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Certificate No: LR21366305TA Issue Date: 28/09/2021 Expiry Date: 29/04/2026

# **Type Approval Certificate**

Manufacturer

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Danfoss A/S

	2 3 2 2 2 3 3 4 2
Address	Nordborgvej 81, Nordborg, 6430, Denmark
Place of Production	Danfoss Poland Sp. z o.o. ul. Chrzanowska 5, Grodzisk Mazowiecki, 05-825, Poland
Туре	Switches - Temperature
Description	The RT thermostats are single-pole double-throw (SPDT) temperature-controlled switches with cylindrical remote sensor
Trade Name	RT 106, RT 107, RT 123

System, Test Specification Number 1 – March 2015.

Marine,Offshore and Industrial applications for use in environmental

categories ENV1, ENV2 and ENV3, as defined in Lloyd's Register Type Approval

EN 60947-1: 2007+A2: 2014 EN 60947-4-1: 2019 EN 60947-5-1: 2017 IACS E10 Rev. 8 / 2021

**Matthias Karg** 

Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

**Application** 

**Specified Standard** 

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**Ratings** Ambient temperature range:

-50 °C to +70 °C

Operating temperature range: RT 106: +20 °C to +90 °C RT 107: +70 °C to +150 °C RT 123: +150 °C to +250 °C

Contact load at 400 VAC:

AC-1: 10 A AC-3: 4 A AC-15: 3 A

Contact load at 230 VDC:

DC-13: 12 W

**Additional Tests** Enclosure test IP 66 (acc. IEC60529: 1992)

**Other Conditions** Type Approval does not eliminate the need for normal inspection and survey

procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re- approved prior to it being supplied to vessels to which

the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document HTS/ETS 41727-21/MK and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Reference: HTS/ETS 41727-21/MK

03.2021

### LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issued by: HAMBURG TECHNICAL SUPPORT OFFICE (HPC1662101)
Issued to: DANFOSS A/S
For: THERMOSTAT, TYPES RT 106, RT 107, RT 123

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

### **APPROVAL DOCUMENTATION**

000301

ETS 57357	Type Approval Application Checklist	23.04.2021
ETS 58305	Request for Marine Services – Type Approval	23.09.2021
ETS 35129-17	Design Appraisal Document of previous certificate no. 17-20040	12.04.2017
KAT2000462	Production quality assessment report of Danfoss Poland	05.10.2020
DK009970-1, Rev. 1	Certificate ISO 9001:2015 for Danfoss Poland	12.09.2018
060-9650 Rev. AE	EU Declaration of Conformity (Low Voltage) Temperature switches, RT-series	20.07.2021
Al245286497322en-		

Matthias Karg
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Lloyd's Register EMEA

Product data sheet Thermostat, Type RT

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#### Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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