

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB000019E
Revision no.:
2

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 **Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces: - input/output devices**

with type designation(s)
Ancillary field units

issued to

Autronica Fire and Security AS
Trondheim, Norway

is found to comply with the Implementing Regulation (EU) 2025/1533 for
Item no. **MED/3.51h (Row 1 of 1)**
according to the following requirements:

SOLAS 74 Reg. II-2/7, IMO Res. MSC.36(63)-(1994 HSC Code) 7, IMO Res. MSC.97(73)-(2000 HSC Code) 7, IMO Res. MSC.391(95)-(IGF Code) 11, IMO MSC.1/Circ.1242, SOLAS 74 Reg. X/3, IMO Res. MSC.98(73)-(FSS Code) 9

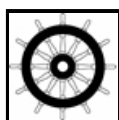
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-10-06**

Expiry date: **2030-10-05**

DNV local unit:
Trondheim

Approval Engineer:
Frode Nygård



Notified Body
no.: **0575**



for **DNV AS**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
Head of Notified 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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 USD 300 000.

Product description

Ancillary field units designed according to EN54 for use with Autronica's interactive fire detection systems:

BN-221/01	Extinguishing control unit
BN-221/02	Monitored Output Unit with 7A current capability
BN-300	Input unit with SelfVerify
BN-303	Single Monitored Input Unit
BN-304	Single Monitored Input/Output Unit
BN-305	Dual Monitored Input/Output Unit
BN-305-D	Control and Monitoring I/O Unit
BN-307	Monitored Fire Alarm Device Control Unit
BN-310	Single relay output unit without SelfVerify
BN-320	Interface unit with SelfVerify
BN-320/2	Door control unit
BN-320/4	Monitoring and control unit
BN-320/5	Sprinkler control unit
BN-500/N	Input unit with SelfVerify, Exic-version for use in zone 2 only
BN-500/EX	Input unit with SelfVerify, Exia-version for use in all zones
BZ-500	Barrier unit
BN-342/1	PowerLoop 4-20 mA input unit, 19" rack mounted
BN-342/2	PowerLoop 4-20 mA input unit, DIN-rail mounted
BN-342/EX	PowerLoop 4-20 mA input unit, Exem-version for hazardous area zone 1 and 2
BNB-330A	Conventional Loop Interface unit
BNB-331	Conventional Loop Interface unit
BNY-330	End of line unit
BBR-52	Smart buzzer
BWP-100/xx	Conduit box
BWB-110	Base Adapter

Application/Limitation

Please see Appendix: Application/Limitation

Type Examination documentation

Please see Appendix: Type Examination Documentation

Tests carried out

Applicable tests according to:

- IEC 60092-504:2016,
- IEC 60533:2015,
- EN 54-18:2005 incl. AC:2007,
- EN 54-17:2005 incl. AC:2007 (for Base Adapter).

Marking of product

For identification to this type examination certificate the products shall be marked with:

- Manufacturer's name or trade mark
- Type designation
- Mark of Conformity (wheel mark), followed by
 - identification number of the NoBo involved in production control (MED D)
 - the year the mark is affixed



