



## [1] EU-TYPE EXAMINATION CERTIFICATE

### [2] Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU Annex III - MODULE B: EU-TYPE EXAMINATION

[3] EU-type Examination Certificate number: **IMQ 11 ATEX 034 X**

[4] PRODUCT: **Volume converter – pressure datalogger**  
TYPE/SERIES: **G2P**

[5] MANUFACTURER: **Automa S.r.l.**

[6] ADDRESS: **Via Casine di Paterno 122/A – I-60131 Ancona (AN)**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to

[8] IMQ, notified body N° 0051, in accordance with Article 17 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 equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in Report No.:

**AT21-0061541-01 ; AT19-0041508-01 ; AT17-0018786-01 ; AT16A0620432-01 ; 43AL00041.1 ; 43AL00041**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

**EN IEC 60079-0:2018; EN 60079-11:2012**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate

[11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. 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 equipment or protective system shall include the following:



**II 2 G Ex ib IIB T3 Gb**

This document is composed of 5 pages including 1 annex

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B.U. PRODUCT CONFORMITY ASSESSMENT  
CERTIFICATION SECTOR – MANAGER

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PRD N° 005 B

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Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 11 ATEX 034 X**

[15] **Description of product:**

**G2P** volume converter is an intrinsically safe device for measuring and correcting gas flow, and storing of physical quantities such as temperature, pressure and flow rate

[15.1] **Models/Series Identification:**

Volume converter: G2P-CV  
Pressure datalogger: G2P-DL

For both above models, the following versions are available:

- BAT (supplied by battery),
- HID (with keyboard and display),
- EXP (with expansion module),
- ALI (supplied by battery pack G2P-PB7430-E)

[15.2] **Ratings: -**

[15.3] **Safety Ratings:**

**Battery pack G2P-PB7430**

Rated voltage:	7,2 V
Maximum open circuit voltage:	7,8 V
Cell type:	Li/SOCl <sub>2</sub> (Size D) – 2 cells in series
Capacity:	19 Ah
Manufacturer / Model:	TADIRAN / SL-2780
Cell type:	HLC (Hybrid Layer Capacitor) – 2 cells in series
Capacity:	560 As @ 3,67 V
Manufacturer / Model:	TADIRAN / HLC-1550

**Battery pack G2P-PB7430-E (for ALI model)**

Rated voltage:	7,2 V
Maximum open circuit voltage:	7,8 V
Cell type:	HLC (Hybrid Layer Capacitor) – 2 cells in series
Capacity:	560 As @ 3,67 V
Manufacturer / Model:	TADIRAN / HLC-1550
	or
Cell type:	SPC (Super Pulse Capacitor) – 2 cells in series
Capacity:	560 As @ 3,67 V
Manufacturer / Model:	EVE / SPC-1550

[13] **Annex**

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**Backup battery**

Rated voltage: 3 V  
 Maximum open circuit voltage: 3,7 V  
 Cell type: Li/MnO<sub>2</sub> (Lithium coin)  
 Capacity: 58 mAh  
 Manufacturer / Model: ENERGIZER / CR2012

Channels		Safety parameters				
		Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]
Signal Repeater (CN-OUT)		5.88	12.6	18.6	500	300
		Ui [V]	Ii [mA]	Pi [mW]	Ci [µF]	Li [mH]
		7.14	15.2	27	~0	~0
RS485		Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]
		5.88	19.8	29.1	500	460
		Ui [V]	Ii [mA]	Pi [mW]	Ci [µF]	Li [mH]
	6.4	21.1	33.8	~0	~0	
Pulse emitter (CN-I)		Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]
		5.88	12.6	18.6	500	300
Only EXP model	4-20mA signal transmitter (CN-A)	Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]
		12.84	37	475.1	6.5	80
		Ui [V]	Ii [mA]	Pi [mW]	Ci [µF]	Li [mH]
	30	200	900	0,01	~0	
	Insulated on/off signal (CN-IN-ISO)	Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]
		28.9	8.4	60.7	0.6	300
Signal repeater (CN-OUT)	Uo [V]	Io [mA]	Po [mW]	Co [µF]	Lo [mH]	
	7.2	15.5	27.9	240	300	

[15.4] **Ambient temperature and temperature classes:**

Ambient temperature: -20 °C ÷ +60 °C

Temperature class: T3

[15.5] **Degree of protection (IP code):** IP67 (according to EN 60529 only)

[15.6] **Warnings:**

On the label, "WARNING – USE ONLY AUTOMA srl BATTERIES – SEE INSTRUCTIONS"

[16] **Report:**

AT21-0061541-01 ; AT19-0041508-01 ; AT17-0018786-01 ; AT16A0620432-01 ; 43AL00041.1 ; 43AL00041

## [13] Annex

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### [16.1] Routine (factory) tests:

The manufacturer shall carry out the routine test prescribed at clause 27 of the EN 60079-0

### [16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters,
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results

### [16.3] Installation conditions:

Above referred equipment is foreseen to be installed in locations where there are environmental conditions as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals requires special considerations and additional measures by the side of installer or user. These should be specified to the manufacturer by the user.

It is not required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions. Installation of equipment has to proceed according to EN 60079-14.

Volume converter G2P shall be installed and maintained according to applicable clauses of EN 60079-14 and EN 60079-17 standards, as indicated into relative instructions for use

### [17] Special Condition of use (X):

Pay attention to safety instructions, in particular:

- environmental conditions, suitable to installation of above referred equipment, and their severity,
- corresponding parameters (type, manufacturer, electrochemical system, rated voltage and rated capacity of battery) that allow a correct and safe replacement of the battery

### [18] Essential Health and safety Requirements:

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report:

None

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 11 ATEX 034 X**

[19] **Descriptive documents:**

- DL-43AL00041, rev. 0, dated 2012-05-31,
- DL-43AL00041, rev. 1, dated 2012-09-18,
- DL-AT16A0620432-01, rev. 0, dated 2016-03-31,
- DL-AT17-0018786-01, rev. 0, dated 2018-01-29,
- DL-AT19-0041508-01, rev. 0, dated 2019-10-31,
- DL-AT21-0061541-01, rev. 0, dated 2021-04-12

[20] **Certification Validity Conditions:**

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file

[21] **Variations**

- 2012-09:
- backup battery and enclosure material changed,
  - G2P-PB7430-E battery pack (for ALI model) added, alternatively to G2P-PB7430 battery pack,
  - EXP model added (with expansion module),
  - CAN BUS connection possibility eliminated; RS485 connection possibility added
- 2016-03:
- Standards update,
  - Modem change,
  - Add optional battery EVE SPC1550 for pack G2P-PB7430-E
- 2018-02: Optional modem on additional PCBA
- 2019-11: Optional modem on additional PCBA
- 2021-04:
- Standards update,
  - Optional modem on additional PCBA