SIEMENS

EU-Konformitätserklärung / *EU Declaration of Conformity*

Nr./*No. 00198B / O2 MCB*

Produktbezeichnung:	Leitungsschutzschalter 5SY3...-.; 5SY4...-.; 5SY6...-.; 5SY7...-.; 5SY4...-7XX..; 5SY4...-8XX..; 5SY4..-6KK11; 5SY4...-7KK11; 5SY7110-6KK13
Product identification:	*Miniature Circuit Breaker 5SY3...-.; 5SY4...-.; 5SY6...-.; 5SY7...-.; 5SY4...-7XX..; 5SY4...-8XX..; 5SY4..-6KK11; 5SY4...-7KK11; 5SY7110-6KK13*
Hersteller: *Manufacturer*	Siemens AG, Energy Management, Low Voltage and Products (EM LP)
Anschrift: *Address*	Siemensstraße 10, 93055 Regensburg, Germany

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Niederspannungsrichtlinie:

2006/95/EG Richtlinie des Europäischen Parlaments und des Rates vom 12. Dezember 2006 zur Angleichung der Rechtsvorschriften der Mitgliedstaaten betreffend elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen ***(bis 19.04.2016)***

2014/35/EU Richtlinie des Europäischen Parlaments und des Rates vom 26. Februar 2014 zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten über die Bereitstellung elektrischer Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen auf dem Markt; Amtsblatt der EU L96, 29/03/2014, S. 357–374 ***(ab 20.04.2016)***

Low Voltage Directive:

2006/95/EC *Directive of the European Parliament and of the Council of 12 December 2006 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits* ***(until 19.04.2016)***

2014/35/EU *Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits; Official Journal of the EU L96, 29/03/2014, p. 357–374* ***(from 20.04.2016)***

EMV-Richtlinie:

2004/108/EG Richtlinie des Europäischen Parlaments und des Rates vom 15. Dezember 2004 zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit ***(bis 19.04.2016)***

2014/30/EU Richtlinie des Europäischen Parlaments und des Rates vom 26. Februar 2014 zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit; Amtsblatt der EU L96, 29/03/2014, S. 79–106 ***(ab 20.04.2016)***

EMC Directive:

2004/108/EC *Directive of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility* ***(until 19.04.2016)***

2014/30/EU *Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility; Official Journal of the EU L96, 29/03/2014, p. 79–106* ***(from 20.04.2016)***

Weitere Angaben über die Einhaltung dieser Richtlinie(n) enthält der Anhang, der ein integraler Bestandteil dieser Konformitätserklärung ist.

Further information about the conformity to this Directive(s) is given in the Annex, which is an integral part of this declaration of conformity.

Anbringung der CE-Kennzeichnung / *affixing of the CE-marking*: 99

Unterzeichnet für und im Namen von:/ *Signed for and on behalf of:*

Siemens Aktiengesellschaft

Regensburg 31.08.2015
Ort / *place* Datum der Ausstellung / *Date of issue*

Eckert G. i.V.
Name / *name* Unterschrift / *signature*

Entwicklung / *Research & Development*
Funktion / *function*

Bauer B. i.V.
Name / *name* Unterschrift / *signature*

Qualität / *Quality*
Funktion / *function*

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Beschaffenheits- oder Haltbarkeitsgarantie. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

This declaration is an attestation of conformity with the indicated Directive(s) but does not imply any guarantee of quality or durability. The safety instructions of the accompanying product documentation shall be observed.

Siemens Aktiengesellschaft: Vorsitzender des Aufsichtsrats: Gerhard Cromme; Vorstand: Joe Kaeser, Vorsitzender;
Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Siegfried Russwurm, Ralf P. Thomas;
Sitz der Gesellschaft: Berlin und München, Deutschland; Registergericht: Berlin Charlottenburg, HRB 12300, München, HRB 6684;
WEEE-Reg.-Nr. DE 23691322

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SIEMENS

Anhang /*Annex 1*

zur EU–Konformitätserklärung / *to EU Declaration of Conformity*
Nr. / *No.* 00198B / O2 MCB

