

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Control Relays**

with type designation(s)  
**Zelio Control, RM22... and RM35... Schneider Electric brand**

Issued to

**Schneider Electric Asia Pte Ltd**  
**Singapore, Singapore**

is found to comply with  
**DNV GL rules for classification – Ships, offshore units, and high speed and light craft**

**Application :**

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

**Temperature    B**  
**Humidity        B**  
**Vibration        A**  
**EMC              A**  
**Enclosure        \*)**

**\*) Required protection according to DNVGL Rules shall be provided upon installation on board**

Issued at **Hamburg** on **2019-06-26**

for **DNV GL**

This Certificate is valid until **2024-06-25**.

DNV GL local station: **Certification of Materials - Singapore**

Approval Engineer: **Marco Rinkel**

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**Joannis Papanuskas**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-031861-1**  
Certificate No: **TAA00002DH**  
Revision No: **1**

## Product description

Control relays with electromechanical relay output

- Cage clamps for all series
- Relay output 8A, 250V AC/DC
- RM22 – 22.5mm wide terminal connectors
- RM35 – 35.0mm wide terminal connectors

Phase Control

RM22TG20, RM22TA31, RM22TA33, RM22TU21, RM22TU23, RM22TR31,  
RM22TR33

Voltage Control

RM22UA21MR, RM22UA22MR, RM22UA23MR, RM22UA31MR,  
RM22UA32MR, RM22UA33MR, RM22UA33MT, RM22UB34

Current Control

RM22JA21MR, RM22JA31MR, RM35JA32MR, RM35JA32MT

Level Control

RM22LG11MR, RM22LG11MT, RM22LA32MR, RM22LA32MT

## Nomenclature:

RM22	JA	1	2	MU
I	II	III	IV	V

### I: Basic model:

RM22

### II. Control & Monitoring Functions:

TG : Three Phase (Sequence, Lost)

TA : Three Phase (Sequence, Lost, Asymmetrical)

TU : Three Phase (Sequence, Lost, Under-voltage)

TR : Three Phase (Sequence, Lost, Under-voltage, Over-voltage)

UA : Single Phase (Under-voltage, Over-voltage, Individual setting)

UB : Single Phase (Under-voltage, Over-voltage, Windows setting)

JA : Single Phase (Under-current, Over-current, Individual setting)

LA : Liquid Level (Through Resistive Probe, Adjustable Sensitivity Range)

LG : Liquid Level (Through Resistive Probe, Fix Sensitivity Range)

### III. Output:

1 : 1 contact

2 : 2 contacts without adjustable time delay

3 : 2 contacts with adjustable time delay

### IV. Input:

	3 Phase Voltage	Single Phase Voltage	Single Phase Current	Liquid Level Level
0:	208V...480V	-	-	-
1:	200V...240V	50mV...5V	4mA...1A	5kΩ...100kΩ
2:	220V...240V	1V...100V	-	0.25kΩ...1MΩ
3:	380V...480V	15V...500V	-	-
4:	-	80V...300V	-	-

### V. Power Supply:

MR: 24-240 Vdc/Vac

MT: 380Y-415Y/220-240 Vac

Blank: same as Input

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RM35	JA	3	2	MU
I	II	III	IV	V

**I: Basic model:**

RM35

**II. Control & Monitoring Functions:**

JA : Single Phase (Under-current, Over-current, individual setting)

**III. Output:**

3 : 2 contacts with adjustable time delay

**IV. Input:**

Single Phase Current

1: -

2: 0.15A...15A

**V. Power Supply:**

MR: 24-240 Vdc/Vac

MT: 380Y-415Y/220-240 Vac

Blank: non

Factory: P T Schneider Electric Manufacturing Batam  
Batamindo Industrial Park, Jalan Beringin Lot 4 & 208, Muka Kuning, Batam Island, Indonesia

### Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

### Type Approval documentation

NHA4930802, NHA4930806, NHA4930807, NHA4930808, NHA4930809, NHA4930810, NHA4930803, EAV5196200, NHA4930805, NHA4930804, NHA4930811, NHA4930816, NHA4930814, NHA4930815, NHA4930813, NHA4930812, NHA4930816, NHA4930816

### Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

### Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number

Brands: Schneider Electric

### Place of Production:

PT Schneider Electric Manufacturing Batam  
Batamindo Industrial Park, Jalan Beringin Lot 1, Lot4, Lot 15, Lot 16, Lot 16A and Lot 208  
Muka Kuning, Batam Island, Indonesia

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### **Periodical assessment**

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE