



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA19236M

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**
Place of Applicant: **DK-6430, Nordborg, Denmark**
Manufacturer: **Danfoss Sp. z o.o**
Place of Manufacturing: **U1. Chrzanowska 5 05-825 Grodzisk, Poland**
Product description: **Thermostats**
Model: **RT2, RT3, RT7, RT10, RT12, RT13, RT14, RT15, RT23, RT26,
RT101, RT106, RT107, RT108, RT120, RT123, RT124**
Approval No.: **84A104**
Valid until: **15 February 2024**

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

Issued at Tokyo on 16 February 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.

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Attached sheet -1/2 to the Certificate No. TA19236M

Specification & documents:

1. Particulars: Temperature Range: -60 ~ 300 °C
 Contact Load : AC 380V 10A (Ohmic), 4A (Inductive)
 DC 220V 12W

2. Components and reference drawings:

Components	Drawings
RT2, RT3, RT7, RT10, RT12, RT13, RT14, RT15, RT23, RT26, RT101, RT106, RT107, RT108, RT120, RT123, RT124	017R0450, 017R0452, 017R0153, 017R0454, 017R0459

3. Test Reports:

Danfoss Test Report dated 26/10/2011

Polish test laboratory Test Report No. 250/NZL/NBW/2011/O dated 12/1/2012

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		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 55°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration $\pm 4.0g \times 1.5$ hours) for RT106, RT107, RT120, RT123		X
Inclination test		X
Cold test (Temperature -25°C × 2 hours)		X
Salt mist test		--
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		X

2. Approval condition:

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

