

# TYPE APPROVAL CERTIFICATE

DNV·GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No. **20 663 - 04 HH**

Company **Danfoss A/S**  
**Nordborgvej 81**  
**6430 Nordborg, DENMARK**

Product Description **Temperature sensor with integrated transmitter**

Type **MBT 5560**

Environmental Category **D, EMC1**

Technical Data /  
Range of Application **Sensing element: 1 x Pt1000**  
**Measuring range: -50°C to +200°C**  
**Output signal: 4 to 20mA, power supply: 10 to 32V DC (24V DC rated) or**  
**ratiometric, power supply: 4.75 to 8V DC (5V DC rated)**  
**Insertion length: 50mm to 250mm**  
**Process connection: G1¼ A standard (other on request, see data sheet)**  
**Electrical connection: plug, EN 175301/803, Pg 9**  
**Response time: water (0.2 m/s) t0.5 = 10 s, t0.9 = 35 s**  
**air (1 m/s) t0.5 = 95 s, t0.9 = 310 s**  
**Degree of protection: IP 65**

**Production place:**  
**Danfoss (Tianjin) Ltd.**  
**Wuqing Development Area**  
**9 Quanhui Road**  
**301700 Tianjin**  
**CHINA**

Test Standard **GL Guidelines for the Performance of Type Approvals, Chapter 2 – Test Requirements for Electrical / Electronic Equipment and Systems (VI-7-2), Edition 2012**

Documents **Test Documentation: "Test of MBT5560 for Ship Classification" of 2004-03-04**  
**Test Reports: No. TR084Z0(-29, -30,-31), 4-969482, TR DIV 084Z-032**  
**Data sheet: IC.PD.P30.F6.02-520B6279**

Remarks **This certificate is issued on the basis of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007**

Valid until **2020-04-07**

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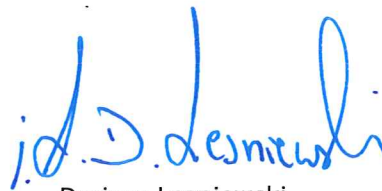
File No. **I.D.02**

**Hamburg, 2015-04-08**

Type Approval Symbol



  
Marco Rinkel

  
Dariusz Lesniewski

**DNV GL**