



NIPPON KAIJI KYOKAI

COPY

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA22320M

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:	Danfoss A/S Nordborgvej 81, DK-6430 Nordborg, Denmark
Manufacturer:	Danfoss (Tianjin) Co., Ltd. 9 Quanhui road, 301700 Tianjin, China
Product description:	Temperature Sensor
Model:	MBT 5250, 5252, 5253, 5260
Approval No.:	96A130
Valid until:	12 June 2027

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

Issued at Tokyo on 13 June 2022.



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.

Specification & documents:

1. Particulars:

Sensing element : Pt100, Pt1000
 Temperature range : -50 ~ 200°C (MBT 5250/5253/5260)
 -50 ~ 400°C (MBT 5252)

2. Components and reference drawings:

Type	Data sheet (Standard Type)	Engineering Sheets (Customized Type)	Remarks
MBT 5250 Series	IC.PD.P30.13.02 AI208386431879en-000801	130813-6, 110825-7, 090428-5, 101116-5	Interchangeable measuring insert
MBT 5252	IC.PD.P30.13.02 AI208386431879en-000801	-	Interchangeable measuring insert with connection head
MBT 5260 Series	IC.PD.P30.13.02 Specification key: 084R2034 ver.05 AI208386431879en-000801	100128-5	Fixed measuring insert DIN 43650 Plug
MBT 5253	AI202586427279en-000701	110119-5, 110119-6, 110119-7 Specification key: 084R2016 ver.05	Interchangeable measuring insert

3. Test report

FORCE Test Report (Doc No. 121-29917-1 Rev.2, 2022-02-16)

- To be continued -

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Attached sheet -2/2 to the Certificate No. TA22320M

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		--
Power supply fluctuation test	Electric	--
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test	(Pneumatic and Hydraulic)	--
Dry heat test	(MBT 5250/5260 : 125°C × 16 hours)	X
	(MBT 5252 : 90°C × 16 hours)	
	(MBT 5253 : 85°C × 16 hours)	
Damp heat test		X
Vibration test	(Acceleration ±4.0g × 1.5 hours)	X
Inclination test		--
Cold test	(Temperature -50°C × 2 hours)	X
Salt mist test	(MBT 5252 only)	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:

The product is not allowed to be installed on open decks except MBT 5252.

- The End -