



NIPPON KAIJI KYOKAI

COPY

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA22497M

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, 6430 Nordborg, Denmark
Manufacturer:	Danfoss(Tianjin) Ltd. 9 Quanhui Road, 301700 Tianjin, China
Product description:	Pressure Transmitter
Model:	EMP 2
Approval No.:	84A155
Valid until:	6 March 2027

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

Issued at Tokyo on 6 September 2022.


S. Oishi
General Manager
Machinery Department



Note: (1) This certificate has been issued due to change of internal structure of the product.
(2) The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Particulars:
- Power Supply: DC12V, DC24V
- Output: 4 ~ 20 mA

2. Components and reference drawings:

Components	Model	Drawings
Pressure Transmitter	EMP 2	084R0250, 084R0251 Eng., 084G0403, 084C0403, 060C0323, 060N0201, 060C0338, 060G2295, 060G0284, 060C0328, TR060N007, TR084G062, TR084G063, TR084G-064, IC.PD.P20.E8.02 520B8644 AI175686432328en-001001

3. Documentation and Test Reports:
- Type approval tests report (1) (Danfoss, TR 84G-025, 1984-3-28)
- EMC tests report (Danfoss, 1994-3-17)
- EMC tests report (Danfoss, 2008-9082, 2008-10-02)
- PHOENIX TESTLAB Test Report (E212000E1, 2021-10-08)
- PHOENIX TESTLAB Test Report (U220976E1, 2022-06-29)
- PHOENIX TESTLAB Test Report (E220976E2, 2022-07-06)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test		X
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (5 - 300Hz, Acceleration ±4.0g × 1.5 hours)		X
Inclination test		X
Cold test (Temperature -25°C × 16 hours)		X
Salt mist test		X
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition

Nil

- The End -