



NIPPON KAIJI KYOKAI

## TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA20480M

**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:	<b>DEIF A/S</b>
Place of Manufacturing:	<b>Frisenborgvej 33, 7800 Skive, Denmark</b>
Product description:	<b>Medium Voltage Relay</b>
Model:	<b>MVR-200 series</b>
Approval No.:	<b>20A028</b>
Valid until:	<b>14 September 2025</b>

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

Issued at Tokyo on 15 September 2020.



T. Shimada  
General Manager  
Machinery Department

Note: 1. The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.



**Specification & documents:**

## 1. Product description

MVR-200 series is a multi-function relays used for monitoring, control and protection feeder, machine and transformer.

Application	Model Variant
Feeder	F201, F205, F210, F215, F255
Machine	G215, G257, M210, M215, M255, M257
Transformer	T215, T216, T256, T257
Busbar	V211

## 2. Particulars:

Power Supply	DC 24 / 48 V
Rated Voltage	AC 100 – 240 V

## 3. Documentation:

## (1) Product Documentation:

4921240605C, 4189341219A, 4189341221A, 4189341220A

## (2) Software Documentation

Software Quality Plan for AQ-x25x & MVR-x25x v2.5.6.1-51 (2020-22-06)

## 4. Test Reports:

(1) TYPE TEST CERTIFICSTE Performance Test-02A Ref.: 4910212100F

(2) TYPE TEST CERTIFICSTE Electrical Fast Transients (EFT)-BURST 1B  
Ref.: 4910217501Q

(3) TYPE TEST CERTIFICSTE Physical spacing-1C Ref.: 4910210501C

- To be continued -



**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		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test (Temperature 55°C × 12 hours × 2cycles)		X
Vibration test (Acceleration $\pm 0.7g \times 1.5$ hours)		X
Inclination test		X
Cold test (Temperature -25°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test (Contact 6kV, Aerial 8kV)		X
Radiated radio frequency immunity test (80MHz – 6GHz)		X
Conducted low frequency immunity test (50Hz – 10kHz)		X
Conducted high frequency immunity test (10kHz – 80MHz)		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test (150kHz — 6GHz)		X
Conducted emission test (10kHz — 30MHz)		X
Flame retardant test		X

## 2. Approval condition:

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

**- The End -**