Produktbezeichnung:	Leitungsschutzschalter 5SY3...-.; 5SY4...-.; 5SY6...-.; 5SY7...-.; 5SY4...-7XX..; 5SY4...-8XX..; 5SY4..-6KK11; 5SY4..-7KK11; 5SY7110-6KK13
Product identification:	*Miniature Circuit Breaker 5SY3...-.; 5SY4...-.; 5SY6...-.; 5SY7...-.; 5SY4...-7XX..; 5SY4...-8XX..; 5SY4..-6KK11; 5SY4...-7KK11; 5SY7110-6KK13*

Die Übereinstimmung des bezeichneten Produkts mit den Vorschriften der angewandten Richtlinie(n) wird nachgewiesen durch die vollständige Einhaltung folgender Normen / Vorschriften:

The conformity of the product described above with the provisions of the applied Directive(s) is demonstrated by full compliance with the following standards / regulations:

Harmonisierte Normen / *Harmonised standards*:

Referenznummer *Reference number*	Ausgabedatum *Date of issue*	Referenznummer *Reference number*	Ausgabedatum *Date of issue*
DIN EN 60898-1 (VDE 0641-11)	2006-03-01	.....	.....
DIN EN 60898-1/A12 (VDE 0641-11/A12)	2009-02-01	.....	.....
DIN EN 60898-1/A13 (VDE 0641-11/A13)	2013-01-01	.....	.....
.....	.....	.....	.....

Sonstige technische Normen, Spezifikationen / *other technical standards, specifications*:

Referenznummer *Reference number*	Ausgabedatum *Date of issue*	Referenznummer *Reference number*	Ausgabedatum *Date of issue*
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Siemens Aktiengesellschaft: Vorsitzender des Aufsichtsrats: Gerhard Cromme; Vorstand: Joe Kaeser, Vorsitzender;
Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Siegfried Russwurm, Ralf P. Thomas;
Sitz der Gesellschaft: Berlin und München, Deutschland; Registergericht: Berlin Charlottenburg, HRB 12300, München, HRB 6684;
WEEE-Reg.-Nr. DE 23691322

V5

Marine & Offshore Division

Certificate number: 14651/C0 BV
File number: ACE 02/148/01
Product code: 2644H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

SIEMENS AG - Low Voltage

Regensburg - GERMANY

for the type of product

MINI-BREAKERS

Miniature Circuit Breaker
5SY4...., 5SY6...., 5SY7.....

Requirements:
BV Rules for the Classification of Steel Ships.
IEC 60898-1: 2015(ed.2)
EC Code: 31

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 16 Dec 2021

For BUREAU VERITAS,
At BV HAMBURG, on 16 Dec 2016,
Dirk Hoepfner

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

5SY4….., 5SY6….., 5SY7..... series are miniature circuit breakers.

General Ratings:
Rated Frequency: 50/60 Hz
Degree of Protection : IP20

I) Type: **5SY4**

5SY4	**5SY4 1..-6**	**5SY4 2..-6**	**5SY4 3..-6**	**5SY4 4..-6**	**5SY4 5..-6**	**5SY4 6..-6**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	250/440	440	440	440	250	440
Characteristic	B	B	B	B	B	B
Rated current Ie (A)	6...63	6...63	6...63	6...63	6...63	6...63
Breaking cap (KA) Icn 440V	10	10	10	10	10	10

5SY4	**5SY4 1..-7**	**5SY4 2..-7**	**5SY4 3..-7**	**5SY4 4..-7**	**5SY4 5..-7**	**5SY4 6..-7**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	250/440	440	440	440	250	440
Characteristic	C	C	C	C	C	C
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 440V	10	10	10	10	10	10

5SY4	**5SY4 1..-8**	**5SY4 2..-8**	**5SY4 3..-8**	**5SY4 4..-8**	**5SY4 5..-8**	**5SY4 6..-8**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	250/440	440	440	440	250	440
Characteristic	D	D	D	D	D	D
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 440V	10	10	10	10	10	10

II) Type: **5SY6**

5SY6	**5SY6 1..-6**	**5SY6 2..-6**	**5SY6 3..-6**	**5SY6 4..-6**	**5SY6 5..-6**	**5SY6 6..-6**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	B	B	B	B	B	B
Rated current Ie (A)	6...63	6...63	6...63	6...63	6...63	6...63
Breaking cap (KA) Icn 400V	6	6	6	6	6	6

