

[1]

TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] Type Examination Certificate Number: **DNV 22 ATEX 13772X** **Issue 2**

[4] Product: **Fire detector**

[5] Manufacturer: **Autronica Fire and Security AS**

[6] Address: **Bromstadvegen 59
7047 Trondheim
Norway**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 and EN 60079-11:2012

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured

[12] The marking of the product shall include the following:

 **II 3 G Ex ic IIB T5 Gc -30°C ≤ Ta ≤ +70°C**

Date of issue:
2024-12-17

Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



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| [13] | Schedule | | |
| [14] | Type Examination Certificate No: | DNV 22 ATEX 13772X | Issue 2 |

[15] **Description of Product**

AutoGuard multicriteria protector (V-530-EXIC or V-530-EXIC/HS mounted to V-120). The product is an assembly of two parts, base and detector.
The base includes a PCBA with terminals for external connections.
The detector board is mounted in the detector and have connections to the base PCBA.
The bases may alternatively be mounted on the box BWP-100 (not a part of the certificate).
The detectors shall be supplied by the Autronica detector loop driver module, BSD-310/N, which is intended to be mounted in the Autosafe Fire Alarm Control panel and connected to the power supply BSS-310A (in non-hazardous area). The loop driver is certified in Nemko 03ATEX217X.
AutoGuard protectors can be used as a replacement for AutoSafe detectors, by mounting adapter V-120/RETRO on AutoGuard. We then have a complete spare part that can replace Autronica legacy detectors 1 to 1.
(BWA-1101 Assembled PCB 128kB (base) can be used instead of AutoGuard Multicriteria Protector V-120-EXIA (base), as circuit is equal. Only layout is changed.)

AutoGuard multicriteria protector can be mounted inside AIR DUCT SAMPLING UNIT BWP-143A-SS/AG and then used as a set.

Type designation

AutoGuard Multicriteria Protector V-530-EXIC
AutoGuard Multicriteria Protector V-530-EXIC/HS (high sense variant) *
AutoGuard Multicriteria Protector V-120 (base)

AIR DUCT SAMPLING UNIT BWP-143A-SS/AG

V-120/RETRO (adapter for base)**
AutoGuard Retro EXIC model names:
V-530-EXIC/BD500, V-530-EXIC/BH500, V-530-EXIC/HS/BH500, V-530-EXIC/BH520

* Only software changes between V-530-EXIC and V-530-EXIC/HS.

** Only layout changes between V-120 and V-120/RETRO.

Intrinsic Safety Data

Only to be connected to BSD-310/N and BSS-310A certified in Nemko 03ATEX217X

Number of detectors that can be connected in parallell: 127

Maximum capacitance in cable: 1,9µF

Ambient temperature:

-30°C to +70°C

Routine tests

None

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|------|---|
| [16] | Report No.: PRJN-330268-2021-PA-NOR/02 |
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[17] Specific Conditions of Use

1. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
2. The detector shall only be supplied by power supply BSS-310A and loop driver BSD-310/N, certified in Nemko 03ATEX217X, according to control drawing Doc-1005104.
3. Max. airflow duct speed = 9 m/s.
4. The maximum pressure increase in the duct adapter is 0.0152 bar, which lead to the maximum ambient pressure where the BWP-143A-SS/AG with detector can be installed in is 1.1 bar – 0.0152 bar = 1.0848 bar.

