



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA20491M

This is to certify that the undernoted products 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:

KEI SYSTEM Co., Ltd.

Place of Manufacturing:

1-1-5 Ikuno-nishi Ikunoku Osaka

Product description:

Power Supply RDS Series

Model:

RDS30-24-24, RDS60-24-24, RDS100-24-24, RDS180-24-24,

RSP-DC48Q-4

Approval No.:

20A031

Valid until:

23 September 2025

This certificate is subject to the conditions specified in the attached sheets.

Issued at Tokyo on 24 September 2020.

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.

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Attached sheet -1/2 to the Certificate No. TA20491M

Specification & documents:

1. Particulars: Power supply: DC 24V

2. Components and reference drawings:

Component	Туре
Power Supply Unit	RDS30-24-24 RDS60-24-24 RDS100-24-24 RDS180-24-24
Surge Protection Device	RSP-DC48Q-4

Drawings:

NK-KEI-RDS-503, NK-KEI-RDS-501

3. Documentation and Test Reports:

LR-KEI-RDS-504

- To be continued -

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Attached sheet -2/2 to the Certificate No. TA20491M

Test items & approval condition:

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
Down gunnly fluctuation toot	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 $70^{\circ}\text{C} \times 16 \text{ hours}$)		X
Damp heat test		X
Vibration test (Acceleration ± 0.7 g)		X
Inclination test		X
Cold test (Temperature $5^{\circ}C \times 16$ hours)		X
Salt mist test		
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (Frequency 80MHz ~ 6GHz)		
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		
Surge immunity test		
Radiated emission test (Frequency 0.15MHz ~ 6GHz)		
Conducted emission test		
Flame retardant test		

2. Approval condition:

The product is not allowed to be installed on open decks.