

[1]

EU-TYPE EXAMINATION CERTIFICATE

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

[3] EU-Type Examination Certificate Number: **DNV 21 ATEX 14779X** **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, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 the Directive.

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 EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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

 II 1 G Ex ia IIC T5 Ga -30°C ≤ Ta ≤ +70°C

For use with BWP-143A-SS/AG:

 II 1 G Ex ia IIA T5 Ga -30°C ≤ Ta ≤ +70°C

 II 2 G Ex ib IIB T5 Gb -30°C ≤ Ta ≤ +70°C

Date of issue:
2024-12-13



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



[13]

Schedule

[14]

EU-Type Examination Certificate No:

DNV 21 ATEX 14779X

Issue 2

[15]

Description of Product

AutroGuard multicriteria protector (V530-EXIA or V-530-EXIA/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 interface and shunt protection unit, BZ-500, Nemko 03ATEX230.

AutroGuard protectors can be used as a replacement for AutroSafe detectors, by mounting adapter V-120/RETRO on AutroGuard. 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 AutroGuard Multicriteria Protector V-120 (base), as circuit is equal. Only layout is changed.)

AutroGuard multicriteria protector can be mounted inside AIR DUCT SAMPLING UNIT BWP-143A-SS/AG and then used this set with limited Ex parameters as defined in item 12 and item 17 of this certificate.

Type designation

AutroGuard Multicriteria Protector V-530-EXIA

AutroGuard Multicriteria Protector V-530-EXIA/HS (high sense variant)*

AutroGuard Multicriteria Protector V-120 (base) and V-120/AP (base)*

Air Duct Sampling Unit BWP-143A-SS/AG

V-120/RETRO (adapter for base)**

AutroGuard Retro EXIA model names:

V-530-EXIA/BD500, V-530-EXIA/BH500, V-530-EXIA/HS/BH500, V-530-EXIA/BH520

* Only software changes between V-530-EXIA and V-530-EXIA/HS, and between V-120 and V-120/AP and V-120/RETRO

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

Intrinsic Safety Data

Ui: 15,75V

Ii: 63,5mA

Pi: 0,44W

Ci: 4,4nF

Li: Negligible

Number of detectors that can be connected in parallel: 32

Maximum capacitance in cable: 302nF

Ambient temperature:

-30°C to +70°C

Routine tests

None

[16] **Report No.:** PRJC-599604

[17] **Specific Conditions of Use**

1. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
2. Max. airflow duct speed = 9 m/s.
3. 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.
4. When detector is used together with the BWP-143A-SS/AG then the set shall be mounted with one of the two limited Ex parameters as mentioned on the BWP-143A-SS/AG nameplate, to be selected by the user:



[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

Number	Title	Rev.	Date
Doc-1003152	Circuit Diagram Socket Board	6	2021-10-25
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	2021-06-12
Doc-1003185	Assembly Drawing Top and Bottom Side Detector Board	11	2021-06-11
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 and Bottom Side Socket Board	4	2018-12-03
Doc-1003794	Type Label laser engraved AIO Detector, rear side	5	2023-04-12
Doc-1003788	Type Label - Ex information AIO detector V-530-EXIA Laser engraved, front	4	2023-04-12
Doc-1005256	BDH-500/EX/SPARE TYPE LABEL (rear side)	1	2023-04-12
Doc-1005258	BHH-500/EX/SPARE TYPE LABEL (rear side)	1	2023-04-12
Doc-1005260	BHH-500/S/EX/SPARE TYPE LABEL (rear side)	1	2023-04-12
Doc-1005262	BHH-520/EX/SPARE TYPE LABEL (rear side)	1	2023-04-12
Doc-1003795	Type Label - Ex information Base AIO detector V-120 Laser engraved	5	2023-02-20
Doc-1003792	BHA-1000 series Coating drawing	3	2023-03-30
Doc-1003793	BWA-1000 series Coating drawing	3	2023-03-30
Doc-1003823	Detector explode view	2	2022-01-17
Doc-1003824	Socket exploded view	2	2022-01-17
116-100000919	Bill of Material Detector Board	2.4	2021-06-16
116-100000429	Bill of Material Socket Board	1.6	2019-10-18

Doc-1003796	*Control Drawing / User manual Technical specifications and instructions	7	2024-12-11
Doc-1003258	AutroGuard compatible socket board, AutroGuard Retro, circuit diagram	3	2021-10-21
Doc-1004973	PCB specification and Gerber files, AutroGuard Retro	2	2022-06-03
Doc-1004944	Assembly drawing top and bottom side AutroGuard Retro socket board	2	2022-06-03
Doc-1005099	Coating Drawing	2	2023-02-20
Doc-1005494	All AutroGuard Retro models, Exploded view	1	2023-02-20
116-10000468	Bill of Material AutroSafe 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
Doc-1028770	*Type Label - Ex information Autroprime base for Autroguard V-120/AP Laser engraved	2	2024-12-15

*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	2021-11-11	D0003939
1	Updated to include pcb <i>BWA-1101 Assembled PCB 128kB</i> (base) - V-120/RETRO. New alternative plastic material for use in enclosures.	2023-05-31	PRJC-599604-2019-PRC-NOR/01
2	Change of details: 1) Added AIR DUCT SAMPLING UNIT BWP-143A-SS/AG as an additional accessory. 2) Added V-120/AP base. 3) Removed precise type of Polycarbonate material from Control Drawing.	2024-12-11	PRJC-599604-2019-PRC-NOR/02

END OF CERTIFICATE