5SY6	**5SY6 1..-7**	**5SY6 2..-7**	**5SY6 3..-7**	**5SY6 4..-7**	**5SY6 5..-7**	**5SY6 6..-7**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	C	C	C	C	C	C
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 400V	6	6	6	6	6	6

5SY6	**5SY6 1..-8**	**5SY6 2..-8**	**5SY6 3..-8**	**5SY6 4..-8**	**5SY6 5..-8**	**5SY6 6..-8**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	D	D	D	D	D	D
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 400V	6	6	6	6	6	6

III) Type: **5SY7**

5SY7	**5SY7 1..-6**	**5SY7 2..-6**	**5SY7 3..-6**	**5SY7 4..-6**	**5SY7 5..-6**	**5SY7 6..-6**
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	B	B	B	B	B	B
Rated current Ie (A)	6...63	6...63	6...63	6...63	6...63	6...63
Breaking cap (KA) Icn 400V	15	15	15	15	15	15

5SY7	5SY7 1..-7	5SY7 2..-7	5SY7 3..-7	5SY7 4..-7	5SY7 5..-7	5SY7 6..-7
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	C	C	C	C	C	C
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 400V	15	15	15	15	15	15

5SY7	5SY7 1..-8	5SY7 2..-8	5SY7 3..-8	5SY7 4..-8	5SY7 5..-8	5SY7 6..-8
Poles	1	2	3	4	1+N	3+N
Rated operational voltage Ue AC (V)	230/400	400	400	400	230	400
Characteristic	D	D	D	D	D	D
Rated current Ie (A)	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63	0.3...63
Breaking cap (KA) Icn 400V	15	15	15	15	15	15

2. DOCUMENTS AND DRAWINGS :

- In accordance with the information filed in the ACE 02/148/01.

3. TEST REPORTS :

- Nr: 208785-CC2-001...078, dated 2015-10-12 tested by IPH institut.
- Nr: 208785-CC2-104...128, dated 2015-10-12 tested by IPH institut.
- Nr: 208785-CC2-129...154, dated 2015-10-12 tested by IPH institut.
- Damp heat test dated 27/02/01, issued by Siemens.

4. APPLICATION / LIMITATION :

4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships
4.2 - According to IEC 60898-1
4.3 - Bureau Veritas Environmental Category, EC Code: 31
4.4 - Miniature circuit breakers to be used for the protection of final sub-circuits.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above mentioned miniature circuit breakers are to be supplied by **SIEMENS AG - Low Voltage**, in compliance with the type described in this certificate.
5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320.
5.3 - **SIEMENS AG - Low Voltage** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirement of NR320 for HBVproducts:

SIEMENS AG - Low Voltage
Siemensstrasse 10
D 93055 Regensburg - GERMANY

6. MARKING OF PRODUCT :

- According to IEC 60898-1 specifications

7. OTHERS :

7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **SIEMENS AG - Low Voltage, Regensburg - Germany**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
7.2 - This certificate supersedes the Type Approval Certificate N° 14651/B0 BV issued on 07 Nov 2011 by the Society

***** END OF CERTIFICATE *****

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Protectors, Supplementary - Component

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Protectors, Supplementary - Component

See General Information for Protectors, Supplementary - Component

SIEMENS AG E116386
LOW VOLTAGE
SIEMENSSTRASSE 10
93055 REGENSBURG, GERMANY

Auxiliary contacts, Series 5ST3 for use with protectors 5SY4, 5SY6, 5SY7, 5SY8.

Cat. No.	Type	UG	FW	Max Volts	Max Amperes	TC	OL	SC
5SY4, 5SY6, 5SY7, 5SY8	OC	A	0	480	63	2	0	5kA U2, 7.5kA U2, 14kA U2
5SY4, 5SY6	OC	A	0	60 Vdc	1A - 63	2	0	3.5kA U2

Marking: Company name, type and catalog designation.
Last Updated on 2014-10-31

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Protectors, Supplementary Certified for Canada - Component

See General Information for Protectors, Supplementary Certified for Canada - Component

SIEMENS AG
LOW VOLTAGE
SIEMENSSTRASSE 10
93055 REGENSBURG, GERMANY

E116386

Supplementary protectors.

