



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Autronica Fire & Security AS
Address	Bromstadvegen 59, Trondheim, 7047, Norway
Place of Production	Autronica Fire & Security AS Bromstadvegen 59, Trondheim, 7047, Norway
Type	Fire Detection Alarm Systems
Description	Sounders and strobes for fire detection systems, AutoSafe and AutoPrime
Trade Name	BBL-100, BBL-100/IP, BBR-130, BBR-230, BBR-230/IP, BBQ-130, BBQ-230, BBQ-230/IP
Application	Marine, Offshore and Industrial applications for use in environmental categories ENV1, ENV2 and ENV3, as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – December 2021.
Specified Standard	EN 54-3: 2014 +A1: 2019 EN 54-17: 2005 EN 54-23: 2010 (BBQ-230/ BBQ 230/IP) IEC 60092-504: 2016 IACS UR E10 Rev. 8: 2021

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Matthias Karg

Electrical & Control - Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Type Approval Certificate

Ratings	Software version: 1.6
Additional Tests	Low temperature test: -15 °C/16 h Flame retardant Acoustic noise and signals Compass safe distance Degree of protection (with cables / glands where specified): IP22: BBR-130, BBQ-130 IP32C: BBL-100 IP42: BBR-230, BBQ-230 IP44D: BBR 230/IP, BBQ-230/IP IP54: BBR 230/IP, BBQ-230/IP IP66: BBL-100/IP
Other Conditions	For systems consisting of the listed components the final functional arrangement and application software are to comply with appropriate Lloyd's Register Rules and Regulations and shall be subject to project related Plan Approval Process, when installed on LR classed vessels. Documents and drawings for the actual application are to be provided according relevant LR Rules and Regulations. Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: This certificate supersedes certificate number LR2004282TA issued on

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Type Approval Certificate

18 June 2020 which is hereby cancelled.

The Design Appraisal Document TSO/24-013805 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

