



Type Approval Certificate

[Sounders and Strobes]

Initial Approval 26 December 2012
Manufacturer Eaton Electrical Products Ltd.
 Llantarnam Park, Cwmbran, NP44 3AW, United Kingdom

Product Description Type : BBR, BBQ, BBL Series

- BBR Series : Sounder
- BBQ Series : Sounder & Strobe
- BBL Series : Beacon

* Intended for : AutoSafe and AutoPrime Fire Detection System

- Applicant : Autronica Fire and Security AS
 Bromstadveien 59, NO-7047, Trondheim, Norway

" See Appendix 1 "

Approval Condition " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships, EN 54-3, EN 54-17, EN 54-23

This Certificate is valid until 25 December 2027

Issued at Busan, Korea on 25 October 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23047128362) and certificate No.(LDN37868-FD001).



KOREAN REGISTER

*General Manager of
 Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 25 October 2023

A. Product Descriptions

1. Sounder

- 1) BBR-130
 - Sounder with base intended for indoor use
 - Configurable sound pattern
 - High/low volume setting(93 dB and 80 dB)
 - Enclosures Protection IP22
- 2) BBR-230, BBR-230/IP
 - Sounder intended for indoor use
 - Configurable sound pattern
 - High/low volume setting(103 dB and 90 dB)
 - Short circuit isolator in each unit
 - Enclosures Protection IP42 (BBR-230)
 - Enclosures Protection IP66 (BBR-230/IP)

2. Sounder / Strobe

- 1) BBQ-130
 - Sounder/strobe with base intended for indoor use
 - Automatic addressing
 - Configurable sound pattern
 - High/low volume setting (93 dB and 80 dB)
 - Enclosures Protection IP22
- 2) BBQ-230, BBQ-230/IP
 - Sounder/Strobe intended for indoor use
 - Configurable sound pattern
 - High/low volume setting (103 dB and 90 dB)
 - Enclosures Protection IP42 (BBQ-230)
 - Enclosures Protection IP66 (BBQ-230/IP)

3. Beacon

- 1) BBL-100, BBL-100/IP
 - Beacon for indoor use
 - 2 Candela output
 - Enclosures Protection IP32 (BBL-100)
 - Enclosures Protection IP66 (BBL-100/IP)

B. Documentation

1. Test Reports

- BRE Test Report No. TE 220788, TE243617 (EN 54-3 & EN 54-17)
- DNV Test report No. 2010-3107, rev.1 (URE 10 & IEC 60945)
- NEMKO Test Report No. E18217.00
- Intertek Test Report No. 103747439LHD-021

2. Data Sheet

- BBR-130 : Doc-1000282-2, 2021-05-19
- BBR-230 : Doc-1000286-3, 2021-05-19
- BBR-230/IP : Doc-1000288-2, 2021-05-19
- BBQ-130 : Doc-1000274-4, 2021-05-19
- BBQ-230 : Doc-1000276-2, 2021-05-19
- BBQ-230/IP : Doc-1000278-2, 2021-05-19
- BBL-100 : 116-P-BBL100/CGB, Rev. C, 2014-06-25

C. Approval Condition

1. Application and Limitation

- 1) This approval is granted on the basis of the approved documentation and the test reports. (IACS UR E10 Rev.7)
- 2) Unless specifically directed by the Administration, this approval is not to be interpreted as a replacement for approval from the flag Administration. This certificate may not be used for Korea flagged vessels.
- 3) The product or packing is to be marked with the applicant's name and type designation on a suitable position.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is not required.

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