Cat. No.	Type	UG	FW	Max Volts	Max Amperes	TC	OL	SC
5SY4, 5SY6, 5SY7, 5SY8	OC	A	0	480	63	2	0	5kA U2, 7.5kA U2, 14kA U2
5SY4, 5SY6	OC	A	0	60 Vdc	1A - 63	2	0	3.5kA U2

Auxiliary contact, Series 5ST3.

Marking: Company name, catalog or series designation and the Recognized Component Mark for Canada, c UL .

Last Updated on 2014-01-21

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CERTIFICATE OF COMPLIANCE

Certificate Number	20130923-E116386
Report Reference	E116386-20020430
Issue Date	2013-SEPTEMBER-23
Issued to:	SIEMENS AG LOW VOLTAGE SIEMENSSTRASSE 10 93055 REGENSBURG GERMANY
This is to certify that representative samples of	COMPONENT - PROTECTORS, SUPPLEMENTARY Please see addendum
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 1077 - Supplementary Protectors for Use in Electrical Equipment. CSA C22.2 No. 235-04 - Supplementary Protectors
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada: and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number	20130923-E116386
Report Reference	E116386-20020430
Issue Date	2013-SEPTEMBER-23

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Series 5SY4, 5SY6, 5SY7 and 5SY8

Products: Valid for 5SY6, 5SY4, 5SY7 and 5SY8		not for 5SY60... series

Voltage	1 pole, 1 pole + N	277V AC max.
	2-, 3-, 4 pole, 3 pole + N	480V AC max.
Characteristics	A, B, C, D	
Rated current	A1…A63, B6…B63, C0,3…C63, D0,3…D63	
Voltage	1 pole	60V DC
Characteristics	A, B, C, D	
Rated current	A1…A63, B6…B63, C1…C63, D1…D63	

Interrupting ratings:		
5kA	at 277V AC	for 1 pole and 1 pole + N
7,5kA	at 240V AC	for 1 pole and 1 pole + N
14kA	at 120/240V, 240V AC	for 2 pole, 1+N and 1 pole in pairs (series rating)
5kA	at 480V AC	for 2-, 3-, 4 pole and 3 pole + N
3,5kA	at 60V DC	for 1 pole

When a auxiliary switch or two auxiliary switches are mounted to a supplemental protector, the protector and the adjacent auxiliary switch may be wired for opposite polarity between the protector pole and the adjacent auxiliary switch, in applications involving up to 480V AC between the protector pole and the adjacent contact block.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

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CERTIFICATE NUMBER
16-HG1594318-PDA

DATE
13 Jan 2017

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

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: **Miniature Circuit Breaker (MCB) 5SY...**

This Product Design Assessment (PDA) Certificate 16-HG1594318-PDA, dated 13/Jan/2017 remains valid until 12/Jan/2022 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.

AMERICAN BUREAU OF SHIPPING

Dagmar Gramatzki

Dagmar Gramatzki
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

SIEMENS AG
REGENSBURG
SIEMENSSTR, 10
D-93055 REGENSBURG
Germany
Telephone: +49-911 895-7222
Fax:
Email: support.automation@siemens.com
Web: http://www.siemens.com/lowvoltage

Tier: 2 - PDA Issued

Product: **Circuit Breaker**
Model: **Miniature Circuit Breaker (MCB) 5SY...**
Intended Service:
Circuit breakers with overload and short circuit protection in electric main circuits and distribution systems.

Description:
Fixed mounted or withdrawable circuit breakers.

Rating:
Rated (AC) voltage Ue: 230 / 400 V, 230 V, 400 V.
Rated currents In: 0.3 A to 63 A.
Degree of protection: IP20 (with connected conductors), IP40 (in the area of the handle with distribution cover).

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:
Document No. 01, VDE Marks Approval Certificate, Revision: -, Pages: 5.
Document No. 02, Catalogue 5SY Miniature Circuit Breakers, Revision: 2016/2017, Pages: 16.
Document No. 03, EU Declaration of Conformity 5SY..., Revision: -, Pages: 2.
Document No. 04, Certificate ISO 9001_14001_OHSAS 18001, Revision: -, Pages: 2.
Document No. CB-56223, IEC Test Certificate No. CB-56223 of 11 Nov 2015, Revision: -, Pages: 2.
Document No. CB-56223M1, IEC Test Certificate No. CB-56223M1 of 30 Aug 2016, Revision: -, Pages: 2.

