



# NIPPON KAIJI KYOKAI

## TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No.TA19067M

**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>
Place of Applicant:	<b>DK-6430, Nordborg, Denmark</b>
Manufacturer:	<b>Danfoss Sp. z o.o</b>
Place of Manufacturing:	<b>U1. Chrzanowska 5 05-825 Grodzisk, Poland</b>
Product description:	<b>Thermostats</b>
Model:	<b>KPS76, KPS77, KPS79, KPS80, KPS81, KPS83</b>
Approval No.:	<b>84A106</b>
Valid until:	<b>15 February 2024</b>

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

Issued at Tokyo on 31 January 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		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 22 hours)		X
Damp heat test		X
Vibration test (Acceleration ±4.0g × 2 hours)		X
Inclination test		X
Cold test (Temperature -30°C × 18 hours, -50°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.

**- The End -**

