



CERTIFICATE NUMBER  
18-HS1779164-PDA

DATE  
26 Sep 2018

ABS TECHNICAL OFFICE  
Houston ESD - Piping

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## CERTIFICATE OF Design Assessment

This is to certify that a representative of this Bureau did, at the request of

### **RKI INSTRUMENTS, INC.**

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: **BEACON 110**


This Product Design Assessment (PDA) Certificate 18-HS1779164-PDA, dated 26/Sep/2018 remains valid until 25/Sep/2023 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

  
\_\_\_\_\_  
Tim Kimble  
Engineer/Consultant

NOTE: This certificate certifies compliance with one or more of the Rules, Codes, standards or other provisions of ABS or a statutory, industrial or manufacturer's standard. It is issued solely for the use of ABS, its committees, its clients or other authorized outlets. Any significant changes to the design and product without approval by ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as set forth in ABS Rules 1.1-1.13.7.9 Terms and Conditions of the Request for Proposal Type Approval and Agreement (2016).

182920110

**RKI INSTRUMENTS**

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**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Gas Monitor  
**Model:** BEACON 110  
**Intended Service:**  
Marine & Offshore Application.

**Description:**  
Single Channel Wall Mount Controller.

**Rating:**  
Power: 115/220 VAC or 24 VDC.  
Operating Temperature: -4°F to 122°F (-20°C to 50°C).  
Storage Temperature: -4°F to 158°F (-20°C to 70°C).  
Enclosure: NEMA 4X.  
See attached "Beacon 110, Product Brochure F000-1202./2000" Data Sheet for details.

**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.  
- Suitable for installed in non-hazardous areas only.

**Comments:**  
- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.  
- Sensors wired remote from the Controller and installed in a Hazardous Area are to be Explosion Proof and detailed installation drawings are to be submitted for review.

**Notes/Drawing/Documentation:**  
Document No. RKI Instruments Project 70162883, CSA Report 1876100, Dated 06 June 2018, Pages: 18  
Document No. Beacon110, Beacon 110 Product Brochure F000-1202./2000, Pages: 2  
Part No: 72-2110RK, Rev. B, Assembly, Beacon 110, 2 Pages;  
Part No: 72-2110RK-01, Rev. 0, Beacon 110 Controller with Battery charging, 2 Pages;  
Part No: 72-2110RK-02, Rev. A, Beacon 110 Controller with Strobe Light, without Battery charging, 2 Pages;  
Part No: 72-2110RK-03, Rev. 0, Beacon 110 Controller with Strobe Light, and Battery charging, 2 Pages;

**Terms of Validity:**  
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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.

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**STANDARDS**

**RKI INSTRUMENTS**

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**ABS Rules:**

Rules for Conditions of Classification, Part 1- 2018 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2018 Steel Vessels Rules: 4-8-3/1.11.1, 4-8-3/Table 2

Rules for Conditions of Classification, Part 1- 2018 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2018 Mobile Offshore Drilling Units Rules: 4-3-3/3.1.1(a), 4-3-3/Table 1

**National:**

CSA C22.2 No. 61010-1-12

UL Std. No. 61010-1 (3rd Edition)

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA