

CERTIFICATE NUMBER 16-HG1531940-PDA DATE 24 Jun 2016

ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF

DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

SIEMENS AG GWA

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Circuit Breaker

Model: 3RV2.1, 3RV2.2, 3RV2.3, 3RV29, 8US1, 3RV19

This Product Design Assessment (PDA) Certificate 16-HG1531940-PDA, dated 24/Jun/2016 remains valid until 23/Jun/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

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Tier: 2 - PDA Issued

Product: Circuit Breaker

Model: 3RV2.1, 3RV2.2, 3RV2.3, 3RV29, 8US1, 3RV19

Intended Service:

Circuit breakers for installation in electrical switchboards and panels.

Description:

Moulded case Circuit Breaker

Rating:

Rated Voltage Ue: up to 690V AC Rated Current In: up to 80A

Rated Breaking Current Icu: up to 100kA

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation: Drawing No. 3003c, 3003c, Revision: 1, Pages: 1
Drawing No. 3291, 3291, Revision: 1, Pages: 1
Drawing No. A5E03774150A RS-AB 002, A5E03774150A RS-AB 002, Revision: 1, Pages: 1 Drawing No. A5E315101340 $\overline{0}$ 0A 3R \overline{V} 2.31above50Aand3R \overline{V} 2.32, A5E31510134000A 3RV2.31above50Aand3RV2.32, Revision: 1, Pages: 1 Drawing No. Certificate-Draft ABS 3RV2, Certificate-Draft ABS 3RV2, Revision: 1, Pages: 1 Drawing No. Contents, Contents, Revision: 1, Pages: 1
Drawing No. EquipmentUnderTest Circuit Breaker 3RV2 version 3.0 2016-04, EquipmentUnderTest Circuit Breaker 3RV2 version 3.0 2016-04, Revision: 1, Pages: 1 Drawing No. ISO 9001 certificate Amberg, ISO 9001 certificate Amberg, Revision: 1, Pages: 1 Drawing No. ISO 9001 certificate Kartal, ISO 9001 certificate Kartal, Revision: 1, Pages: 1 Drawing No. List of General Drawings, List of General Drawings, Revision: 1, Pages: 1
Drawing No. List of IEC Test-Reports, List of IEC Test-Reports, Revision: 1, Pages: 1
Drawing No. List of Operating instructions, List of Operating instructions, Revision: 1, Pages: 1 Drawing No. List of Plastic Material 3RV2, List of Plastic Material 3RV2, Revision: 1, Pages: 1 Drawing No. List of Tripping Curves, List of Tripping Curves, Revision: 1, Pages: 1 Drawing No. NEB4612580.10.000.RS-AA.004 Op Instr, NEB4612580.10.000.RS-AA.004 Op Instr, Revision: 1, Pages: 1 Drawing No. NEB4612582.30.000.RS-AA.002 Op Instr, NEB4612582.30.000.RS-AA.002 Op Instr, Revision: 1, Pages: 1 Drawing No. NEP46127012400001, NEP46127012400001, Revision: 1, Pages: 1 Drawing No. NEP46127022400002, NEP46127022400002, Revision: 1, Pages: 1 Drawing No. NEP46127030100002, NEP46127030100002, Revision: 1, Pages: 1 Drawing No. NEP46127030200003, NEP46127030200003, Revision: 1, Pages: 1 Drawing No. NEP46127030300003, NEP46127030300003, Revision: 1, Pages: 1 Drawing No. NEP46127030300003, NEP46127030300003, Revision: 1, Pages: 1 Drawing No. NEP46127112400001, NEP46127112400001, Revision: 1, Pages: 1 Drawing No. NEP46127122400001, NEP46127122400001, Revision: 1, Pages: 1 Drawing No. NEP46127130100003, NEP46127130100003, Revision: 1, Pages: 1 Drawing No. NEP46127130200003, NEP46127130200003, Revision: 1, Pages: 1 Drawing No. NEP46127130300003, NEP46127130300003, Revision: 1, Pages: 1

Drawing No. NEP46127212400002, NEP46127212400002, Revision: 1, Pages: 1

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Drawing No. NEP46127222400001, NEP46127222400001, Revision: 1, Pages: 1
Drawing No. NEP46127230100001, NEP46127230100001, Revision: 1, Pages: 1
Drawing No. NEP46127230200001, NEP46127230200001, Revision: 1, Pages: 1
Drawing No. NEP46127230300001, NEP46127230300001, Revision: 1, Pages: 1
Drawing No. NEZ4612001_02_3RV2.2 screw terminals, NEZ4612001_02_3RV2.2 screw terminals, Revision: 1, Pages: 1
Drawing No. NEZ4612006_01_3RV2.1 spring terminals, NEZ4612006_01_3RV2.1 spring terminals, Revision: 1, Pages: 1
Drawing No. NEZ462000100000_3RV2.31up_to_45A, NEZ462000100000_3RV2.31up_to_45A, Revision: 1, Pages: 1
Drawing No. Nomenclature Breakdown Circuit Breaker 3RV2 2014-01-20, Nomenclature Breakdown Circuit Breaker 3RV2 2014-01-20, Revision: 1, Pages: 1
Drawing No. SN27095, SN27095, Revision: 1, Pages: 1

Terms of Validity:

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STANDARDS

ABS Rules:

2016 Steel Vessel Rules, 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-8-3/1.7/1.17/5.3.3

National:

NA

International:

IEC 60947-2 (2016), IEC 60947-4-1 (2001), IEC 60947-5-1 (2016)

Government:

NA

EUMED:

NA

OTHERS:

NA