



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA23660M

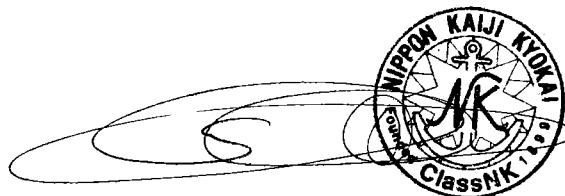
This is to certify that the undernoted products have been approved in accordance with the requirements specified in Chapter 1, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	IDEC CORPORATION
Place of Manufacturing:	6-64 Nishimiyahara 2-chome, Yodogawa-ku, Osaka, Japan
Product description:	Programmable Electronic System
Model:	IDEC SmartRelay
Approval No.:	02A030
Valid until:	5 November 2028

The details are described in the attached sheet(s).

Issued at Tokyo on 20 December 2023.



S. Oishi
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 -1/3 to the Certificate No. TA23660M

Specification & documents:

1. Particulars: Power supply: DC 12V, DC 24V, AC 120V or AC 230V

2. Type of Equipment:

FL1F -H12SCD, -H12RCE, -H12RCA, -H12RCC, -B12RCE, -B12RCA, -B12RCC,
-M08B1S2, -M08B2R2, -M08D2R2, -M08C2R2, -J2B2, -K2BM2, -J2BR2, -RD1

- To be continued -

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Attached sheet -2/3 to the Certificate No. TA23660M

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 (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±1.0g × 1.5 hours)		X
Inclination test		--
Cold test (Temperature -25°C × 16 hours)		X
Salt mist test		--
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		--

- To be continued -

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Attached sheet -3/3 to the Certificate No. TA23660M

2. Approval conditions:

- (1) IDEC SmartRelay fulfil the EMC requirements for general power distribution zone.
Exception: FL1F series except FL1F-RD1 may be installed in the bridge with filter B84113-C-B30 (Messrs.Siemens tested) or equivalent.
- (2) Surge Immunity : For DC system (I/O signals, DC power systems) an external protection is required. Manufactured DEHN, Order No.918402/918422 (Messrs. Siemens tested) or equivalent. All RCE modules only to be used with 24V DC power supply.

- The End -