Type Approval Certificate

KR KOREAN REGISTER

[Oil Mist Detection System]

Initial Approval   22 December 2015

Manufacturer   Schaller Automation Industrielle Automationstechnik GmbH & Co. KG

Industriering 14, D-66440 Blieskastel, Germany

Product Description   Type : VISATRON VN 301plus / VN 301plusEX

″ See Appendix 1 ″

Approval Condition   ″ See Appendix 1 ″

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 5, Ch. 2, Art. 203 & Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships and IACS UR M67 Rev.2

This Certificate is valid until 21 December 2030

Issued at Busan, Korea on 2 January 2026

This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "http://e-cert.krs.co.kr" by using the tracking No(ME26000338088) and certificate No.(HMB02586-OD004).

KOREAN REGISTER

General Manager of
Marine & Ocean Equipment Team

Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 2 January 2026

A. Product Description

1. Product Specification
1) Product Descriptions
   VISATRON VN 301plus / VN 301plusEX protects large diesel engines against oil mist explosion.

   (1) Power Supply : 24V DC
   (2) Relay Outputs : 2 x 'Alarm', 1 x 'Ready', 1 x 'Pre-Alarm'
   (3) Communication : RS485
   (4) Sensor Types
       - VN301plus Sensor Unit, vertical connection
       - VN301plus Sensor Unit, horizontal connection
       - VN301plusEX Sensor Unit, vertical connection
       - VN301plusEX Sensor Unit, horizontal connection
   (5) Degree of Protection : IP65
   (6) Software version : 1.21 (Central Unit), 1.18 (Sensor)

2. Approved Drawings and Documents
1) Operation Manual Version 2.1 dated 2024.01.24

2) Drawing No. DC180403 Rev.02, DC18040 Rev.02, DC180405 Rev.02
              1000048 VN301plusEX Rev.04, 1000006 VN301plus Rev.05

3) Ex-proof Certificate No. BVS 11 ATEX E 175, IBExU25ATEXQ010 Issue 1 dated 2025.11.14

3. Test Reports, etc.
1) Environmental / EMC Test Report
   - No. 1-5141/12-01-02~03, 1-4083/11-01-02~05 by CETECOM
   - GSSO report (15.03.2012)
   - Function test report according to IACS UR M67 Rev.2 by Schaller (2017.03.22)
   - SGS TUV test report, Project No. 79917_05122019_VN301 plus (06.12.2019)
   - No. 1-1490-25-01-02_TR1-R01 issued by CETECOM (2025.10.16)

B. Approval Condition

1. Application & Limitation
1) This approval is granted on the basis of the test reports and the approved documentation.

2) Degree of protection is to be complied with Rule Pt.6 Ch.1 Sec.2 201.2.(5).

3) The manufacturer is to inform this Society of all kinds of revisions of the equipment including the major changes of software. If the changes are recognized to affect functionality of the approved equipment, type tests to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.

2. Individual Product Cert. and Drawing Approval Requirement
1) Individual Product Certification is not required.

3. Marking
1) The product or packing is to be marked with manufacturer's name and type designation on a suitable position.

4. Others
1) Test condition

Test	Condition	Remark
EMC	All locations excluding the bridge and deck zone	-
Temperature	+5 ~ +70℃	-
Vibration	Acceleration ±4.0g	-

< End of Certificate >