

EU-TYPE EXAMINATION CERTIFICATE [1] [2] Equipment intended for use in potentially explosive atmospheres Directive 2014/34/EU - Annex III Certificate Number: [3] **EPT 20 ATEX 3788 X** issue 0 Equipment: **Gas Sensors & Transmitters** [4] **Explorer RTC & RTE** Manufacturer: [5] Recom Industriale S.r.l. Via Pietro Chiesa, 25-27 r. 16149 Genova (GE) - Italia [6] Address: [7] This equipment and its accepted variations are specified in the annex to this Certificate. Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive [8] 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive. The examination and test results are recorded in the confidential Report N° EPT.20.REL.01/55954

EN IEC 60079-0:2018; EN 60079-1:2014

Compliance with the essential health and safety requirements is assured through the verification of them

- [10] If the sign "X" is placed after the Certificate number, it indicates that the equipment is subject to the special conditions for safe use specified in the annex to this Certificate.
- [11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified equipment. Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment. These requirements are not object of this Certificate.
- [12] The equipment shall include the sign $\langle \xi_{x} \rangle$ and the following string:

II 2G Ex db IIC T6 Gb

and by compliance with the standard:

-20 °C ≤ Ta ≤ +50 °C



[9]

Place and date of issue:

Torino, 2020-11-09

Dionisio Bucchierioduct Testing
Directive Responsible

Paolo Trisoglio Managing Director

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is reproducible only in its entirely. Conditions of validity are reported This Certificate has 5 pages and below.



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ANNEX

issue 0



Equipment description [15]

Gas sensors and transmitters type Explorer RTC & RTE are equipment designed to detect and transmit the concentration value of flammable or toxic gases in ambient air under atmospheric conditions.

They are composed of a gas detector unit and a flameproof enclosure, covered by a separate certificates of component; the gas detector unit is screwed in the enclosure.

The detection unit is able to reveal the gas concentration by means of a breathing element of sintered metal, protecting the sensitive element.

The terminals for electric connections and electronic circuits are installed in the metallic flameproof enclosure.

The data transmission is obtained by means of current loop 4-20 mA or serial RS 485 communication protocol.

The different types of sensing elements and conversion circuits are detailed in the documents annexed to this certificate.

Model Reference

The characteristics of the apparatus are codified according to the following schema:

RTC or RTE

[a]	[b]	[c]	[d]	[e]
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[a]	Gas sensor series:	1	: Explorer		
[b]	Sensitive element type:	1	: MED sensor (MED and Ex applications only for sensitive element types [e] 04, 05 & 06 and flameproof enclosure type [c] 02)		
	definitive element type.	2	: ATEX sensor (only for Ex applications)		
[c]	Flameproof enclosure type (electronic board flameproof case):	2	: EL.FiT® GUA-26 flameproof blind enclosure type		
		3	: Limatherm® XD-JB85 flameproof blind enclosure type		
[d]	Electronic board configuration type:	02	: LEL Only for RTC type		
		03	: TOX O ₂ Only for RTE type		
[e]	Identification of the sensitive element:	01	: LEL VQ1		
		02	: LEL VQ21 Only for RTC type		
		03	: VQ6		
		04	: O ₂		
		05	: CO Only for RTE type		
		06	: H ₂ S		



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issue 0



[15] Equipment description (Continue)

	07	: H ₂	
Identification of the sensitive element: (Continue)	08	: ETO	
	 13	: PH ₃	
	16	: HCI	0.1.6. D.T.
	18	: HCN	Only for RTE type
	20	: THT	
	21	: HCOOH	
	22	: KE-25	

Rated characteristics:

Supply voltage up to:

24 V_{dc}

Supply current up to:

210 mA

Maximum dissipated power:

5 W

Warning label

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

Routine tests

None.

[16] Assessment Report n° EPT.20.REL.01/55954

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.I., and reported in the Assessment Report above cited.

[17] Specific conditions of use

Flameproof joints shall not be repaired.

[18] Essential Health and Safety Requirements\

Assured by compliance with harmonized standards listed in [9].



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[19] Descriptive documents

The equipment objects of this Certificate are described by the following scheduled documents; they cannot be modified without the explicit authorization of the Notified Body.

Type of document	Document identification		Date	
Technical description	Explorer RTC/RTE Series Gas sensor Technical Descriptive Note	1	2020-07-29	
Safety instructions	SAFETY INSTRUCTIONS Gas sensors Explorer RTC & RTE	1	2020-07-29	
Drawing	1000001M.159.00LB Sensor Housing type B	7	2020-01-16	
Drawing	100000M1.167.00LB (Sensor Housing Type B – Identification TAG	1	2020-07-29	

[20] Terms and conditions

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] History

This certificate is at its first issue.



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End of Certificate

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