



MARINE DIVISION

Certificate number: 23502/A0 EC

File number: AP 4162

Annex A1 Item number: A.1/3.30

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

*as per Module B of European Union Council Directive 96/98/EC on marine equipment
as amended by Commission Directive 2009/26/EC*

This certificate is issued to

RIKEN KEIKI CO., LTD.

Tokyo - JAPAN

for the type of product

OXYGEN ANALYSIS AND GAS DETECTION EQUIPMENT

Portable Multi Gas Monitor

Model: GX-8000

Requirements:

SOLAS 74 convention as amended, Regulations II-2/4, VI/3, IMO Res. MSC.98(73)-(FSS code) 15, EN 60945 (2002), IEC 60092-504 (2001), IEC 60533 (1999), EN 60079-29-1 (2007), EN 50104 (2002) including A1 (2004), EN 60079-0 (2006), EN 60079-11 (2007), EN 60079-26 (2007).

This certificate is issued under the French Maritime Authority to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.


This certificate will expire on: 18 Jan 2016

For BUREAU VERITAS Notified Body 0062,

At BV KOBE, on 18 Jan 2011,

Yasuo Hiramatsu



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. BUREAU VERITAS is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Portable Multi Gas Monitor, Model: **GX-8000**.

1.1 - Main Characteristics of GX-8000 Gas Detector:

Detection Gas	HC	Oxygen
Detection principle:	Catalytic Combustion (% LEL) Thermal Conductivity (% vol)	Galvanic Cell
Measuring Range:	0-100 % LEL and / or 0-100 % vol (Depending on model)	0-40 % vol (Oxygen depletion or enrichment)
Display:	Digital LCD with auto backlight (Gas concentration value + Bargraph)	
Alarms:	Gas Alarms (2 Levels) & Failure Alarms (LEDs and Buzzer)	
Sampling Method:	Internal sample pump, flow rate 0.75 l/min.	
Power Source:	AA alkaline battery x 3 Direct charging Li-ion Battery Pack	
Protection Index:	IP67	
Ex Protection:	Ex ia IIC T4	
Software Version:	03756 dated 2010.8.11	

2.2 - Other Characteristics:

GX-8000 is declared by manufacturer as capable of detecting and measuring CO, H₂S (not covered by MED).

2. DOCUMENTS AND DRAWINGS:

From **Riken Keiki**:

2.1 - Brochure / Software:

Portable Multi Gas Monitor: Model GX-8000, Ref. COE-0700

Software Configuration and Control Management No. H262-10020 dated Oct.29.2010.

2.2 - Drawings:

Drawings List (2 pages) for Model GX-8000, Ref. 2010.04.20 Rev.2.

Drawings according to drawings List.

Nb: This above list can be revised to show changes to drawing issue status. Before changes can be implemented, new drawings must be provided to Bureau Veritas for review and acceptance. The new drawing list will be stamped and endorsed accordingly.

2.3 - Manual(s) for installation, use and maintenance:

Model GX-8000 Operating Manual.

To be stamped by a Society's Surveyor and to be available in one of the IMO languages, in addition to the ship's flag language.

2.4 - Manufacturing documentation: To be approved by Bureau Veritas e.g. Manufacturing, test and inspection plan.

3. TEST REPORTS:

3.1 - From **Riken-Keiki**:

Test Report No. 570H10029 as per MED A.1/3.30 and testing standards EN 60079-29-1:2007 and EN50104:2002 dated September 10.2010 / October 29.2010 and witnessed by BV 's Surveyor

Test Report No. 570H10030 as per MED A.1/3.30 and testing standard EN 60945:2002 dated October 13.2010 / October 29.2010 and witnessed by BV 's Surveyor.

3.2 - From **UL Japan**:

EMC Test Report 30HE0099-SH dated September 22, 2010.

3.3 - From **DEKRA - KEMA**:

EC-Type Examination Certificate No. KEMA 10ATEX0085 Issue No.1 dated May 25, 2010.

3.3 - From **JQA**:

IP - Test Certificate No. 382-100006-3 dated May 19, 2010.

4. APPLICATION / LIMITATION:

4.1 - As per Requirements of Regulations stated on the front page of this certificate.

4.2 - The equipment fulfils the EMC requirements for installation in General Power Distribution Zone and / or Deck Zone.

4.3 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

4.4 - Not to be used for measurement of Oxygen on Nitrogen or Flue Gas based Inert Gas Systems.

5. PRODUCTION SURVEY REQUIREMENTS:

This certificate does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

6. MARKING OF PRODUCT:

- According to IEC 60079-29-1 and EN 50104
- Ex marking as relevant.
- Markings as per MED 96/98/EC:

⊗ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where XX are the last two digits of year mark affixed.

7. OTHERS:

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time, and that **RIKEN KEIKI CO., LTD., (Tokyo - Japan)**, will accept the responsibility for informing shipbuilders or their sub-contractors of the proper methods of use and general maintenance of the GAS DETECTION EQUIPMENT and the conditions of this approval.

*** END OF CERTIFICATE ***

ORIGINAL PRINTING