



# Indian Register of Shipping

CERTIFICATE NO: 2021TAC021

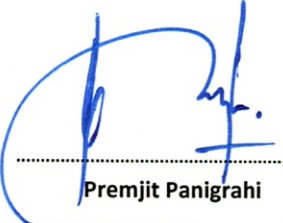
## TYPE APPROVAL CERTIFICATE

*This is to certify that the product is in accordance with the applicable rules/standards/codes as described below. The product is considered to be suitable for use in marine applications and is **included** in the list of approved products.*

<b>MANUFACTURER</b>	<b>Schaller Automation GmbH &amp; Co. KG</b>
<b>REGISTERED OFFICE &amp; WORKS</b>	Industrielle Automationstechnik GmbH & Co. KG, Industriering 14, D-66440, Blieskastel, Germany.
<b>PRODUCT NAME</b>	<b>OIL MIST DETECTION SYSTEM</b>
<b>MODEL NO. / TRADE NAME</b>	VISATRON VN2020 / VN2020 EX VISATRON VN87Plus(115)
<b>PRODUCT DESCRIPTION</b>	Oil Mist Detectors for use in Diesel and Gas Engines (See Annexure - I for details)
<b>APPLICABLE RULES/STANDARDS/CODES</b>	IRS Rules and Regulations for the Construction and Classification of Steel Ships IACS UR M67 Rev. 2, 2015
<b>CONDITIONS OF APPROVAL</b>	See Annexure - II
<b>VALIDITY</b>	The Certificate is valid until 01/03/2026

ISSUE DATE: 02/03/2021

PLACE: MUMBAI

  
Premjit Panigrahi  
Sr. Principal Surveyor

This Certificate is issued upon the following terms and conditions as laid down in the Society's Regulations:-  
Whilst Indian Register of Shipping, a Classification Society, along with its subsidiaries and associates (hereinafter referred to as the Society) and its Board/Committees use their best endeavors to ensure that the functions of the Society are properly carried out, in providing services, information or advice neither the Society nor any of its servants or agents warrants the accuracy of any information or advice supplied. Except as set out herein neither the Society nor any of its servants or agents (on behalf of each of whom the Society has agreed this clause) shall be liable for any loss damage or expense whatever sustained by any person due to any act or omission or error of whatsoever nature and however caused of the Society, its servants or agents or due to any inaccuracy of whatsoever nature and howsoever caused in any information or advice given in any way whatsoever by or on behalf of the Society, even if held to amount to a breach of warranty. Nevertheless, if any person uses services of the Society, or relies on any information or advice given by or on behalf of the Society and suffers loss damage or expenses thereby which is proved to have been due to any negligent act omission or error of the Society, its servants or agents or any negligent inaccuracy in information or advice given by or on behalf of the Society then the Society will pay compensation to such person for his proved loss up to but not exceeding the amount of the fee charged by the Society for that particular service, information or advice.  
Any notice of claim for loss, damage or expense, as referred to above, shall be made in writing to the Society's Head Office within six months of the date when the service, information or advice was first provided, failing which all the rights to any such claim shall be forfeited and the Society shall be relieved and discharged from all liabilities.

**ANNEXURE – I**

**(TO CERTIFICATE NO. 2021TAC021 DATED 2<sup>ND</sup> MARCH 2021)**

**Product Description**

**Model Name and Number: VISATRON VN2020 / VN2020 EX and VN87Plus(115)**

The Oil Mist Detection System works on the venturi principle to extract the oil atmosphere out of the crankcase to detect the presence of oil mist.

**Characteristics of VN2020/VN2020EX**

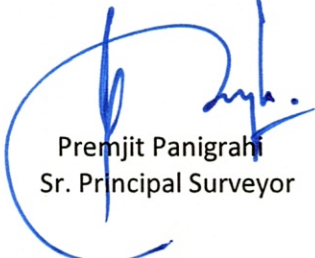
Power Supply	18 - 31.2 VDC, max. 2A
Nominal Voltage	24 VDC
Relay Outputs	2 x 'High Oil Mist Alarm' 1 x 'Ready' 1 x 'Oil Mist Pre-Alarm' (max. 60 Volts AC/DC, 1A)
Cable Entry	2 x M25 (8-16mm), 1 x M20 (5-13mm)
Communication Interface	3 wire RS485, galvanically isolated (CAN-open, galvanically isolated)
Protection Class	IP 54
Ex Marking for VN2020 EX	II (2G) [Ex op is IIB T4 Gb] +5°C ≤ Ta ≤ +70 °C
Software Version**	V1.xx

**Characteristics of VN87Plus(115)**

Power Supply	18 - 31.2 VDC, max. 2A
Nominal Voltage	24 VDC
Relay Outputs	2 x 'High Oil Mist Alarm' 1 x 'Ready' 1 x 'Oil Mist Pre-Alarm' (max. 60 Volts DC, 1A)
Cable Entry	2 x M25
Communication Interface	3 wire RS485, galvanically isolated (opt. 4-20 mA, galvanically isolated)
Protection Class	IP 54
Software Version**	V5.xx

Note: \*\* - Changes in Software version are to be as per internal quality procedure and such changes are to be recorded in release notes as per the procedure.



  
Premjit Panigrahi  
Sr. Principal Surveyor

**ANNEXURE – II**  
**(TO CERTIFICATE NO. 2021TAC021 DATED 2<sup>ND</sup> MARCH 2021)**  
**TERMS AND CONDITIONS**

This approval is subject to following:

- 1) The oil mist detection system and arrangements are to be installed in accordance with the engine designer's and oil mist detection system manufacturer's instructions and recommendations in accordance with the latest version of IACS UR M10.
- 2) The approval is granted based on review of following documents and assessment of manufacturer's works:
  - I) **For Model: VN2020/VN2020 EX:**
    - a) EMC Test report no. 1-7830/19-01-04 dated 20/02/2019, Environment Test report no. 1-7830/19-01-04 dated 20/03/2019
    - b) Functional Test as per IACS UR M67 dated 23/05/2019
    - c) Product Operating Manual (Doc. No. V1.1 03/2020 EN)
    - d) Technical data (Doc. Unnumbered)
  - II) **For Model: VN87Plus(115):**
    - a) IP 54 Test report no. 1-8082/14-01-03 dated 28/07/2014, Vibration Test report no. 1-8082/14-01-06 dated 10/09/2014, Environment Test report no. 1-8082/14-01-04 dated 06/10/2014, EMC Test report no. 1-8082/14-01-05-B dated 24/09/2014.
    - b) Functional Test as per IACS UR M67 dated 22/03/2017
    - c) Product Operating Manual (Doc. No. V1.1 03/2020 EN)
    - d) Technical data (Doc. Unnumbered)
- 3) A copy of the oil mist detection equipment maintenance and test manual is to be provided onboard ship.
- 4) The equipment together with detectors is to be tested when installed on the test bed and onboard ship to demonstrate that the detection and alarm system functionally operates.
- 5) Spares parts are to be supplied in accordance with the recommendation in the manual.
- 6) EX-certification is not covered by this certificate. Application in hazardous area is to be approved in each case in accordance with the rules and Conditions for Safe Use specified in valid Ex-certificate issued by a notified or recognized certification body.
- 7) Any change in the manufacturing process affecting the approval would require re-assessment of the works for continued approval.
- 8) Any changes in the approved design and any changes in applicable rules and/or IACS requirements affecting the approval would necessitate testing and re-approval of the above products.

  
Premjit Panigrahi  
Sr. Principal Surveyor