



Certificate No. TA12230M

# NIPPON KAIJI KYOKAI

## *Certificate* **OF APPROVAL** **FOR AUTOMATIC DEVICES AND EQUIPMENT**

**Manufacturer:** Schaller Automation  
Industrielle Automationstechnik GmbH & Co., KG,

**Place of manufacturing:** D66440 Blieskastel, Saarland, Germany

**Product description:** Oil Mist Detectors

**Model:** VN115/93, VN116/93, VN215/93

**Approval No.:** 87A128

**Specification & documents:** As shown on the attached sheet (-1/2)

**Test items & approval conditions:** As shown on the attached sheet (-2/2)

THIS IS TO CERTIFY that the above mentioned model of the product has been type 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 in Society's Rules and the relevant unified requirements of IACS (UR M67 revised in October 2007).

This certificate is valid until 18 June 2017.

Issued at Tokyo on 30 May 2012.

T. Narisawa  
General Manager  
Machinery Department

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

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Attached sheet - 1 / 2 to Certificate No. TA12230M

## Specification & documents :

1. Ratings: DC 24 V
2. Components and reference drawings:

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

— To be continued —

# NIPPON KAJI KYOKAI

Attached sheet-2/2 to Certificate No. TA12230M

## 1. Testing items :

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		X
Dry heat test (Temperature 70°C×2hours)		X
Damp heat test		X
Vibration test (Acceleration 4g×1.5hours)		X
Inclination test		X
Cold test (Temperature -25°C×2hours)		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		X
Radiated emission test		X
Conducted emission test		X

## 2. Approval conditions :

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

-- The end --