

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Safety Unit for Rotating Machinery**

with type designation(s)

**Oil Mist Detector Visatron, VN 115/87plus, VN 116/87plus, VN115/87plus EX, VN 215/87plus**

Issued to

**Schaller Automation Industrielle Automationstechnik GmbH  
 & Co KG**

**Blieskastel, Saarland, Germany**

is found to comply with

**DNV GL rules for classification – Ships**

**DNV GL rules for classification – High speed and light craft**

**Application :**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Type	Temperature	Humidity	Vibration	EMC	Enclosure
<b>Oil Mist Detector Visatron</b>					
<b>VN 115/87plus</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>IP54</b>
<b>VN 116/87plus</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>IP54</b>
<b>VN115/87plus EX</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>IP54</b>
<b>VN 215/87plus</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>IP54</b>

Issued at **Hamburg** on **2020-06-11**

for **DNV GL**

This Certificate is valid until **2025-06-10**.

DNV GL local station: **Essen**

Approval Engineer: **Marco Rinkel**

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**Joannis Papanuskas**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-027374-2**  
Certificate No: **TAA00001RJ**  
Revision No: **2**

## Product description

Visatron Oil Mist Detector for diesel engine crankcase monitoring, types:

VN 115/87plus, VN 116/87plus, VN115/87plus EX, VN 215/87plus

VN 115:	Basic system without localisation of the point of damage
VN 116:	Medium sensitive system display of crankcase compartment half with the overheating damage
VN 215:	high sensitive system - with display of the compartment with the overheating damage

- Voltage: 24V DC +/-25%, Operating Current: max. 3A, Current at make: 4A
- Contact outputs (NO/NC): 1 prealarm, 1 NO/NC alarm, 1 detector failure
- RS 485 serial data link
- Built-in history storage device
- Connection of remote monitoring device
- Degree of protection: IP 54
- Ex (2G) [Ex op is IIB T4 Gb]  $+5 \leq T_a \leq +70 \text{ }^\circ \text{C}$  for VN115/87plus EX

## Application/Limitation

Spare parts are to be supplied in accordance with recommendation in manual.

Product certificate

As long as the units are covered by the Type Approval, a product certificate will not be required. Correct configuration and set up for each delivery to be tested as part of switchboard functional testing and during commissioning after installation.

Suction pipes to be arranged according to Schaller instructions, with no low "pockets" where liquid oil may assemble and block the path between crankcase and oil mist detector unit.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Excertificate issued by a notified/recognized Certification Body.

## Type Approval documentation

See ANNEX.

## Tests carried out

Applicable tests according to Class Guidelines DNVGL-CG-0339, November 2015.  
IACS UR M67 Rev. 1, Oct. 2006  
IACS UR M67 Rev. 2, Feb 2015

## Marking of product

Manufacturer: Schaller Automation Industrielle Automationstechnik GmbH & Co KG  
Model name: As listed under Product description  
Serial number: Unique for each delivered item

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### **Periodical assessment**

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE

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**ANNEX**  
**Type Approval documentation**  
(hidden)

VISATRON VN 87 plus V1.0, 08/2006  
VISATRON VN115/87plus EX V1.1 01/2015  
Update 2018  
Operation Manual VN115/87plus EX, Version 1.4 02/2017  
Operation Manual VN115, 116, 215 /87plus, Version 2.5 08/2017

Drawings:  
050072-015 13.08.99  
070055-012 26.03.99  
070022-011 26.03.99  
DC094001 02-005 09.06.04  
DC094002 02-005 08.01.01  
DC094003 02 005 17.06.04

CETECOM 4-2018/06-01-01(EMC)  
CETECOM 4-2018-1-2 (Climatic)  
For Vibration see certificate 94635-94HH (VNxxx/93), GSSO IACS UR M67, 2007-02-22  
CETECOM 1-8082/14-01-05-A (EMC)  
CETECOM 1-8082/14-01-04 (Climatic)  
CETECOM 1-8082/14-01-06 (Vibration)  
CETECOM 1-8082/14-01-03 (IP54)

Extension 2008:  
Binder with complete documentation of Visatron VN115/87, 116/87, 215/87plus:  
Ch. 1: Operation Manual. Version 1.7, 07/2008  
Ch. 3: Circuit diagrams  
Ch. 5: 4-2912-01-01/07 & 3-5679-1-1/08  
Ch. 6: 4-2018-1-2/06  
Ch. 7: Test Report M67, Acceptance date 2007-02-22, Ref.no: 07-008268

Documentation submitted for IACS UR M67 required tests:  
GSSO IACS UR M67, 2007-02-22

Documentation submitted for IACS UR M67 Rev. 2 required tests:  
OMD Function Test IACS UR M67 Rev, 2 regarding VN87plus 2017-08-07

Ex Certificate IBExU14ATEX1153

Certification Retention Survey Report DNV Essen 2013-03-06  
Periodical Assessment Report DNVGL Essen 2016-08-31  
Periodical Assessment Report DNVGL Essen, 2020-04-01

TÜV 79917\_05122019\_VN87plus  
Additional EMC tests for extended frequency range 2019-12-06