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- Example: 0575/2025

APPENDIX

Type Examination documentation

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Document No.	Rev.	Title
2001-3416	1	Report: DNV, IEC60092-504 and IEC60533
116-P-BNB330/CE	D	Data sheet: BNB-330 and BNY-330
187264	00 / 2011-12-15	Report: Nemko, EN 54-17, BN305
187265	00 / 2011-12-15	Report: Nemko, EN 54-18, BN305
180163	2011-11-08	Report: Nemko lab. statement/test results for BWP-100 of IP65
E14054.00	00 / 2014-03-10	Report; Nemko, BN-305,BN-305-2,BN-305-D
E14143.00	2014-05-27	Report: Nemko Marine test, BWB-110
116-P-BWB110/CGB	2011-10-07	Data sheet: BWB-110 Base Adapter
E15275.00	00 / 2015-12-14	Test Report BN-221/01 & BN-221/02
116-P-BN320/CGB	C / 2016-10-24	Data sheet: BN-320 - INTERFACE UNIT WITH SELFVERIFY
116-P-BWP100/CGB	D / 2016-06-13	Data sheet: BWP-100 - CONDUIT BOX
Doc-1000122	1 / 2019-03-27	Data sheet: BN-500/EX
Doc-1000128	2 / 2021-11-23	Data sheet: BN-500/NBN500N_CGB
Doc-1000129	2 / 2021-12-06	Data sheet: BZ-500
Doc-1000291	1 / 2013-06-10	Data sheet: BBR-52
Doc-1000362	2 / 2016-01-11	Data sheet: BN-221/01
Doc-1000364	2 / 2016-01-11	Data sheet: BN-221/02
Doc-1000366	2 / 2022-11-11	Data sheet: BN-300
Doc-1000369	1 / 2021-11-02	Data sheet: BN-303
Doc-1000372	3 / 2022-11-11	Data sheet: BN-304
Doc-1000374	1 / 2022-11-02	Data sheet: BN-305
Doc-1000375	3 / 2021-06-09	Data sheet: BN-307
Doc-1000376	1 / 2016-10-24	Data sheet: BN-310
Doc-1000380	1 / 2009-11-09	Data sheet: BN-320/2
Doc-1000382	1 / 2009-07-21	Data sheet: BN-320/4
Doc-1000384	1 / 2009-12-07	Data sheet: BN-320/5
Doc-1000387	1 / 2014-03-11	Data sheet: BN-342/1
Doc-1000389	1 / 2014-03-11	Data sheet: BN-342/2
Doc-1000390	2 / 2020-08-19	Datasheet: BN-342/EX
Doc-1000394	1 / 2015-07-07	Data sheet: BNB-331
Doc-1000565	2 / 2017-02-21	Data sheet: BWP-100/xx
Doc-1004751	2 / 2021-11-02	Data sheet: BN_305-D
Doc-1004840	1 / 2018-11-15	Report: Nemko, No. E18217.00, IEC60092-504:2016 (supplemental), Misc equipment
Doc-100501	1 / 2004-05-11	Report: DNV No. 2003-3169, rev.2, IACS UR E10 Rev. 7, BSD-340, BN-342, X33
Doc-1005134	1 / 2000-03-13	Report: DNV 2000-1178 Rev 2, Misc equipment
Doc-1005354	1 / 2008-12-17	Report: CNPP DE 08 00 74 A, EN 54-17, EN 54-18, BN-304
Doc-1010114	1 / 2011-12-15	Report: Nemko, 187266 TRF EN54_17, BN-307
Doc-1010116	1 / 2011-12-15	Report: Nemko, 87270 TRF EN54_17, BNB-331

Doc-1010853	1 / 2010-05-05	Report: DNV No. 2010-3107 Rev 1, IACS UR E10 Rev.5, Fourteen I/O- and A/V units
Doc-1010873	1 / 2000-01-04	Report: DNV No. 99-1491, rev.2, IACS UR E10 Rev.2, Autrosafe
Doc-1019102	1 / 2012-05-29	Report: Nemko, No. E12044.00, IACS UR E10 (2006), BNB-331, BNB-330A
Doc-1019103	1 / 2002-02-26	Report: DNV No. 2002-3146, , BN-330-BNY-330-BN-221-BU-200
E15275.00	0 / 2015-12-14	Report: Marine Test, IACS E10 (2014), BN-221/01
E16007.00	0 / 2017-01-13	Report: Marine Test, Marine Test, IACS E10 (2014) , BN-221/01 and BN-221/02
E16024.00	0 / 2017-01-13	Report: Marine Test, EN 54-17, BN-221/01
E16025.00	0 / 2017-01-13	Report: Marine Test, EN 54-18, BN-221/01
E16026.00	0 / 2017-01-13	Report: Marine Test, EN 54-17, BN-221/02
E16027.00	0 / 2017-01-13	Report: Marine Test, EN 54-18, BN-221/02
Doc-1001124	7 / 2024-02-24	Type label: BN-500/EX
Doc-1001754	8 / 2025-08-16	Type label: BZ-502
Doc-1001951	5 / 2024-04-17	Type label: BN-500/N
Doc-1002084	D / 2016-03-08	Drawing: Assembly and dimensions BNA-303
Doc-1002100	4 / 2024-04-17	Type label: BN-342/EX
Doc-1003606	9 / 2024-11-19	Control Drawing / User Manual: 03ATEX218X / IECEx 11.0009X CSA 2679735 (BN-500..)
Doc-1003627	2 / 2020-03-13	Drawing: Coating BNA-304
Doc-1003628	2 / 2020-03-13	Drawing. Coating BNA-307
Doc-1003708	2 / 2019-07-19	Drawing: Schematic Modification BZA-500
Doc-1003753	3 / 2024-08-20	Control Drawing / User Manual: 03ATEX230 / IECEx NEM 11.0008 DNV 22 UKEX 68902/CSA 2679735 (BZ-500
Doc-1003777	3 / 2024-08-26	Type label: BZ-501/01
Doc-1016451	1 / 2023-11-20	Type label: WZA-500 Marking

