



NIPPON KAIJI KYOKAI

**TYPE APPROVAL CERTIFICATE
FOR EXHAUST GAS MEASUREMENT DEVICE**

Certificate No. TA23536M

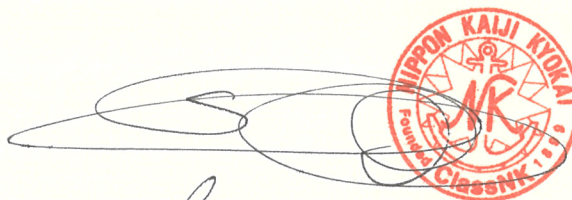
This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	Testo SE & Co. KGaA
Place of Manufacturing:	Celsiusstraße 2, 79822, Titisee-Neustadt, Germany
Product description:	Exhaust Gas Measurement Device
Model:	testo 350 MARITIME_V2
Approval No.:	14DD001B
Valid until:	22 January 2029

The details are described in the attached sheet(s).

Issued at Tokyo on 28 November 2023.



S. Oishi
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.

Product description

“testo 350 MARITIME_V2” is a portable measurement instrument for measuring exhaust gas emissions from combustion engines as a component for “Simplified Measurement Method” specified in Chapter 6.3 of NOx Technical Code 2008 and “Direct Measurement and Monitoring Method” specified in Chapter 6.4 of NOx Technical Code 2008.

– Hardware

Portable exhaust gas analyzer for NOx, CO, CO₂, SO₂ and O₂

Gas sampling probe with pre-filter

Protective case

– Software

Analyzer firmware Version 1.xx

Control Unit firmware Version 1.xx

Technical specifications:

Power Supply: 110—230V AC 50/60Hz

Ambient Temperature: -5—+45°C

Sample Pressure Range: -300—+50hPa

Measurement Range:

Component	Measuring Principle	Range
O ₂	ECS	0—25 vol.%
CO	ECS	0—3,000ppm
NO	ECS	0—3,000ppm
NO ₂	ECS	0—500ppm
SO ₂	ECS	0—3,000ppm
CO ₂	NDIR	0—40 vol.%

- To be continued -

Examined documents

Report for applying of Type Approval (2012-06-01, Version V01j, 16-750-15/1211)

Report of Compliance Test (2012-05-22, Version V01b, 16-750-15/1211-A)

Equivalence Reports (June 2008, 42-967-50/0608)

Instruction Manual (0970 3509 en 01 V01.00 en_GB)

Instruction Manual (0970 3509 en 03 V01.00 ja_SMM)

EMC Test report (2021-0048-EMC-TR-23-0042-V01)

Environmental test items

(Applied testing items are marled with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8 basis)		Mark
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)		--
Dry heat test (Temperature 55°C × 16hours)		X
Damp heat test		X
Vibration test (Acceleration probe: ±4g, system: ±0.7g)		X
Inclination test		X
Cold test (Temperature 5°C × 2hours)		X
Salt mist test		X
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
Flame retardant test		X

- To be continued -

Application/Limitation

1. In case where the product is used as a component of a system for “Simplified Measurement Method”, the overall system should completely fulfill the requirements of Chapter 6.3 of the NOx Technical Code 2008.
2. In case where the product is used as a component of a system for “Direct Measurement and Monitoring Method”, the overall system should completely fulfill the requirements of Chapter 6.4 and Appendix VIII of the NOx Technical Code 2008.
3. The “testo 350 MARITIME_V2” must be installed, operated and calibrated in accordance with manufacturers’ recommendations.
4. Amendments to MARPOL Annex VI and the NOx Technical Code 2008 may render this certificate invalid.

- The End -