

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
Type	Fire Detection Alarm Systems
Description	Sounders and strobes for fire detection and alarm systems AutoSafe 4 and AutoPrime 2
Trade Name	BBL-100, BBL-100/IP, BBR-130, BBQ-130, BBQ-230, BBQ-230/IP, BBR-230, BBR-230/IP
Application	Marine, offshore and industrial applications suitable for use in environmental categories ENV1, ENV2 and ENV 3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – March 2019
Specified Standard	IEC 60092-504: 2016 EN 54-3: 2014 EN 54-17: 2006 EN 54-23: 2010(BBQ-230/ BBQ 230/IP)
Additional Tests	Low temperature test: -15°C/16 hrs Flame retardant Acoustic noise and signals Compass safe distance

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Degree of protection:
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

With cables / glands where specified
Systems comprising the components described above are subject to a separate plan appraisal according to applicable Rules and Regulations when installed on LR classed vessels.

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.

The Design Appraisal Document No. HTS/ETS 39459 -20 AHB/TW/AC and its supplementary Type Approval Terms and Conditions form part of this Certificate.