



**EC TYPE EXAMINATION (MODULE B)**  
**CERTIFICATE Nr. MED272113CS**

***This is to certify,*** that RINA, specified as Notified Body N° 0474 by the Italian "Ministero delle Infrastrutture e dei Trasporti Direzione Generale per la navigazione ed il Trasporto Marittimo ed Interno" on 25 November 1998, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Directive (EU) 2015/559

<i>MED Item N°</i>	<b>A.1/3.54</b>
<i>Description</i>	<b>Fixed oxygen analysis and gas detection equipment</b>
<i>Type</i>	<b>Explorer 4</b>
<i>Applicant</i>	<b>RECOM INDUSTRIALE S.R.L.</b> VIA PIETRO CHIESA 25 R 16149 GENOVA (GE) ITALY
<i>Testing standards</i>	<b>IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011), IEC 60533 (1999), and as applicable to: a) Category 4: (safe area) EN 50104 (2010). b) Category 3: (explosive gas atmospheres) EN 50104 (2010), EN 60079-0 (2012), EN 60079-29-1 (2007). For combined O 2/HC systems additionally: IMO MSC.1/Circ.1370.</b>
<i>Reference standards</i>	<b>SOLAS Reg. II-2/4, SOLAS Reg. VI/3, IMO Res. MSC.98(73)-(FSS Code) 15. For combined O 2/HC systems additionally: IMO MSC.1/Circ.1370.</b>
<i>Issued at</i> GENOVA <i>on</i>	<i>This Certificate is valid until</i>
May 2, 2016	July 28, 2021

*This Certificate consists of this sheet plus an attachment*

**Franca Parisi**  
RINA Services S.p.A.







**ATTACHMENT TO  
CERTIFICATE Nr. MED272113CS**

**Page 1 of 3**

*Manufacturer*

**RECOM INDUSTRIALE S.R.L.**

*Place of Manufacturer*

VIA PIETRO CHIESA 25 R  
16149 GENOVA (GE)  
ITALY

**Product description:**

The Explorer4 analyzer is a multi-channel, microprocessor controlled gas detection system, designed for the continuous monitoring of gas and other parameters, composed by:

**Main features:**

<b>Case</b>	Rack for 4 – 8 – 16 channels
<b>Power supply</b>	12 VDC / 110 – 220 VAC with transformer
<b>Display</b>	LCD 2x16 digit
<b>Analog input signals</b>	2 for each channel (0÷10 V / 4÷20 mA)
<b>Digital Input signals</b>	RS 232 / Bus / I/O / PC
<b>Visual alarm</b>	4 LED for each channel (1 fault and 3 alarm levels) + 1 LED for power
<b>Output alarms</b>	4 output for each channel (1 for level) 1 fault relay
<b>Analog input signals</b>	2 for each channel (0÷10 V / 4÷20 mA)
<b>Alarms</b>	3 levels, from 0 to 100% F.S. Fault and alarm disconnection sensor 3 relays for each channel
<b>Measure point range</b>	% or ppm - 8bit configurable
<b>Buzzer Alarm</b>	1 buzzer activated in case of alarm
<b>Key pads</b>	3 multi function keys
<b>Operative Temperature</b>	-20°C to +55°C
<b>Humidity</b>	0% to 95% HR (non-condensate)
<b>Battery</b>	Optional
<b>Programming</b>	Languages menu: English, Italian, French, Spanish, German, Portuguese (others on request) average of the reading time, sampling time, kind of alarm (beeps or continuous)

Suitable to work in conjunction with:

**1001700** 102111 RTC 1001 Combustible Gas Sensor Transmitter 0-100%LEL VQ-01 ATEX Z1  
**1001710** 102154 RTC 1002 Combustible Gas Sensor Transmitter 0-100 %LEL VQ-21 PR ATEX Z1  
**1001760** 102302 RTE 1001 Oxigen Sensor Transmitter 0-30%  
**1001800** 102311 RTE 1004 H2S Sensor Transmitter  
**1001780** 102306 RTE 1003 CO Sensor Transmitter

Programming of parameters (gain, offset, full scale, alarm levels (3), fault of the sensors, etc.) makes it possible to check any measurement detectable with sensors 0÷10 V or 4÷20 mA.







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**ATTACHMENT TO  
CERTIFICATE Nr. MED 272113CS  
Page 2 of 3**

**Reference Documents**

- Operating / Installation Manual for EXPLORER 4 Gas Sampling System issued Gennuary 2006 ver.1.0
- RECOM functional test reports dated 15/6/2015 in compliance with CEI EN 60079-29-1 and CEI EN 5010
- Exploer 4 User Manual / Senors Datasheet Tox - %LEL code n°:1001700/1001760/1001780/1001800
- EV2 Pellistor Relative Responses conversion Table

**Test reports:**

TesLab Environmental Test Report n° TesLab n° 15A201F dated 18/01/2016  
TesLab Environmental Test Report n° TesLab n° 061008F dated 26-07-06  
Test Report ISMAR-CNR-ISMAR n° 0000063 dated 08/01/2016  
Testing Standard in compliance with EN 50104 n° A35023 Rev. 3 dated 29/4/2013



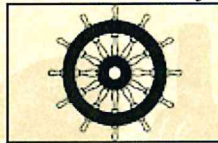




**ATTACHMENT TO  
CERTIFICATE Nr. MED272113CS**

**Page 3 of 3**

*The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex B of the Directive is fully complied with a written inspection agreement with a Notified Body*



**XXXX/YY**

**"WHEELMARK FORMAT"**

**XXXX**      *Notified Body number undertaking surveillance module*  
**YY**         *Last two digits of year mark affixed*

***General conditions for the approval***

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

**Franca Parisi**

