DNV·GL

Certificate No:
TAA00001NC

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Control Relays

with type designation(s)
Telemecanique Control Relays 8497xxxx

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 Rules shall be provided upon installation onboard**

Issued at **Hamburg** on **2018-11-20**

This Certificate is valid until **2023-11-19**.
DNV GL local station: **Certification of Materials - Singapore**

Approval Engineer: **Marco Rinkel**

for **DNV GL**
Digitally Signed By:
Papanuskas, Joannis
Signing Date: Mittwoch, 21. November 2018

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.

Product description

Level control relays: RM35LM33MW, RM35LV14MW,
Part No. 84 970 7, followed by 0 or 1, followed by 0.

Current control relays: RM17JC00MW, RM35JA31MW, RM35JA32MW,
Part No. 84 971 1, followed by 2 or 3, followed by 0 or 2.

Voltage control relays: RM17UAS14, RM17UAS16, RM17UAS15, RM17UBE16, RM17UBE15, RM35UA11MW, RM35UA12MW, RM35UA13MW,
Part No. 84 972 1, followed by 2, 3, 4 or 5, followed by 0, 1 or 2.

Frequency control relais: RM35HZ21FM,
Part No. 84 972 501.

Three phase control relays: RM35UB330, RM35UB3N30, RM17UB310,
Part No. 84 973 22, followed by 0, 1 or 2.

Phase control relays: RM17TG00, RM17TG20, RM17TT00, RM17TU00, RM17TA00, RM17TE00, RM35TF30,
Part No. 84 973 02, followed by 0, 1, 2, 3, 4, 5, or 6.

Phase + Thermal control relays: RM35TM50MW, RM35TM250MW,
Part No. 84 973 02, followed by 7 or 8.

Speed control relays: RM35S0MW,
Part No. 84 974 320.

Lift Temperature control relays Part no. RM35ATL0MW, RM35ATR5MW, RM35ATW5MW,
Part no. 84 974 1, followed by 1, 2 or 3, followed by 0.

Pump control relays: Part no. RM35BA10,
Part No. 84 974 200.

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

Test report: Overview of test reports - GL Certification January 2007, Project RMC2.

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
- Telemecanique

Place of Production:

PT Schneider Electric Manufacturing Batam
Batamindo Industrial Park, Jalan Beringin Lot 4 & 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