# **Type Approval Certificate**



[Oil Mist Detectors]

Initial Approval	30 September 2019
Manufacturer	Schaller Automation Industrielle Automationstechnik GmbH & Co. KG
	Industriering 14, D-66440 Blieskastel, Germany
Product Description	Type : VISATRON VN2020 / VN2020EX
	"See Appendix 1 "
Approval Condition	"See Appendix 1 " REGISTER

**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 29 September 2029 Issued at Busan, Korea on 4 October 2024



 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(ME24047299313) and certificate No.(HMB02586-OD005).



**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.

Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
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 certificate is a rendered.

the requirements as amended

### **Product Description and/or Approval Condition**

Date of Issue : 4 October 2024

#### A. Product Description

#### 1. Product Specification

- 1) Function : Protect Large Diesel Engines against oil mist explosion
- 2) Rating

Nucing		
- Nominal Voltage		24V DC
- Relay Outputs	:	2 x 'High Oil Mist Alarm'
5		1 x 'Ready'
		1 x 'Oil Mist Pre-Alarm'
- Communication interface	:	3 wire RS485, galvanically isolated
		to monitoring device
- Cable Entry	:	2 x M25 (8~16mm), 1 x M20 (5~13mm)
- Degree of Protection		IP54
	:	ATEX: II (2G) [Ex op is IIB T4 Gb] $+5^{\circ}$ C $\leq$ Ta $\leq$ $+70^{\circ}$ C
	-	IECEx: [Ex op is IIB T4 Gb] $+5^{\circ}$ C $\leq$ Ta $\leq$ $+70^{\circ}$ C

#### 2. Approved Drawings and Documents

1) Circuit Diagrams

-	- Document Ňo.	1000194_05	:	VN2020 CPU Board
				Visatron VN2020 Terminal Box PCB
-	- Document No.			Visatron VN2020 Display PCB
-	- Document No.	260064_01	:	VN2020 Sendeplatine
-	- Document No.	200004_01	·	VNZUZU Sendepratine

- 2) Etc
  - Operation Manual VISATRON VN2020 (EX) Rev. 3.0, dated 2024-01-24
  - Quality Assurance Measures for the Generation of Software VA\_7.3\_004e\_V05
  - Release Note FB\_8.2\_027\_V02\_Firmware V2.03

#### 3. Test Reports, etc.

- 1) Test Report No. 1-7830/19-01-04 issued by CTC advanced GmbH, dated on 2019-02-20
- 2) Test Report No. 1-7830/19-01-05 issued by CTC advanced GmbH, dated on 2019-02-20
- 3) Function Test Report No. FB\_7.1\_012\_V03 under the witness by surveyors of this Society

#### **B.** Approval Condition

#### 1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and 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 test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.
- 4) Explosion-proof certification by a notified/recognized Certification Body is not covered by this certificate. Ratings and Special Condition for Safe Use in hazardous areas are to be obtained from the relevant valid Ex-Certificate.

#### 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 the manufacturer's name and type designation on a suitable position.

## Product Description and/or Approval Condition

Date of Issue : 4 October 2024

1) Test condition

Test	Condition	Remark		
EMC	All locations excluding the bridge and deck zone	Up to 6 GHz		
Temperature	+5 ~ +70 °C			
Vibration	Acceleration ±4.0g	–		
Salt mist	Not Applied	–		
Degree of Protection	IP 54	   _		

< End of Certificate >