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Certificate No: LR22361399TA Issue Date: 21/08/2022 Expiry Date: 20/08/2027

## **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer Schaller Au

Schaller Automation Industrielle
Automationstechnik GmbH & Co. KG

**Address** 

Industriering 14, Blieskastel, 66440, Germany

Type

Oil Mist Detectors

Description

Oil Mist Detection Multi Sensor System

**Trade Name** 

VN301 plus / VN301 plus EX

**Application** 

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV4 as defined in Lloyd's Register Type Approval

System, Test Specification Number 1 - 2021.

**Specified Standard** 

Manufacturer's specification,

Lloyd's Register Test Specification Number 4 IACS UR M67 2005 / Rev. 2 on February 2015

Ratings

Software Version

Sensor Unit:

1.17

Central Unit:

1 21

**Additional Tests** 

Low Temperature Test: +5°C for 2hrs Dry Heat Test: +70°C for 16hrs.

Degrees of protection by enclosure: IP65

**Thomas Milow** 

Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom



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Safe Type Equipment: VN301 plus EX

II -/2G Ex op is IIB T4 -/Gb (DEKRA Cert. "BVS 11 ATEX E 175")

**Other Conditions** 

The suitability of the installation of the Oil Mist Detector is to be demonstrated in accordance with IACS UR M10, latest version, for each type of engine.

VN301 plus EX is suitable for use in ATEX Zone1 and Zone2.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 

12/20035 (E1)

The Design Appraisal Document HTS/ETS 35715-17 Issue 1 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Reference:

HPC1762091-22/TM

## LLOYD'S REGISTER TYPE APPROVAL - DESIGN APPRAISAL DOCUMENT

Issued by: HAMBURG TECHNICAL SUPPORT OFFICE
Issued to: SCHALLER AUTOMATION INDUSTRIELLE AUTOMATIONSTECHNIK GMBH & CO.KG
For: OIL MIST DETECTION MULTI SENSOR SYSTEM, Types VISATRON VN301PLUS, VISATRON VN301PLUS(EX)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION		
10000406050-MSC-RvA-DEU	ISO 9001:2015 Certificate issued by DNV•GL	03.10.2020
Unnumbered (Version 1.5)	Operation Manual Visatron® VN301 plus EX	01.2021
VA_7.3_04_V02	Verfahrensanweisung – Qualitätssicherungsmaßnahmen für die	19.04.2012
VA_1.5_04_V02	Erstellung von Software	13.04.2012
Unnumbered	OMD Function Test (M67)	15.03.2012
BVS 11 ATEX E 175	EC-Type Examination Certificate issued by DEKRA EXAM GmbH	21.02.2012
HPC1762091	Inspection and Surveillance Report of Production Facilities	23.08.2022
Unnumbered	Release Notes "Firmware VN301plus Central Unit"	24.04.2020
Unnumbered		05.01.2021
Onnumbered	Release Notes "Firmware VN301plus Sensor Unit"	05.01.2021
TEST REPORTS		
00009C1VP7	Type Test Report LEONI cable "LIH 1X0.75/2.2	25.07.2011
00009C1WYR	Type Test Report LEONI cable "LIH 1X0.5/2.1 VZN	25.07.2011
00009C1X5Y	Type Test Report LEONI cable "LIH 2X1X0.75 VZN",	25.07.2011
	"LIH CH 4X1X0.5 VZN SW" and "PUR-SCHLAUCH 2.5/4.0"	
00009C1YK8	Type Test Report LEONI cable "LIH 2X1X0.75 VZN",	25.07.2011
	"LIH CH 4X1X0.5 VZN SW" and "PUR-SCHLAUCH 2.5/4.0"	
1-4083/11-01-02	EMV Test Report CETECOM	02.03.2012
79917_05122019_VN301 plus	EMC Test Report SGS-TÜV Saarland Forster GmbH	06.12.2019
DRAWINGS		
DC180403 02	Dimension Drawing VN301plus Central Unit	29.02.2012
DC180401 02_Rev.002	Dimension Drawing VN 301plus / EX Sensor Unit	02.03.2012
DC180405 02	Sensor Unit, Material Listing VN301plus / EX	18.04.2012
210970_Rev.5	Änderungsprotokoll VN301 + Anschlussplatine	14.12.2011
210970_Rev.5	VN 301 + Anschlussplatine, Bestückung Top Layer & Bottom	14.12.2011
210971_Rev.7	VN 301 + Zentraleinheit CPU Platine	14.12.2011
1000048_Rev.1	VN 301 + EX Sensorelektronik	25.11.2011
1000032_Rev.3	VN 301 + -V Sendeplatine	18.01.2012
1000006_Rev.3	VN 301 + V Sensorelektronik	18.11.2011
330187	Housing machined	22.07.2022



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Thomas Milow

Specialist

Electrotechnical Systems

Hamburg Technical Support Office

Lloyd's Register EMEA

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## **Supplementary Type Approval Terms and Conditions**

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.