



CERTIFICATE NUMBER

DATE

13-BKT1016582-PDA

26 April 2013

ABS TECHNICAL OFFICE

Busan Ship Engineering

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
GASTRON CO., LTD. - ANSAN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Gas Detector**

MODEL: **GIR-3000, GTD-2000Ex, GTD-2000Tx(O2),GTD-2000Tx(H2S)**

This Product Design Assessment (PDA) Certificate 13-BKT1016582-PDA, dated 26/Apr/2013 remains valid until 25/Apr/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Kyu-Siek Lee

Engineer

GASTRON CO., LTD.

18-8, DOGEUMDANJI 1-GIL
PALGOGI-DONG
ANSAN
Korea, Republic of
Telephone: 82 31 490 0841
Fax: 82 31 490 0801
Email: chojh@gastron.com
Web: http://www.gastron.com

PRODUCT: **Gas Detector**

MODEL: **GIR-3000, GTD-2000Ex, GTD-2000Tx(O2),GTD-2000Tx(H2S)**

Intended Service:

Marine & Offshore Application

Description:

Fixed gas detector to monitor flammable, oxygen and toxic gases

Ratings:

Input voltage range: 18 to 32Vdc (24Vdc nominal)

Max power consumption: Max 6 Watts. At 24Vdc

Current output: 4-20mA (Source or Sink)

Operating Temperature: -20 deg.C to 60 deg.C

IP rating: IP66/67

Explosion-proof type: GIR-3000 & GTD-2000Tx series -Ex d IIC T6 (-20 deg.C ..+60 deg.C)

GTD-2000Ex - Ex d IIC T5 (-20 deg.C ..+60 deg.C)

Service Restriction:

Unit Certification is not required for this product.

Comments:

This PDA is based on KOMERI & SIRA Certificate and Test Reports.

1. Explosion-proof Certificate No.: Sira 08ATEX1003/
IECEX SIR 08.0003
2. IP test report(Degree of protection) No.: KOMERI-
0306-12T1566/12T1317/12T1567
3. Environmental Test Report No.: KOMERI-CTA-
12T1268/12T1266/12T1270/KOMERI-0314-12T1277/
KOMERI-0306-12T1276/KOMERI-0602-12T1279-1
4. EMC Test Report No.: KOMERI-0311-12T1269/
12T1267/12T1271/12T1278
5. Performance Test Report No.: Sira-N 0568 / N0569 /
KOMERI-CTA-12T1467/12T1280/2T1388/12T1468
6. Visual & Function Test Report No.: G1209-0002/3
7. General Requirement of the EN50104:2010/45544 :
2000 Report No.: G1209-0001/0004

GASTRON CO., LTD.

Notes / Drawings / Documentation:

Term of Validity:

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STANDARDS

ABS Rules:

The Manufacturer has provided a declaration about the control of, or lack of Asbestos in this product. The Rules applicable to this assessment are: 2013 Steel Vessels Rules 1-1-4/7.7, 4-8-3/1.11, 4-8-3/Table 2, 4-8-4/27

National:

NA

International:

IEC60068-2-1:2007, IEC60068-2-2:2007, IEC60068-2-30:2005, IEC60092-504:2001, IEC60079-0:2007, IEC 60079-1:2007, IEC60529:2001, IEC60533:1999, EN60079-29-1:2007, EN45544:2000, EN50104:2010, EN60945:2002

Government Authority:

NA

EUMED:

NA

Others:

NA