

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

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)

TeSys GV5P

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) 150 / 220
Frequency (Hz) 50 / 60****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.

This Certificate is valid until **2025-09-06**.Issued at **Høvik** on **2020-09-07**for **DNV GL**DNV GL local station: **France CMC**Approval Engineer: **Nicolay Horn**

**Marta Alonso Pontes
Head of Section**

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.



Place of manufacturer

Schneider Electric Alpes
Voie Isaac Newton ZI Alpespace
73800 FRANCIN
France

Product description

	GV5P150F	GV5P150H	GV5P220F	GV5P220H
Rated insulation voltage U_i AC (V)	800	800	800	800
Rated impulse voltage U_{imp} AC (V)	8	8	8	8
Rated operational voltage U_e AC (V)	230 - 690	230 - 690	230 - 690	230 - 690
Rated current I_e (A)	150	150	220	220
Rated frequency Hz	50/60	50/60	50/60	50/60
Rated short-circ. service break. cap. I_{cs} (kA)				
690V	8	10	8	10
500V	30	50	30	50
440V	35	65	35	65
415V	36	70	36	70
230V	85	100	85	100
Rated ultima. short-circ. break. cap. I_{cu} (kA)				
690V	8	10	8	10
500V	30	50	30	50
440V	35	65	35	65
415V	36	70	36	70
230V	85	100	85	100
AC1 performance I_e (A)	150	150	220	220
AC3 performance I_e (A)	130	130	162	162

All test results are given according to IEC 60947-1 and 4-1

Application/Limitation

Motor-protected circuit breaker including electronic overload release, electronic short-circuit release, thermal memory and phase loss sensitive.

Applicable for use in an IT net with a voltage up to 690 V.

Type Approval documentation

Technical info:

"Identification File TeSys GV5P, No DID_180053"
Catalogue "TeSys GV5 / GV6 55 to 250 kW".

Test reports:

LCIE test report no. 159383-732071 issued 2019-09-04.
F-Lab Volta test reports nos. 201900218_005 issued 2019-04-12, 201907902_001 issued 2020-02-03, 201907902_002 issued 2020-01-23, 201907902_003_v1 issued 2020-07-10, 201907902_004 issued 2020-02-14, 201907902_005 issued 2020-01-27, 201907902_010 issued 2020-02-11.

Other condition

Environmental test parameters:

Temperature:	-25 °C and 70 °C
Vibration:	± 1mm / 0.7g
EMC:	Bridge and deck zone and general power distribution zone
Enclosure:	IP20

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.

Generic Statement for EU RO MR Type Approval Certificate

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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