



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR CRANKCASE OIL MIST DETECTION ARRANGEMENTS

Certificate No. TA22441M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 6, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer: Schaller Automation Industrielle Automationstechnik

GmbH & Co., KG,

Place of Manufacturing:

D66440 Blieskastel, Industriering 14, Germany

Product description:

Oil Mist Detectors

Model:

VN115/93, VN116/93, VN215/93

Approval No.:

87A128

Valid until:

18 June 2027

This certificate is subject to the conditions specified in the attached sheet(s). Issued at Tokyo on 22 July 2022.

S. Oishi

General Manager

Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

NIPPON KAIJI KYOKAI

Attached sheet -1/2 to the Certificate No. TA22441M

Specification & documents:

1. Particulars:

Power supply: DC 24 V

2. Components and reference drawings:

Components	Drawing
VN115/93	DC094011
VN116/93	DC094002
VN215/93	DC094003

3. Documentation and Test Reports:

Test Report No. 022a/94

OMD Function Test IACS UR-M67 Rev.2 (22. March 2017)

EMC Test Report 79917_05122019_VN93

- To be continued -

NIPPON KAIJI KYOKAI

Attached sheet -2/2 to the Certificate No. TA22441M

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS NMENTAL TESTS (IACS UR E10 Rev. 7 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Davier appely fluctuation test	Electric	X
Power supply fluctuation test	Pneumatic and Hydraulic	
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		X
Dry heat test (Temperature $70^{\circ}\text{C} \times 16 \text{ hours}$)		X
Damp heat test		X
Vibration test (Acceleration 4g × 1.5 hours)		X
Inclination test		X
Cold test (Temperature $-25^{\circ}C \times 2$ hours)		X
Salt mist test		
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		
Radiated emission test		
Conducted emission test		
Flame retardant test		

2. Approval conditions:

The product is not allowed to be installed in the bridge and open decks.