APPENDIX

Application/Limitation

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The equipment are found to comply with following location/application dependent requirements (for definition of each of the location classes, see below the table):

MODEL	TEMPERATURE	VIBRATION	EMC	ENCLOSURE
BN-221/01	TEM-B (Note 1)	VIB-A	EMC-B	ENC-C (IP 66)
BN-221/02	TEM-B (Note 1)	VIB-A	EMC-B	ENC-C (IP 66)
BN-300	TEM-A	VIB-A	EMC-A	ENC-C
BN-303	TEM-B	VIB-A	EMC-B	ENC-B (IP 54)
BN-304	TEM-B	VIB-A	EMC-B	ENC-B (IP 54)
BN-305	TEM-B	VIB-A	EMC-B	ENC-B (IP 54)
BN-305D	TEM-B	VIB-A	EMC-B	ENC-A (IP 22)
BN-307	TEM-B	VIB-A	EMC-B	ENC-B (IP 54)
BN-310	TEM-A	VIB-A	EMC-A	ENC-C
BN-320	TEM-A	VIB-A	EMC-A	ENC-C
BN-320/2	TEM-A	VIB-A	EMC-A	ENC-C
BN-320/4	TEM-A	VIB-A	EMC-A	ENC-C
BN-320/5	TEM-A	VIB-A	EMC-A	ENC-C
BN-500/N	TEM-A	VIB-A	EMC-A	ENC-C
BN-500/EX	TEM-D	VIB-A	EMC-A	ENC-C
BZ-500	TEM-D	VIB-B	EMC-B	ENC-B
BN-342/1	TEM-D	VIB-A	EMC-B	(Note 2)
BN-342/2	TEM-D	VIB-A	EMC-B	(Note 2)
BN-342/EX	TEM-D	VIB-A	EMC-B	(Note 2)
BNB-330A	TEM-D	VIB-A	EMC-B	ENC-A
BNB-331	TEM-D	VIB-A	EMC-B	ENC-C
BNY-330	TEM-D	VIB-A	EMC-B	ENC-A
BBR-52	TEM-B	VIB-A	EMC-A	ENC-A
BG-21	TEM-D	VIB-A	EMC-B	IP 66/67
BG-201	TEM-D	VIB-A	EMC-B	IP 66/67
BWP-100/xx	TEM-D	VIB-A	NA	IP 55
BWB-110	TEM-B	VIB-A	EMC-B	ENC-A

Note 1: Tested to -10°C and 70°C.

Note 2: Required protection to be provided upon installation onboard.

Definition of the location classes with reference to relevant standards:

- Temperature: TEM-A – Location (5°C-55°C) (ref. IEC 60092-504:2016 table 1 item 6-7)
TEM-B – Location (5°C-70°C) (ref. IEC 60092-504:2016 table 1 item 6-7)
TEM-D – Location (-25°C-70°C) (ref. IEC 60092-504:2016 table 1 item 6-7)
- Vibration: VIB-A – For general applications (ref. IEC 60092-504:2016 table 1 item 10)
VIB-B – For eq. on reciprocating machines etc. (ref. IEC 60092-504:2016 table 1 item 10)
- EMC: EMC-A – General power distribution zone (ref. IEC 60092-504:2016 table 1 item 13-20)
EMC-B – Bridge and open deck zone (ref. IEC 60092-504:2016 table 1 item 13-20)
- Enclosure: ENC-A – Control room, accommodation, bridge (IP22) (ref. IEC 60092-201:1994 table 5)
ENC-B – Engine room (IP44) (ref. IEC 60092-201:1994 table 5)
ENC-C – Open deck (IP56) (ref. IEC 60092-201:1994 table 5)

Ex installations to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Ex-certification is not covered by this certificate and the following paragraph, which is for information only, is based on information received from the manufacturer, but not verified by DNV.

Information on Ex-Certification received from manufacturer – Not verified by DNV			
Equipment	Certified		Certificate No.
BZ-500	II (1) G	[Ex ia Ga] IIC Ta: -20°C to +60°C	Nemko 03ATEX230
BN-342/EX	II 2 G	Ex em II T4 Ta=70°C	Nemko 03ATEX222
BN-500/EX	II 1G	Ex ia IIC T5 Ta: -20°C to +70°C	Nemko 03ATEX218X
BN-500/N	II (3)G	[Ex ic Gc] IIB Ta: -20°C to +70°C	Nemko 03ATEX217X
	II 3G	Ex ic IIB T4 Gc Ta: -20°C to +70°C	