



[1] **EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

[3] EU-type Examination Certificate number: **IMQ 15 ATEX 003 X**

[4] PRODUCT: **Transmitter gas concentration**  
TYPE/SERIES: **SX.X....**

[5] MANUFACTURER: **Seitron S.p.A. a socio unico**

[6] ADDRESS: **via del Commercio, 9/11 – 36065 Mussolente (VI) Italy**

[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.:

**AT17-0018340-01**

[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 60079-0:2012 + A11:2013; EN 60079-1:2014; EN 60079-31:2014**

[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 2G**  
**II 2D**

**Ex db IIB+H2 T6 Gb**  
**Ex tb IIIC T85°C Db**

This document is composed of 4 pages including 1 annex

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[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 15 ATEX 003 X**

Description of product:

Transmitter gas concentration SX . X... series are equipment designed to detect the concentration of flammable and toxic gases.

[15] They are composed by a gas sensor detector, housed in a metallic flameproof housing, and protected by a sintered metal element; terminal for electric connections and electronic circuits for amplification/ conversion/ transmission of signal are installed in the metallic flameproof enclosure.

The different types of sensing elements and conversion circuits are given the documents annexed to the certificate. Devices installed inside the enclosure must comply with explosion-proof electrical and dimensional limits specified in the descriptive documents in order to ensure compliance with the declared maximum temperature rise.

Models/Series Identification:

	SX	(1)	X	(2)	(3)	(4)	(5)
	(1)	Tipo di gas / Gas type		(2)	Materiale alloggiamento sensore / Sensor housing material		
	A	NH3 (ammoniacca / ammonia)		1	Alluminio 2011 anodizzato / aluminium 2011 anodised		
	B	C4H10 (butano / butane)		3	Acciaio/Steel AISI 303		
	C	CO (monossido carbonio / carbon monoxide)		6	Acciaio/Steel AISI 316		
	D	H2S (acido solfidrico / hydrogen sulphide)		7	Ferro/Iron AVZ-1		
	G	GPL / LPG					
	H	H2 (idrogeno / hydrogene)		(3)	Fondo scala / Full Scale		
	L	Cl2 (cloro / chlorine)		1	0..500 ppm		
	M	CH4 (metano / methane)		4	0..50% LEL-LIE		
[15.1]	N	NO (ossido di azoto / nitrogen oxide)		6	0..100% LEL-LIE		
	O	O2 (ossigeno / oxygen)		-	Altri / other		
	P	C3H8 (propano / propane)					
	Q	NO2 (biossido di azoto / nitrogen dioxide)		(4)	Interfaccia di uscita / Output interface		
	R	CO2 (anidride carbonica / carbon dioxide)		1	Corrente/Current 4..20 mA		
	S	SO2 (anidride solforosa / sulfur dioxide)		4	S-Bus		
	V	vapori di benzina / petrol vapor		M	Modbus®		
	-	altri / other		-	altri / other		
				(5)	Filettatura imbocco cavi / Cable entry thread		
				0	M25 X 1.5		
				1	3/4" NPT		

The other parts of identification code have not influence on type of protection.

[15.2] Ratings:  $V_{in} = 12...24 V$   
 $P_{max} = 4 W$   
 Functional humidity range: 20%...90% R.H.

## [13] Annex

[14] EU-type Examination Certificate number: **IMQ 15 ATEX 003 X**

[15.3] Safety Ratings: -

Ambient temperature and temperature classes:

[15.4] Tamb: -20°C ÷ +55°C

Temperature class: T6 / T85°C

[15.5] Degree of protection (IP code): IP6X

Warnings:

[15.6] Warning label: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

[16] Report: AT17-0018340-01

[16.1] Routine (factory) tests:

The manufacturer shall carry out the routine test prescribed at clauses 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 request 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 a 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.

Installation and maintenance of transmitter shall be performed according to EN 60079-14 and EN 60079-17, strictly in compliance with details listed in manufacturer's and safety instructions.

Cable glands used for entry into the enclosure shall be certified of minimum category 2GD, mode of protection Ex tb, degree of protection IP65 and suitable for ambient temperature range -20°C÷+55°C.

Periodically clean the apparatus, to avoid dust layers of more than 5 mm.

Special Condition of use (X):

[17] The transmitter shall be installed and used where a protection against risk of high mechanical damage is provided.

## [13] Annex

[14] EU-type Examination Certificate number: **IMQ 15 ATEX 003 X**

[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:  
n/a

[19] Descriptive documents:

DL-AT17-0018340-01, dated 2018-03-29

[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] In accordance with Article 41 of Directive 2014/34/EU, Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. New issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

Variations:

2015, March:

First issue

[22] 2018, April:

- Updating to new edition of standards and to new ATEX Directive (2014/34/UE).
- Added taper threads NPT mod. on the body of the enclosure.
- Updating of company name.