

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no .: MEDB00003UH Revision no .: 3

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:- control and indicating equipment

with type designation(s) Interactive fire panels

issued to Autronica Fire and Security AS Trondheim, Norway

is found to comply with the Implementing Regulation (EU) 2024/1975 for Item no. MED/3.51a (Row 1 of 2) 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, IMO MSC.1/Circ.1487, IMO MSC.1/Circ.1528, IMO MSC.1/Circ.1554, 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: 2025-06-26 Expiry date: 2025-08-15

DNV local unit: Trondheim

Approval Engineer: Dariusz Lesniewski



Notified Body no.: 0575

DNV

FGL

AND THE EN

Digitally Signed By: Elter, Frederik Tore on behalf of

for DNV AS

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

Form code: MED 2101.NOR



Product description

AUTROPRIME

The fire alarm control panel BS-200M supports 4 detection loops. All loop units can be mixed freely and connected at any point on the same detection loop. A maximum of 8 additional panels can be freely mixed and connected to the fire alarm control panel via the RS-485 panel bus, including repeater panels BS-211, information panels BV-210, fire brigade panels BU-210 and mimic drivers BUR-200.

Autroprime Interactive Fire Detection System consist the following units:

- BS-200M: Main control panel
- BS-210: Operator panel
- BS-211: Repeater panel
- BU-210: Fire brigade panel
- BV-210: Information panel
- BUR-200: Mimic driver
- BC-250: Controller Unit

Software version: 2. 1. x, x to be defined for each delivery.

AUTROSAFE 4

The fire alarm control panel BS-420/420M/420G supports maximum 30 modules, of which maximum 12 can be loop driver modules. Utilizing a redundant Ethernet network, AutroNet, the control panel can communicate with other system units. A maximum number of 64 system units can be connected to each AutroNet, including controller BC-420, operator panel BS-430 and BU-BV-420 configurable repeater/information panel. Power supply units BP-405, BPS-405 and BPS-410.

- BS-420M: Main control panel, network system, marine applications, release 4
- BS-420G: Main control panel, network system, offshore applications, release 4
- BS-420G2: Main control panel, network system, offshore applications, release 4, certified to SIL2
- BS-430: Operator panel with total display/service, network system, release 4
- BS-430G2: Operator panel with total display/service, network system, release 4, certified to SIL2
- BC-420: Controller without display/buttons, network system, release 4
- BC-420G2: Controller without display/buttons, network system, release 4, certified to SIL2
- BU-BV-420: Repeat/Information panel (service by dipswitch settings), release 4
- BU-BV-420G2: Repeat/Information panel (service by dipswitch settings), release 4, certified to SIL2
- BP-405: Power cabinet provides space for two 12V/18Ah batteries, release 4
- BPS-405 Decentralized power unit, mountable in a 19" rack/console, 115/230VAC 24VDC/5A, release 4
- BPS-410: Decentralized power unit, mountable in a 19" rack/console, 115/230VAC 24VDC/10A, release 4
- BC-440 Rack mount version of BC-420
- BC-440G2 Rack mount version of BC-420G2, certified to SIL2

Interface modules:

- BSB-310A: Monitored output module
- BSD-310: Loop driver module
- BSD-330: BS-100 loop interface
- BSE-310: Monitored input module
- BSE-320: Input module
- BSL-310: Communication module
- BSS-310A: Power module
- BSS-311: Power module

Software version 4.x.y, where x, y- values shall be defined for each delivery.

Application/Limitation

The equipment are found to comply with following location/application dependent requirements:

AUTROSAFE 4 and AUTROPRIME

- Temperature: TEM-B Location (5°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)
- EMC: 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)



Certificate no.: MEDB00003UH Revision no.: 3

BPS-405 and BPS-410 Decentralized power units

- TEM-D Location (-25°C-70°C) (ref. IEC 60092-504:2016 table 1 item 6-7) VIB-A For general applications (ref. IEC 60092-504:2016 table 1 item 10) - Temperature:
- Vibration:
- EMC-B Bridge and open deck zone (ref. IEC 60092-504:2016 table 1 item 13-20) - EMC:
- ENC-A Control room, accommodation, bridge (IP22) (ref. IEC 60092-201:1994 table 5) - Enclosure:

The power supply equipment listed under Product description have been assessed according to the requirements of item MED/3.51b (Row 1 of 1) of Implementing Regulation (EU) 2024/1975.

Type Examination documentation

Please see Appendix: Type Examination Documentation

Tests carried out

Applicable tests according to:

- EN 54-2:1997 incl. AC:1999 and A1:2006,
- EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006,
- IEC 60092-504:2016,
- IEC 60533:2015.

