DNV·GL

Certificate No:
TAE000005W

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Overcurrent- and Short-Circuit Relay

with type designation(s)
3RB22, 3RB23 & 3RB29

Issued to
Siemens AG GWA
Amberg, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

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

This Certificate is valid until **2018-12-31**.

Issued at **Høvik** on **2015-09-21**

for **DNV GL**

DNV GL local station: **Essen**

Approval Engineer: **Marta Alonso Pontes**

Marit Laumann
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.

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Product description

Overload Relays (solid state) type 3RB22, 3RB23, and 3RB29 according to Size and power range as listed below. Max. operating voltage = 690 V. Insulation voltage 300 V, 600 V (IT-net) or 1000 V. Frequency = 50 / 60 Hz.

3RB22../3RB23..	Electronic Overload Relay Control Voltage: 24 up to 240 V ac/dc Rated insulation voltage: 300 V
3RB2906-2B	Current detection Module 3-phase motor P_N at 400V/50Hz: 0.09 kW up to 1.1 kW Current setting range: 0.3 A up to 3 A Rated insulation voltage: 600 V (IT-net)
3RB2906-2D	Current detection Module 3-phase motor P_N at 400V/50Hz: 1.1 kW up to 11 kW Current setting range: 2.4 A up to 25 A Rated insulation voltage: 600 V (IT-net)
3RB2906-2J	Current detection Module 3-phase motor P_N at 400V/50Hz: 5.5 kW up to 45 kW Current setting range: 10 A up to 100 A Rated insulation voltage: 600 V (IT-net)
3RB2956-2T	Current detection Module 3-phase motor P_N at 400V/50Hz: 11 kW up to 90 kW Current setting range: 20 A up to 200 A Rated insulation voltage: 1000 V
3RB2966-2B	Current detection Module 3-phase motor P_N at 400V/50Hz: 37 kW up to 450 kW Current setting range: 63 A up to 630 A Rated insulation voltage: 1000 V

Accessories include extension modules, flat cable (3RB29..) and Push-In lugs for screw mounting (3RP19.. and 3RB19..)

Application/Limitation

For installation inside switchboards/ enclosures onboard ships and offshore units.

With Uimp = 6 kV the max. rated voltage is 600 V when used in a IT (ship) net. It can be used in applications with directly earthed systems with rated voltage of 400/690 V.

Type Approval documentation
Tests carried out

Type tests in accordance with IEC/EN60947, dry heat, damp heat, salt mist, vibration, high voltage & EMC.

Marking of product

Manufacturer's label containing data and manufacturer's type number.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at least every second year.

END OF CERTIFICATE