

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	AutroGuard interactive fire detectors and accessories V-430 multicriteria protector mounted on standard base V-100 V-530 multicriteria protector mounted on base V-110 / V-120 BWP-100/20/AG and BWP100/25/AG – conduit box For detailed product description, pls. refer to appendix.
Trade Name	V-430, V-530, V-100, V-110, V-120, BWP-100/AG
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 – March 2019.
Specified Standard	IACS E10 Rev. 8 / 2021 IEC 60092-504: 2016 EN 54-3: 2014 +A1: 2019 (sounders) EN 54-5: 2017+A1: 2018 (heat detector)

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EN 54-7: 2018 (smoke detector)
EN 54-17: 2005 (short circuit isolator)
EN 54-23: 2010 (visual alarm devices)
EN 54-29: 2015 (multi-sensor fire detectors)

Ratings

Operating temperature: -25 °C to +70 °C
Ingress protection IP 44 (V-430 / V-530)
Ingress protection IP 50 (BWP-100/AG)

SW versions: 1.9.4
HW versions:
V-430series (BHA-1004) ver. 2.5
V-530series (BHA-1003) ver. 1.6
V-100 (BWA-1002) ver. 1.12
V-110 (BWA-1003) ver. 1.14
V-120 (BWA-1001) ver. 1.23

Additional Tests

Low temperature test: -25 °C / 2 h

Other Conditions

Systems comprising the component described above are subject to a separate plan appraisal process according to applicable Rules and Regulations when installed on LR classed vessels.

The Ex-certification and SIL2-Certification related to V-530 series do not form part of this Type Approval Certificate and have not been verified by Lloyd's Register.

Ex-installations are to be approved in each case according to the LR Rules and Regulations.

The requirements of the Ex-Certification / SIL2-Certification and the dedicated Special Condition for Safe Use stated in applicable and valid Ex-certificate issued by a notified/recognized Certification Body are to be observed when installed in hazardous area and to be verified during plan approval process.

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The EXia detectors shall be supplied by the Autronica interface and shunt protection unit, BZ-500.

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 LR2205382TA issued on 10 January 2022 which is hereby cancelled.

The Design Appraisal Document HTS/ETS 42094-22/MK/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Appendix

DESCRIPTION

AutroGuard – interactive fire detectors

AutroGuard® V-430 multicriteria protector series

- V-430-S AutroGuard® multicriteria protector
- V-430-VADW AutroGuard® multicriteria protector with white visual alarm device (VAD)
- V-430-VADR multicriteria protector with red visual alarm device (VAD)
- V-430-S-VADW multicriteria protector with sounder and white VAD
- V-430-S-VADR multicriteria protector with sounder and red VAD

AutroGuard® V-100 standard base for protector series V-430

AutroGuard® V-530 multicriteria protector series with SIL2 approval (multi / heat only / smoke only)

- V-530 multicriteria protector with SIL2 approval
- V-530-EXIA multicriteria protector with SIL2 approval
- V-530-EXIC multicriteria protector with SIL2 approval
- V-530-S-VADW multicriteria protector (without SIL2 approval) with sounder and white VAD

AutroGuard® V-110 and V-120 bases for protector series V-530

- V-110 SIL2 base, with external LED output
- V-120 Ex ia/Ex ic SIL2 base, without external LED output

AutroGuard® sound pressure levels for tones (acc. to EN 54-3)

AutroGuard® BWP-100/20/AG and BWP100/25/AG conduit box