Terms of Validity:
This Product Design Assessment (PDA) Certificate 16-HG1594318-PDA, dated 13/Jan/2017 remains valid until 12/Jan/2022 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.

STANDARDS

ABS Rules:
2017 Steel Vessel Rules, 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-8-3/1.3 /1.7 /1.11.1 /5.3.3.

SIEMENS AG
REGENSBURG
SIEMENSSTR, 10
D-93055 REGENSBURG
Germany
Telephone: +49-911 895-7222
Fax:
Email: support.automation@siemens.com
Web: http://www.siemens.com/lowvoltage

Tier: 2 - PDA Issued

National:
NA

International:
IEC 60898-1: Edition 1 (2015).

Government:
NA

EUMED:
NA

OTHERS:
NA

DNV·GL

Certificate No:
TAE00001E3

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Automatic Fuse

with type designation(s)
5SY4..., 5SY6..., 5SY7...

Issued to
Siemens AG Low Voltage
REGENSBURG, Germany

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

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

This Certificate is valid until **2021-10-11**.
Issued at **Hamburg** on **2016-10-12**

for **DNV GL**

DNV GL local station: **Augsburg**

Approval Engineer: **Harald Amberger**

Duy Nam Le
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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Job Id: **262.1-022765-1**
Certificate No: **TAE00001E3**

Product description

Miniature Circuit Breaker Type:	5SY4…, 5SY6…, 5SY7…		
Rated voltage Ue	230/400V AC		
Max. operational voltage U_e	250/440V AC 72V DC/pole		
Rated impulse withstand voltage U_{imp}	4kV		
Rated frequency	50/60 Hz		
Number of poles	1, 1+N, 2, 3, 3+N, 4		
Utilization Category acc. IEC 60947-2	A		
Pollution degree for overvoltage category	3/III		
Rated current I_e (30°C)	5SY6…	5SY4…	5SY7…
Tripping characteristic A	--	0,5 - 63A	--
Tripping characteristic B	2,0 – 63A	2,0 – 80A	6,0 – 63A
Tripping characteristic C	0,3 – 63A	0,3 – 80A	0,3 – 63A
Tripping characteristic D	0,3 – 63A	0,3 – 63A	0,3 – 63A
Rated short circuit capacity I_{cn}, acc. IEC 60898-1	6kA	10kA	15kA
Further ratings according manufacturer documentation			

Application/Limitation

Location Classes:
Temperature: B, Humidity: B, Vibration: A
Enclosure: IP20 with connected conductors, IP40 in the area of the handle with distribution cover

Type Approval documentation

Char. A:
CCA Report DE1-34507M1 (2016-08-30), VDE-No. 132701 (2001-05-03 updated 2016-08-30)
Test Report No. 208786-CC2-000 to -155 and 213552-CC2-000 to -027.

Char. B; C; D:
CCA Report DE1-34507 (2015-11-11), VDE-No. 40017097 (2006-03-10 updated 2016-01-19)
Test Report No. 208785-CC2-000 to -155.

Tests carried out

Cold, dry heat, damp heat, vibration, flame retardancy
EN 60898-1:2003+A1:2004+Cor. 2004+A11:2005
EN 60898-1:2003/A12:2008
EN 60898-1:2003/A13:2012

Marking of product

Siemens – Type designation – Rated current – Rated voltage(s) – Breaking capacity.

Name and place of manufacturer

Siemens AG Low Voltage
Siemensstraße 10
93055 Regensburg
Germany

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 Routine Tests (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.

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

Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr

Bundeswehr
Wir. Dienen. Deutschland.

