



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	IR flame detector for fire detection systems, AutoSafe or AutoPrime.
Trade Name	BG-201, BG-301, BG-301-EXIA, BG-301-EXIC
Application	Marine, Offshore and Industrial applications for use in environmental categories ENV2, ENV3 and ENV5, as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – July 2024.
Specified Standard	EN 54-10: 2002 +A1: 2005 EN 54-17: 2005 IEC 60092-504: 2016 IACS UR E10 Rev. 9: 2023

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

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Ratings	Software versions: BG-201: 1.9 BG-301: 1.1.x (x = minor changes, e.g. bug fixes)
Additional Tests	IP66 / IP67 acc. to IEC 60529: 2013
Other Conditions	<p>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.</p> <p>Specific Conditions of Use as stated in applicable Ex-certificates and the conditions of the LR Ship Rules & Regulations of Classification of Ships Part 6, Chapter 2 shall be observed when installed in hazardous areas. The Ex-certification does not form part of this certificate.</p> <p>Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.</p> <p>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.</p>

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 LR2466210TA issued on 05 June 2024 which is hereby cancelled.

The Design Appraisal Document TSO/24-021699 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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