



MARINE DIVISION

Certificate number: 15520/B0 EC

File number: AP 3702

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*

### PORTABLE OXYGEN ANALYSIS AND GAS DETECTION EQUIPMENT

Portable Combination Gas Detectors

RX-515, RX-516 and RX-517

**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 51014 (2002).

*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: 11 Aug 2016**

For BUREAU VERITAS Notified Body 0062,

At BV KOBE, on 11 Aug 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 Marine Combination Gas Detectors, Models **RX-517, RX-516** and **RX-515**.

#### 1.1 - Main Characteristics of **RX-516/517** Gas Detectors:

Detection Gas	HC	O2
Detection principle	NDIR	Galvanic Cell
Measuring Range	0-100%LEL 2-100%vol	0-25.0%vol
Response Time	Within 30 sec. (T90)	Within 20 sec. (T90)
Sampling method	Internal sample pump, flow rate 400 ~ 500 ml/min	
Ex Symbols	Ex d ia IIBT3 Gb (-20°C ≤ Ta ≤ +50°C)	
Power Source	C alkaline battery x 4	
Software Version	02852 dated 2006.12.28	

#### 1.2 - Main Characteristics of **RX-515** Gas Detector:

Detection Gas	CH4	O2
Detection principle	NDIR	Galvanic Cell
Measuring Range	0-100%LEL 5-100%vol	0-25.0%vol
Response Time	Within 30 sec. (T90)	Within 20 sec. (T90)
Sampling method	Internal sample pump, flow rate 400 ~ 500 ml/min	
Ex Symbols	Ex d ia IIBT3 Gb (-20°C ≤ Ta ≤ +50°C)	
Power Source	C alkaline battery x 4	
Software Version	02852 dated 2006.12.28	

#### 1.3 - Other Characteristics:

RX-515, RX-516 and RX-517 are declared by manufacturer as capable of detecting and measuring CO, CO<sub>2</sub>, H<sub>2</sub>S (not covered by MED).

### 2. DOCUMENTS AND DRAWINGS:

#### 2.1 - Brochure / Manuals:

C5E-0170-050630.

Operation and User Manuals No. PT0E-0731 (RX-515) and No. PT0E-0771 (RX-516/517), undated documents

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

#### 2.2. - List of outer and complete drawings: are filed in document dated 28 Apr.2005

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 ref PT0E-0731 (Model RX-515 Operator's Manual) and PT0E-0771 (Model RX-516 & RX-517 Operator's Manual) are 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:

- Type Test Report N° 570H'05022 dated 17/Jun./05 as per EN 50054(1991), EN 50057(1999) and EN 50104(1999) by in-house laboratory, witnessed by a Society's Surveyor.

- EMC Test Report N° 25IE0252-YK-1 dated 02/Jun./05 as per IEC 60945(2002), IEC 61000-6-4(1997) and IEC 61000-6-2(1999) by UL-Apex Co., Ltd. (JAPAN).

- EMC Test Report No. 30CE0089-SH-B dated October 29, 2009 and witnessed by BV's Surveyor.

- Type Test Report No. 570H10007 as per IEC 60079-29-1 dated November 30, 2009 / March 03, 2010 issued by Riken Keiki and witnessed by BV's Surveyor.

- EC-Type Examination Certificate Baseefa 06ATEX0205 dated 26th July 2006 and Variation 1 dated 2nd June 2011.

**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.

**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
- 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:**

7.1 - 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.

7.2 - This Certificate supersedes EC Type Examination Certificate N° 15520/A1 EC issued on 13/07/2011 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*