



NIPPON KAIJI KYOKAI

COPY

## TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA22333M

**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

Applicant:	<b>Danfoss A/S</b> <b>Nordborgvej 81, 6430 Nordborg, Denmark</b>
Manufacturer:	<b>Danfoss (Tianjin) Ltd.,</b> <b>No.9 Quanhui Road, Wuqing Development Area,</b> <b>301700 Tianjin, China</b>
Product description:	<b>Temperature sensor</b>
Model:	<b>MBT 5560, 5550</b>
Approval No.:	<b>05A002</b>
Valid until:	<b>26 January 2026</b>

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

Issued at Tokyo on 20 June 2022.

  
  
S. Oishi  
General Manager  
Machinery Department

- Note: 1. This certificate has been issued due to addition of new model.  
2. The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.



Attached sheet -2/2 to the Certificate No. TA22333M

**Test items & approval conditions:**

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.7 basis)		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)		--
Dry heat test (Temperature 85°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±4.0g × 1.5 hours)		X
Inclination test		--
Cold test (Temperature -50°C × 16 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		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		X

2. Approval condition:

The products are not allowed to be installed on open deck.