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
 - Example: 0575/2025



APPENDIX Type Examination documentation

Certificate no.: MEDB00003UH Revision no.: 3

Document No.	Rev.	Title	
E12195.00	2013-02-27 Envir. and EMC test report for BSD-330-Nemko		
P-BS100/HE	E / 2000-08-25 Data sheet: BS-100 DYFI		
Doc-1000415	1 / 2020-11-03	Data sheet: BS-200M, BS-210	
Doc-1000120	1 / 2014-03-20	Data sheet: BSS-310A	
Doc-1000299	2 / 2021-01-25	Data sheet: BC250_CGB	
Doc-1000300	2 / 2022-09-10	Data sheet: BC-420	
Doc-1000302	1 / 2016-05-19 Data sheet: BC-440 / BC440G2		
Doc-1000396	3 / 2022-09-10 Data sheet: BP-405		
Doc-1000398	1 / 2016-05-19	Data sheet: BPS-405	
Doc-1000400	1 / 2021-03-11 Data sheet: BPS-410		
Doc-1000417	1 / 2019-03-06 Data sheet: BS-211		
Doc-1000419	2 / 2022-09-10 Data sheet: BS-420		
Doc-1000422	1 / 2022-09-10	Data sheet: BS-430	
Doc-1000424	4 / 2022-05-18	Data sheet: BSB-310A	
Doc-1000427	2 / 2022-01-25	Data sheet: BSD-310 / BSD-311	
Doc-1000431	1 / 2013-05-22	Data sheet: BSD-330	
Doc-1000436	1 / 2011-03-30	Data sheet: BSE-310	
Doc-1000438	1 / 2011-06-14	Data sheet: BSE-320	
Doc-1000442	1 / 2011-06-07	Data sheet: BSL-310	
Doc-1000458	1 / 2010-11-24	Data sheet: BSS-311	
Doc-1000463	1 / 2019-03-06	Data sheet: BU-210	
Doc-1000467	1 / 2022-09-10	Data sheet: BU-BV-420	
Doc-1000550	2 / 2018-03-13	Data sheet: BUR-200	
Doc-1000554	1 / 2019-03-06	Data sheet: BV-210	
Doc-1005052	1 / 2018-11-12	Report: Applica, No. 21439, IEC60092-504:2016, AutroSafe 4	
Doc-1010849	1 / 2009-12-21	Report: DNV, No. 2009-3691 Rev.6, IEC60092-504, AutroSafe 4	
Doc-1016930	1 / 2008-08-05	Report: Nemko, No. 86445_3 Rev.2, EN54- 2:1997+AC:1999+A1:2007, BS-200, BS-200L, BS-200M, BS-210, BS-211, BU-210, BU-211, BV-210, BUR-200	
Doc-1016931	1 / 2008-08-05 Report: Nemko, No. 86445_4 Rev.2, EN54- 4:1997+AC:1999+A1:2002+A2:2006, BS-200, BS-200L, BS-200M BS-210, BS-211, BU-210, BU-211, BV-210, BUR-200		
Doc-1016935	1 / 2013-06-06	1 / 2013-06-06 Report: Nemko, No. E07357.05, IEC60092-504:2001, BS-200M, BC-250, BS-211, BU-210, BV-210, BUR-200	
Doc-1016936	1 / 2019-01-31	Report: Nemko, No. E18299.00, IEC60092-504:2016, BS-200M, BS-211, BC-250, BU-210, BV-210, BUR-200	
Doc-1018139	1 / 2009-12-11	Report: DNV, No. 2009-3664, EN54-2, EN54-4, AutroSafe 4	
Doc-1018143	1 / 2012-01-30	Report: DNV, No. 2010-3355 Rev.2, IEC60092-504, BPS-405, BPS- 410	
Doc-1019072	1 / 2010-02-19	Report: DNV, No. 2009-3710, EN54-2, EN54-4, AutroSafe Release 4	
Doc-1019073	1 / 2011-01-03	Report: DNV, No. 2010-3386, EN54-4, BPS-405, BPS-410	

DNV		Certificate no.: MEDB00003UH Revision no.: 3
Doc-1019180	1	Report: NEMKO. Test Report –EN 54-4:1997 + Corrigendum AC:1999 + A1:2002 + A2:2006, BS-200, BS-200S, BS-200M and BC-250
Doc-1019182	1	Report: NEMKO Test Report IACS E10 Rev.7:2018, IEC 60533:2015, IEC 60092-504:2016, Fire Alarm Panel, Autroprime BS-200M
Doc-1029640	1	Report: NEMKO Test Report BS-200, BS-200S, BS-200M and BC- 250 EN 54-2:1997 + AC:1999 + A1:2006, EN 54-4:1997 + AC:1999 + A1:2002 + A2:2006, EN 55032:2015, EN IEC 61000-3-2:2019, EN 61000-3-3:2013 + A1:2019, EN 50130-4:2011 + A1:2014
Doc-1018463	1	Report: NEMKO Test Report – EN 54-2 :1997 + Corrigendum AC:1999 + A1:2006, BS-200, BS-200S, BS-200M and BC-250