



TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000014H
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 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 **MSN 1874 Amendment 9,**

item No. UK/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 **2028-11-14**.

Issued at **London** on **2024-06-28**

DNV local unit:
East & South Norway CMC



for **DNV UK Ltd.**

Approval Engineer:
Ståle Sneen

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

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 60092-201:1994 table 5)
- ENC-A2 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 Outdoor (IP56) (ref. IEC 60092-201:1994 table 5)

Type Examination documentation

Equipment	Scope	Document	No.
BBQ-130	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000274 rev.4, 2021-05-19	17
BBR-130	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000282 rev.2, 2021-05-19	18
BBR-230	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000286 rev.3, 2021-05-19	19
BBR-230/IP	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000288 rev.2, 2021-05-19	20	
BBQ-230	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000276 rev.2, 2021-05-19	21
BBQ-230/IP	EN 54-3	BRE, Test Report, TE 243617 dated 2010-10-15	16
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000278 rev.2, 2021-05-19	22	
BBR-110	EN 54-3	BRE, Test Report, TE 220788 dated 2005-06-29	3
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	IEC 60092-504, IEC 60533	DNV, Test Report, 2010-3107 rev.01	15
	Product data	Autronica, Doc-1000280 rev.1	12
BBR-200	EN 54-3	BRE, Test Report, TE 221656 dated 2005-08-18	4
		Autronica, Technical assessment, Doc-1011320 rev.1 2023-09-19	26
	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, Doc-1000284 rev.2	13	

Tests carried out

- EN 54-3:2014 incl. A1:2019,
- IEC 60092-504:2016,
- IEC 60533:2015.



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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 (UK Conformity mark), followed by
 - identification number of the NoBo involved in production control (MER D)
 - the year the mark is affixed
 - Example: 0097/2024