



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAA00002DH
Revision No:
3

This is to certify:

that the **Electromechanical Relays**

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

issued to
Schneider Electric Asia Pte Ltd
Singapore, Singapore

is found to comply with
DNV 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.

Temperature	B
Humidity	B
Vibration	A
EMC	A
Enclosure	*) Required protection according to DNV Rules shall be provided upon installation on board

Issued at **Høvik** on **2024-09-04**

for **DNV**

This Certificate is valid until **2029-06-26**.

DNV local unit: **Certification of Materials - Singapore**

Approval Engineer: **Torsten Dzillak**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.



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, RM22TG20C, RM22TA31, RM22TA33, RM22TU21, RM22TU23, RM22TR31, RM22TR33, RM22TR33C

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	C
I	II	III	IV	V	VI

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

VI. Letter suffix for marketing purpose with no design/construction variation



Job ID: 262.1-040497-2
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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, 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 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

renewal audit 2024-04-25
EMC test report 7191326138-EEC24/01 issue 1 dated 16-02-2024 TÜV Süd PSB Singapore

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.

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

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