



CERTIFICATE NUMBER 19-HG1871665-PDA
EFFECTIVE DATE 07-Aug-2019
EXPIRATION DATE 06-Aug-2024
ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF Product Design Assessment

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

SCHALLER AUTOMATION GMBH & CO. KG

located at

**INDUSTRIERING 14,
D-66440 BLIESKASTEL, GERMANY**

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 Oil Mist Detector

Model VISATRON VN2020 / VN2020 EX

This Product Design Assessment (PDA) Certificate remains valid until 06-Aug-2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Efstratios Maliatsos
Engineer / Consultant

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 product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

SCHALLER AUTOMATION GMBH & CO. KG

INDUSTRIERING 14

D-66440 BLIESKASTEL

Germany

Telephone: 49- (0) 6842-508-218

Fax: 49- (0) 6842-508-260

Email: Jochen.boeck@schaller.de

Web: www.schaller.de

Tier: 3 - Type Approved, unit certification not required

Product: Oil Mist Detector

Model: VISATRON VN2020 / VN2020 EX

Intended Service:

Monitoring of oil mist concentration in crankcases of diesel/combustion engines and alerting of high concentration.

Description:

Indication of high oil mist concentration in entire crankcase section or other engine locations.

Rating:

Power Supply: 24 V DC +/- 25%, max. 2 A.

Degree of Protection: IP 54.

Max. Air Consumption: 1.2 m³/h at 2 - 14 bar.

Service Restriction:

1. 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.
2. The vacuum in the engine crankcase, caused by the extraction of gases, is not to exceed 2.5 mbar. See 4-6-5/13.1 of the Marine Vessels Rules..
3. All electrical equipment intended for installation in hazardous areas are to be certified safe type based on the class of the hazardous area at its location of installation. Certificates in this regard are to be presented to ABS Surveyor for verification on a case by case basis.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Each particular application is to be specifically approved in conjunction with the relevant engine type and installation.

Notes/Drawing/Documentation:

Drawing No. 01, dimension drawing, Revision: 01, Pages: 1

Drawing No. 02, characteristics, Revision: 01, Pages: 2

Drawing No. 03, 183000 Manual VN2020-EX-V1.0, Revision: 1-0, Pages: 60

Drawing No. 04, Infrared Emitter - SFH 4855_EN, Revision: 1, Pages: 12

Drawing No. 05, Photodiode - BPW20RF, Revision: 1, Pages: 5

Drawing No. 06, Pressure Sensor - MPX5100, Revision: 1, Pages: 17

Drawing No. 07, Thermal Link XG Series, Revision: 1, Pages: 1

Drawing No. 08, 260064_01 - VN2020 IR TransmitterSchalt-Bestueckungsplan, Revision: 1, Pages: 5

Drawing No. 09, 1000198_03 - Visatron-VN2020 Display - Schalt-Bestueckungsplan, Revision: 3, Pages: 6

Drawing No. 11, 1000194_04 - VN2020 CPU Platine - Schalt-Bestueckungsplan-none3d, Revision: 4, Pages: 10

Drawing No. 12, 1000196_03 - VN2020 Terminal Box - Schalt-Bestueckungsplan, Revision: 3, Pages: 7

Drawing No. 14, 20190204_FB_8.2_027_Release_Notes_FW_VN2020, Revision: 1, Pages: 1

Drawing No. 15, VA_7.3_004e_Quality Assurance Measures for the Generation of Software, Revision: 1, Pages: 6

Drawing No. 16, UR-E10 test 1-7830_19-01-04 (Report No.: 1-7830/19-01-04; Report Date: 20 Feb, 2019; Lab: CTC advanced GmbH), Revision: 1, Pages: 64

Drawing No. 17, Environmental testing 1-7830_19-01-05 (Report No.: 1-7830/19-01-05; Report Date: 20 March, 2019; Lab: CTC advanced GmbH), Revision: 1, Pages: 37

Drawing No. 18, ATEX191048_engl_pc, Revision: 1, Pages: 2

Drawing No. 19, CoC_IECEX_IBE_19.0010_0, Revision: 1, Pages: 3

Drawing No. 20, inspection plan_V02, Revision: 1, Pages: 1

Drawing No. 21, DNV-GL_Zert_ISO9001_2020 English 160041-2014-AQ-GER-DAkkS, Revision: 1, Pages: 1

Drawing No. 22, IBExU19ATEXQ006_en, Revision: 1, Pages: 1

SCHALLER AUTOMATION GMBH & CO. KG

INDUSTRIERING 14

D-66440 BLIESKASTEL

Germany

Telephone: 49- (0) 6842-508-218

Fax: 49- (0) 6842-508-260

Email: Jochen.bock@schaller.de

Web: www.schaller.de

Tier: 3 - Type Approved, unit certification not required

Drawing No. FB_7_1_011_Checkliste fuer Klassenzulassung, Schaller- Application Form for Class Admission, Revision: -, Pages: 1

Drawing No. FB_7_1_012_Function Test IACS UR-M67, Schaller- Function Test - IACS UR-M67 Rev.2, Revision: -, Pages: 3

Drawing No. VN2020, Picture- VN2020, Revision: -, Pages: 1

Drawing No. IBExU19ATEX1048, ATEX Certificate, Revision: 03, Pages: 7

Drawing No. FB_7.1_012_V03, Function test report-IACS UR-M67 Rev.2 (Report No.: FB_7.1_012_V03; Report Date: 23 May, 2019; Lab: Schaller Automation GmbH & Co.KG), Revision: 03, Pages: 7

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-HG1871665-PDA, dated 07/Aug/2019 remains valid until 06/Aug/2024 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:

ABS Rules for Building and Classing Steel Vessels 2019: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-2-1/7.2/App.6, 4-6-5/13.1, 4-8-3/1.7/1.11/1.17, 4-9-8/13, 4-9-6/Tables 1A,B

ABS Rules for Building and Classing Marine Vessels 2019:1-1-4/7.7, 1-1-A3, 1-1-A4, 4-2-1/7.2/App.6, 4-6-5/13.1, 4-8-3/1.7/1.11/1.17, 4-9-9/13, 4-9-6/Tables 1A,B

ABS Rules for Building and Classing Steel Vessels Under 90 meters (295 feet) in Length 2019: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-2-1/1.1

ABS Rules for Building and Classing Offshore Support Vessels 2019: 1-1-4/7.7, 1-1-A3, 1-1-A4

ABS Rules for Building and Classing Mobile Offshore Drilling Units 2019:1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-2/1.1

ABS Rules for Building and Classing Mobile Offshore Units 2019: 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-2/1.1

National:

NA

International:

IACS UR E10 (Rev. 7, 2018) except the flame retardant test.

IACS UR M67 (Rev.2, 2015).

Government:

NA

EUMED:

NA

OTHERS:

NA