



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA20388M

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 2024

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 26 March 2019.



T. Shimada
General Manager
Machinery Department

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

Test items & approval conditions:

1. Test 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		--
Power supply fluctuation test	Electric	--
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		--
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 85°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g × 1.5 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		--
Burst / Fast transient immunity test		--
Surge immunity test		--
Radiated emission test		--
Conducted emission test		--
Flame retardant test		--

2. Approval condition:

Nil.