



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA24206M

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: Kongsberg Maritime AS

Place of Manufacturing: Skonnertvegen 1, NO-7053 Ranheim, Norway

Product description: Temperature Sensor

Model: MN3927G, MN4213G

Specification & documents: P-MN3927_G_CE, P-MN4213_G_CE,

E10123.01

Approval No.: 03A008

Valid until: 25 March 2029

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

Issued at Tokyo on 4 April 2024.

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.

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Attached sheet to the Certificate No. TA24206M

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		
Power supply fluctuation test	Electric	
	Pneumatic and Hydraulic	i i i i i i i i i i i i i i i i i i i
Insulation resistance test		X
High voltage test		
Pressure test (Pneumatic and Hydraulic)		
Dry heat test (Temperature $85^{\circ}C \times 16$ hours)		X
Damp heat test		X
Vibration test (Acceleration $\pm 0.7 \text{g} \times 1.5 \text{ hours}$)		X
Inclination test		
Cold test (Temperature -55° C × 24 hours)		X
Salt mist test		X
Electrostatic discharge immunity test		
Radiated radio frequency immunity test		
Conducted low frequency immunity test		
Conducted high frequency immunity test		MM
Burst / Fast transient immunity test		
Surge immunity test		
Radiated emission test		
Conducted emission test		
Flame retardant test		88

2. Approval condition:

Nil.