

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000014H
Revision No:
1

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 Fire alarm devices - Sounders

with type designation(s)
Interactive sounding devices

Issued to

Autronica Fire and Security AS
Trondheim, Norway

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

Regulation (EU) 2020/1170,

item No. MED/3.53. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IMO MSC.1/Circ.1242 and IMO MSC.1/Circ.1487

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

This Certificate is valid until **2023-08-12**.

Issued at **Høvik** on **2021-05-26**

DNV local station:
Norway CMC, Mid-North

Approval Engineer:
Nils Jarem



Notified Body
No.: **0575**



for **DNV AS**

Digitally Signed By: Alonso Pontes, Marta
Location: DNV Høvik, Norway
on behalf of

Sverre Olav Bergli
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 300,000 USD.



Product description

This certificate comprises fire alarm sounders in a fixed installation intended to signal an audible warning of fire between a fire alarm system and the occupants of the vessel. The devices derive their operating power by means of a physical electrical connection to an external source as a fire alarm system. The sounder provides different advanced sound patterns according to configuration. All sounders within the same loop will have synchronized sound outputs, so two sounders located near each other will be perceived as one. The maximum number of sounders on a detection loop must be calculated according to the limitation of the system in question. All devices are designed for use with Autronica's interactive fire alarm system.

BBQ-130

BBQ-130 is a combined detector base and addressable sounder/strobe that is connected directly to the detection loop. Sound output on 80 / 90 dB(A) @ 1m, designed for indoor applications (type A).

BBR-130

BBR-130 is a combined detector base and addressable sounder that is connected directly to the detection loop. Sound output on 80 / 90 dB(A) @ 1m, designed for indoor applications (type A).

BBR-230

BBR-230 is an addressable sounder that is connected directly to the detection loop. Sound output on 90 / 100 dB(A) @ 1m, designed for indoor applications (type A).

BBR-230/IP

BBR-230/IP is an addressable sounder that is connected directly to the detection loop. Sound output on 90 / 100 dB(A) @ 1m, designed for outdoor applications (type B).

BBQ-230

BBQ-230 is a addressable sounder/strobe that is connected directly to the detection loop. Sound output on 90/ 100 dB(A) @ 1m, designed for indoor applications (type A).

BBQ-230/IP

BBQ-230/IP is an addressable sounder/strobe that is connected directly to the detection loop. Sound output on 90 / 100 dB(A) @ 1m, designed for outdoor applications (type B).

BBR-110

BBR-110 is a combined detector base and addressable sounder that is connected directly to the detection loop. Sound output on 86 dB(A) @ 1m, designed for indoor applications (type A).

BBR-200

BBR-200 is an addressable sounder that is connected directly to the detection loop. Sound output on 100 dB(A) @ 1m, designed for indoor applications (type A).

Following sub models are included: BBR-200, BBR-200/W, BBR-200/NL, BBR-200IP and BBR-200IP/NL.

Application/Limitation

MODEL	TEMPERATURE	VIBRATION	EMC	ENCLOSURE (IP)
BBQ-130	TEM-B	VIB-B	EMC-B	ENC-A2
BBR-130	TEM-B	VIB-B	EMC-B	ENC-A2
BBR-230	TEM-B	VIB-B	EMC-B	ENC-A2
BBR-230/IP	TEM-D	VIB-B	EMC-B	ENC-C
BBQ-230	TEM-B	VIB-B	EMC-B	ENC-A2
BBQ-230/IP	TEM-D	VIB-B	EMC-B	ENC-C
BBR-110	TEM-B	VIB-B	EMC-B	ENC-A1
BBR-200	TEM-D	VIB-B	EMC-B	ENC-B (BBR-200, BBR-200/W, BBR-200/NL) ENC-C (BBR-200IP and BBR-200IP/NL)

Definition of the location classes with reference to relevant standards:

Temperature

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-B For eq. on reciprocating machines etc. (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-A1 Dry control room, accommodation (IP20) (ref. IEC 60092-201 table 5)
ENC-A2 Control room, accommodation, bridge (IP22) (ref. IEC 60092-201 table 5)
ENC-B Engine room (IP44) (ref. IEC 60092-201 table 5)
ENC-C Outdoor (IP56) (ref. IEC 60092-201 table 5)

Type Examination documentation

Equipment	Scope	Document	No.
BBQ-130	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBQ130, Rev. C, 2014-06-25	17
BBR-130	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBR130, Rev. B, 2011-02-21	18
BBR-230	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBR230, Rev. B, 2011-02-21	19
BBR-230/IP	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		Abtest Limited, ENV778, dated 2007-02-05	23
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBR230IP, Rev. B, 2011-02-21	20
BBQ-230	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBQ230, Rev. C, 2014-06-25	21
BBQ-230/IP	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
		Abtest Limited, ENV778, dated 2007-02-05	23
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBQ230IP, Rev. C, 2014-06-25	22
BBR-110	EN 54-3	BRE, Test Report, TE 220788 dated 2005-06-29	3
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
	Product data	Autronica, DS, 116-P-BBR110, Rev. C, 2011-09-29	12
BBR-200	EN 54-3	BRE, Test Report, TE 221656 dated 2005-08-18	4
	IEC 60092-504, IEC 60533	DNV, Test Report, 98-1390 rev.01	5
		DNV, Test Report, 99-1491 rev.02	6
		DNV, Test Report, 2001-3252 rev.01	7
		NEMKO, Test Report, E18217.00 rev.00 dated 2018-11-15	24
	Product data	Autronica, DS, 116-P-BBR200, Rev. F, 2011-09-29	13

Tests carried out

- IEC 60092-504 (2016)
- IEC 60533 (2015)
- EN 54-3 (2014)

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: 0575/2021