD TDCMVD KIT-A1 Minimum brightness test of buttons and status indicators
96	480424	A	Test Report: K-Bridge / K-Nav VDR Communication IEC 61162-450:2018 Type Approval Report
97	110-0054817B	B	Manual: K-Bridge Conning Operator Manual
98	110-0062585A	A	Manual:K-Bridge INS MFD Built-in MK5 Installation Manual
99	450169/D	D	Manual:Power distribution Maintenance Manual
100	450171/E	E	Manual:Operator panel systems Maintenance Manual
101	450347/A	A	Manual:KM05 650/1300 consoles Maintenance Manual
102	454440/B	B	Manual:AIS 300 option Operator manual
103	464373/B	B	Manual:KM05 650 consoles Installation Manual
104	468380/C	C	Manual:K-Bridge ECDIS/Radar/Conning Standalone OS PPC Maintenance Manual
105	468823/C	C	Manual:K-Bridge ECDIS/Radar/Conning Standalone OS PPC Installation Manual