[18] Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

| Drawing No. | Name/Title | Rev. | Date |
|---------------|--|------|------------|
| Doc-1003067 | Circuit Diagram Detector Board | 6 | 2021-10-25 |
| Doc-1003195 | PCB Specification Detector Board | 11 | 2021-06-12 |
| Doc-1003194 | PCB Layout Detector Board | 11 | 2022-06-12 |
| Doc-1003185 | Assembly Drawing Top and Bottom Side Detector Board | 11 | 2021-06-11 |
| Doc-1005106 | TYPE LABEL laser engraved AutoGuard protector, rear side | 3 | 2023-02-20 |
| Doc-1005105 | TYPE LABEL - Ex information AutoGuard protector V-530-EXIC Laser engraved, front | 3 | 2023-02-20 |
| Doc-1003792 | BHA-1000 series Coating drawing | 3 | 2023-03-30 |
| Doc-1003823 | Detector exploded view | 2 | 2022-01-17 |
| 116-10000919 | Bill of Material Detector Board | 2.4 | 2021-06-16 |
| 116-100001930 | Bill of Material Detector Board (alternative to 116-10000919) | 1.4 | 2022-01-12 |
| Doc-1005104 | *Control Drawing / User manual Technical specifications and instructions | 4 | 2024-12-11 |
| Doc-1003152 | Circuit Diagram Socket Board | 6 | 2021-10-25 |
| Doc-1003193 | PCB Specification Socket Board | 4 | 2018-12-03 |
| Doc-1003192 | PCB Layout Socket Board | 4 | 2018-12-03 |
| Doc-1003181 | Assembly Drawing Top Side Socket Board | 4 | 2018-12-03 |
| Doc-1003795 | TYPE LABEL - Ex information AutoGuard protector base V-120 Laser engraved | 5 | 2023-02-20 |
| Doc-1003793 | BWA-1000 series Coating Drawing | 3 | 2023-03-30 |
| Doc-1003824 | Socket exploded view | 2 | 2022-01-17 |
| 116-100000429 | Bill of Material Socket Board | 1.6 | 2021-05-12 |
| 116-100001931 | Bill of Material Socket Board (alternative to 116-100000429) | 1.6 | 2022-01-12 |
| Doc-1003258 | AutoGuard compatible socket board, AutoGuard Retro, circuit diagram | 3 | 2021-10-21 |
| Doc-1004973 | PCB specification and Gerber files, AutoGuard Retro | 2 | 2022-06-03 |

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|---------------|---|-----|----------------------------|
| Doc-1004944 | Assembly drawing top and bottom side AutoGuard Retro socket board | 2 | 2022-06-03 |
| Doc-1005257 | BDH-500/N/SPARE TYPE LABEL (rear side) | 1 | 2023-02-20 |
| Doc-1005259 | BHH-500/N/SPARE TYPE LABEL (rear side) | 1 | 2023-02-20 |
| Doc-1005261 | BHH-500/S/N/SPARE TYPE LABEL (rear side) | 1 | 2023-02-20 |
| Doc-1005263 | BHH-520/N/SPARE TYPE LABEL (rear side) | 1 | 2023-02-20 |
| Doc-1005099 | Coating Drawing | 2 | 2023-02-20 |
| Doc-1005494 | All AutoGuard Retro models, Exploded view | 1 | 2023-02-20 |
| 116-100000468 | Bill of Material AutoSafe compatible socket board | 1.3 | 2022-06-09 |
| Doc-1001810 | *UG-817 | 3 | 2024-09-02 |
| Doc-1004540 | *BWP-143A-SS/AG Type label | 2 | 2024-09-03 |
| Doc-1028339 | *Numerical simulations result for BWP-143A-SS/AG | 1 | 2024-03-29 / 2024-05-29 |

*Note: An * is included before the title of documents that are new or revised.*

[20] Certificate History

| Issue | Description | Issue date | Report no. |
|-------|--|------------|----------------------------|
| 0 | Original issue | 2022-05-16 | PRJN-330268-2021-PA-NOR |
| 1 | Updated to include pcb BWA-1101 Assembled PCB 128kB (base) - V-120/RETRO. | 2023-05-05 | PRJN-330268-2021-PA-NOR/01 |
| 2 | Added AIR DUCT SAMPLING UNIT BWP-143A-SS/AG as an additional accessory. Corrected a marking error (gas group) in the certificate. Removed precise type of Polycarbonate material from Control Drawing. | 2024-12-17 | PRJN-330268-2021-PA-NOR/02 |

END OF CERTIFICATE