



TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA23201M

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

Manufacturer:

DEIF A/S

Place of Manufacturing:

Frisenborgvej 33, 7800 Skive, Denmark

Product description:

Panel Instruments

Model:

XL, BW, BRW-2, XDi

Approval No.:

18A005

Valid until:

25 March 2028

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

Issued at Tokyo on 26 March 2023

S. Oishi

General Manager

Machinery Department

NIPPON KAIJI KYOKAI

Attached sheet -1/2 to the Certificate No. TA23201M

Specification & documents:

1. Particulars:

Power Supply: 24 V

2. Components and reference drawings:

Туре	Documents	
XL72		
XL96	4921250057U, 492140143W, 4189350054A	
XL144		
XL192		
BW144	402125005711 402140142W 4190250055A	
BW192	4921250057U, 492140143W, 4189350055A	
BRW-2	4921250057U, 492140143W, 4189350056A	
XDi 96		
XDi 144	49221250067D, 4189350046D	
XDi 192		

3. Documentation and Test Reports:

404000003E, 4910211100C, 4910211100D, 4040000041F, 4910213105F, 4910217501O, 4910217502J, 4910214505F, 4910227505J, 4910229905C, 4910217507J, 4910229901C, 4910229905C, 491022755C, 4910216501J, 4910217516E, 4910227516A, 4910216502I DELTA Test Report DANAK-1910397, DANAK-197861, DANAK-19/12974

Software Quality Plan (Date: 2017-06-27)

DEIF TYPE TEST CERTIFICATE RF E-FIELD IMMUNITY-TEST 02B (Ref.: 4910217502N)

DEIF TYPE TEST CERTIFICATE RADIATED EMISSION-16A (Ref.: 4910216501M)

- To be continued -

NIPPON KAIJI KYOKAI

Attached sheet -2/2 to the Certificate No. TA23201M

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
Dovven grants flactuation to the	Electric	X
Power supply fluctuation test	Pneumatic and Hydraulic	
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		
Dry heat test (Temperature 70° C \times 16 hours)		X
Damp heat test (Temperature 55° C \times 12 hours \times 2cycles)		X
Vibration test (Acceleration $\pm 0.7 \text{g} \times 2$ hours for XL, BW $\pm 1.0 \text{g} \times 2$ hours for BRW-2 $\pm 4.0 \text{g} \times 2$ hours for XDi)		X
Inclination test (Note 1)		X
Cold test (Temperature $-25^{\circ}C \times 16$ hours)		
Salt mist test		
Electrostatic discharge immunity test (Contact 6kV, Aerial 8kV)		
Radiated radio frequency immunity test (80MHz - 6GHz)		
Conducted low frequency immunity test		X
Conducted high frequency immunity test (10kHz - 80MHz)		
Burst / Fast transient immunity test		
Surge immunity test		
Radiated emission test (150kHz - 6GHz)		
Conducted emission test (10kHz - 30MHz)		
Flame retardant test		

Note 1: Inclination test was carried out for XL, BW, BRW-2.

2. Approval condition:

Nil