DNV-GL

EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No: **MRE000000K** Revision No:

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

Schneider Electric Industries SAS GRENOBLE, France

for

Circuit Breakers

with type designation(s)

GV3P13 to GV3P80, GV3L25 to GV3L80 and auxiliary contacts type GVAED

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Circuit Breakers

Intended service

Circuit breaker for use onboard ship and offshore platforms.

Rated Voltage (V) Up to 690 Rated Current (A) 9 - 80 Frequency (Hz) 50 / 60

This Certificate is valid until 2024-01-28.

This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

DNV GL local station: France CMC	
Approval Engineer: Nicolay Horn	
	Marta Alonso Pontes

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 300,000 USD.



Form code: MRTA 201 Revision: 2020-01 www.dnvgl.com Page 1 of

Head of Section

Job Id: **262.4-000150-1** Certificate No: **MRE000000K**

Revision No: 1

Product description

Motor circuit breaker:

GV3P: Thermal - Magnetic breaker

GV3L: Magnetic breaker

Rated current Ie: GV3 P: 9-80 A GV3 L: 25-80 A

Motor protection: GV3P: 5,5-36 kW

GV3 L: 11-36 kW

Max. operating voltage Ue: 600/690 V AC* Rated insulation voltage Ui: 600/690 V AC*

Rated impulse voltage Uimp: 6 kV
Rated frequency fe: 50/60 Hz
Utilization category: A

*See application / limitation

	Icu [kA] = Iq					Ics [KA]		
	230V	400/415V	440V	500V	690V	230V	400/415V 440V	500/690V
GV3P13								
GV3P18	100	100	50	12	6	100%Icu	100%Icu	50%Icu
GV3P25								
GV3P32								
GV3P40		50						
GV3P50								
GV3P65								
GV3P73	- 65						60%Icu	
GV3P80							00 %1Cu	
GV3L25	100	100	50	12	6	100%Icu	100%Icu	50%Icu
GV3L32								
GV3L40		50						
GV3L50								
GV3L65								
GV3L73	- 65						60%Icu	
GV3L80							00 701Cu	

Manufactured by

Schneider Electric France 6-8 rue du Bailly 21078 Dijon Cedex France

Application/Limitation

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

Form code: MRTA 201 Revision: 2020-01 www.dnvgl.com Page 2 of 4

Job Id: **262.4-000150-1**Certificate No: **MRE000000K**

Revision No: 1

Type Approval documentation

```
Test reports:
F-lab Test report no. 201703880_020
VDE 249419-TL3-4
VDE 234365-TL3-2 & 234365-TL3-3
VDE 5007256-4402-0001/111802- 1 to 3 (2009-05-20)
L2E 200902935_001 (2009-10-14), L2E 200902929_001 (2009-08-14),
L2E 200902930_001 (2009-08-08), L2E 200902931_001 (2009-09-09),
L2E 200902933_001 (2009-08-12), L2E 200902934_001 (2009-08-24),
VDE 188115-CC2-1 (2014-06-18), VDE 188115-CC2-2 (2014-06-18)
IEC DE1-60314 (2018-04-13
```

Marking of product

Manufacturer's name and product identification.

Other condition

Environmental tests in according to IEC 60947-1 Annex Q testsequence D: Dry Heat Test, Damp Heat Test, Low temperature Test, Vibration test.

Type Tests acc. to IEC60947-1(ed.5);am1 & am2, IEC60947-2(ed.5 incl. annex H); IEC60947-4-1 (ed.3); am1.

Environmental test parameters:

Temperature: -25 °C and 70 °C (open product), -20 °C up to +40 °C (enclosed product)*

Vibration: $\pm 1 \text{mm} / 0.7 \text{g}$ EMC: General power zone

Enclosure: IP20

*Enclosed product mean mounted in a dedicated enclosure. Normal use inside a switchboard is regarded as open product.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is 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 RT to be carried out).
- Review of type approval documentation.
- Review of possible change in design, materials and performance.
- Ensure traceability between manufacturer's product marking and the DNVGL EU MR Type Approval Certificate.

Assessment to be performed annually.

Form code: MRTA 201 Revision: 2020-01 www.dnvgl.com Page 3 of 4

Job Id: **262.4-000150-1** Certificate No: **MRE000000K**

Revision No: 1

Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV GL;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

END OF CERTIFICATE

Form code: MRTA 201 Revision: 2020-01 www.dnvgl.com Page 4 of 4