



CERTIFICATE NUMBER

DATE

13-GS079146-PDA

15 October 2013

ABS TECHNICAL OFFICE

Washington DC - SED

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
**MINE SAFETY APPLIANCE-MSA - CRANBERRY
TOWNSHIP**

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 Monitor**

MODEL: **PrimaX IR**

This Product Design Assessment (PDA) Certificate 13-GS079146-PDA, dated 15/Oct/2013 remains valid until 14/Oct/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

Michael J. Roa

Engineer

AB258(01/10)

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned manufacturing process without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rule 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

MINE SAFETY APPLIANCE-MSA

1100 CRANBERRY WOODS DR.

CRANBERRY TOWNSHIP

PA 16066

United States

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PRODUCT: Gas Monitor

MODEL: PrimaX IR

Intended Service:

Marine & Offshore Applications - Provide indication of the presence and levels of explosive gas concentrations in spaces.

Description:

Infrared type gas monitor and transducer to provide 4-20 mA output signal proportional to the concentration of gas in air.

Ratings:

-40 to +80 degree C Ambient Temp 0-95% Humidity; IP67

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

POC: Warren Bennet 724-741-8540

Notes / Drawings / Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity:

This Product Design Assessment (PDA) Certificate 13-WS079146-PDA, dated 15/Oct/2013 remains valid until 14/Oct/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.

STANDARDS

ABS Rules:

MINE SAFETY APPLIANCE-MSA

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. The Rules applicable to this assessment are: 2013 SVR 1-1-4/7.7; 5C-1-7/17.1.4;4-8-3/1

National:

ANSI/ISA 12.13.01

International:

NA

Government Authority:

NA

EUMED:

CE EMC Directive 2004/108/EC; CE ATEX Directive 94/9/ECII 2G Ex d 11c T4

Others:

FMus Class 1 Div 1 Groups A,B,C & D; Class II Div 1, Groups E,F & G; Class III