



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA21479M

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:

NORIS Automation GmbH

Place of Manufacturing:

Muggenhofer Strasse 95, 90429 Nürnberg, Germany

Product description:

Safety and Protection Unit for Diesel Engine

Model:

N3000-SAP

Approval No.:

11A028

Valid until:

24 October 2026

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

Issued at Tokyo on 25 October 2021

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.

PPON KAIJI KYOKAI

Attached sheet -1/2 to the Certificate No.TA21479M

Specification & documents:

1. Particulars: Power supply: 18 - 73V DC

2. Components and reference drawings:

BL134-1 IV, FF9-2 III, FF9-2G III, FF9-3 III, FF9-3G III, GH206-1G,

GH206-1R II, HG-N3000-SAP-5 II, KM139-1 IV, KM140-1 IV, KM141-1 IV,

SA673-1, SA673-1G, SA673-1GL, SA673-1R, SA674-1, SA674-1G, SA674-1R,

SA675-1, SA675-1G, SA675-1GL, SA675-1R, SA677-2, SA677-2G, VL-GH206-1a,

Parts List for SA673-1G, SA675-1G, N3000-SAP-5,

Block diagram N3000-SAP (Block SAP_070606 dated 06.06.07)

Description of N3000-SAP (Info609E V1.56 dated Apr 20, 2020)

Diagram overspeed switch (dated 12.04.07)

Software release for N3000-SAP (Info610E V1.15 dated 04.04.11)

3. Documentation and Test Reports:

N3000-SAP-x Product test report dated Nov./Dec.06

EUT in climatic test dated 11.12.2006

LGA Test Report No. 26 1928 RP1 (EMC Emission) dated 15. January 2007

LGA Test Report No. 26 1928 RP2 (EMC Immunity) dated 15. January 2007

TÜV Test Report for needle flame test (No. 21146389 001) dated 05.02.2010

EUT in vibration test for N3000-SAP dated 06.12.2006

LGA Test Report No. E 4.042 dated 09. February 2007

Test Programme Summary Product Test Report (No. PB 00.101:2020-03) dated 2020-04-28

TÜV Test report for Radiated radio frequency immunity test (No. 60367336-001) dated 28.04.2020

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Attached sheet -2/2 to the Certificate No.TA21479M

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 rev.7 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		
Pressure test (Pneumatic and Hydraulic)		
Dry heat test (Temperature $70^{\circ}\text{C} \times 18 \text{ hours}$)		X
Damp heat test		X
Vibration test (Acceleration $\pm 4g$)		X
Inclination test		
Cold test (Temperature $-25^{\circ}\text{C} \times 16 \text{ hours}$)		X
Salt mist test		
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (80MHz – 6GHz)		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 (150kHz – 2GHz*2.2)		X
Conducted emission test		X
Flame retardant test		X

2. Approval condition:

- 1. The product is not allowed to be installed in the bridge or on open decks.
- 2. Required frequency of Radiated emission test meets CISPR16-2-3 Chapter 7.6.6.2.2.