Zulassungsurkunde / *Certificate of Approval*
Nr. / *No.*
U3.3e/16009

Die Firma / *The Firm of*
Siemens AG Building Technologies
Siemensstraße 10

93055 Regensburg

hat Antrag auf / *has applied for*

☒ **Zulassung nach VG 95211**
Qualification in accordance with VG 95211
(Defense Equipment Standard)

☒ **Aufnahme in VG 95212**
Listen zugelassener Bauelemente (LZB)
entry into VG 95212 „Lists of approved Components"

Für folgende Bauelemente gestellt / *for the following compontents*:

Elektrische und elektronische Schutzschalter

Militärische Bezeichnung der Bauelemente / *Military Designation of the components*
VG95345 - Teil 18: 1 bis 3polig, Auslösecharakteristik B und C, Leitungsschutzschalter mit Trennfunktion bis Bemessungsstrom 63 A, Bemessungsspannung a.c. 230 V/400 V, d.c. 60 V/120 V
gemäß Aufstellung Anlage zur Zulassungsurkunde Nr. U3.3e/16009, Seite 1 bis 2

Anzuwendende Spezifikationen / *Applicable specifications*
VG95345-2, und VG 95345-18
mit den jeweils gültigen Änderungen
Aus dem vorliegenden Prüfprotokoll / *The Test Record provided*
WTD 41 vom 15.12.2011 Az: R1/0000003603 mit laufender Fertigungsüberwachung

geht hervor, dass die o.a. Bauelemente alle Bedingungen der o.a. Spezifikationen erfüllt haben.
shows that above components meet all requirements of the specifications listed above.
Damit ist der Hersteller berechtigt, die Bauelemente für die Verwendung in Wehrmaterial zu liefern.
Consequently the manufacturer is authorized to supply above components for us in military equipment.

Diese Zulassungsurkunde ist gültig bis zum / *This certificate ist valid until*

2021-03-31

Die Zulassungsurkunde Nr. *The certificate of Approval No*	vom *dated*	
U3.4e/11039	29.03.2011	Wird hiermit außer Kraft gesetzt *is no longer valid*

Zusätzliche Bestimmungen / *additional provisions*

The German version of this Certificate shall be binding

Im Auftrag / *by Order*

Koblenz, 2016-03-31

(Siegel) / (*seal*)

BUNDESAMT FÜR AUSRÜSTUNG, INFORMATIONSTECHNIK UND NUTZUNG DER BUNDESWEHR 210

Maas

Anlage zur Zulassungsurkunde-Nr (Annex to Type approval certificate-No.)	U3.3e/16009	Seite 1 von 2 Seiten (Page of Pages)
Militärische Bezeichnung des Bauelements (Military designation of the component)	Teilekennzeichen des Bauelements (Part number of the component)	Versorgungs-Nummer (Federal Stock-No.)
VG95345T18B101	5SY4106-6	
VG95345T18B102	5SY4110-6	
VG95345T18B103	5SY4113-6	
VG95345T18B104	5SY4116-6	5925-12-375-2566
VG95345T18B105	5SY4120-6	
VG95345T18B106	5SY4125-6	
VG95345T18B107	5SY4132-6	
VG95345T18B108	5SY4140-6	
VG95345T18B109	5SY4150-6	
VG95345T18B110	5SY4163-6	
VG95345T18B201	5SY4206-6	5925-12-367-2901
VG95345T18B202	5SY4210-6	5925-12-376-1786
VG95345T18B203	5SY4213-6	
VG95345T18B204	5SY4216-6	5925-12-376-1774
VG95345T18B205	5SY4220-6	5925-12-376-1632
VG95345T18B206	5SY4225-6	5925-12-376-1804
VG95345T18B207	5SY4232-6	
VG95345T18B208	5SY4240-6	5925-12-376-1785
VG95345T18B209	5SY4250-6	5925-12-376-1628
VG95345T18B210	5SY4263-6	
VG95345T18B301	5SY4306-6	5925-12-376-1788
VG95345T18B302	5SY4310-6	5925-12-376-1802
VG95345T18B303	5SY4313-6	
VG95345T18B304	5SY4316-6	5925-12-376-1900
VG95345T18B305	5SY4320-6	5925-12-376-1627
VG95345T18B306	5SY4325-6	5925-12-376-1780
VG95345T18B307	5SY4332-6	5925-12-376-1768
VG95345T18B308	5SY4340-6	5925-12-376-1604
VG95345T18B309	5SY4350-6	5925-12-376-1607
VG95345T18B310	5SY4363-6	5925-12-371-7462
VG95345T18C101	5SY4106-7	5925-12-370-8715
VG95345T18C102	5SY4110-7	5925-12-370-8728
VG95345T18C103	5SY4113-7	
VG95345T18C104	5SY4116-7	5925-12-370-9006
VG95345T18C105	5SY4120-7	5925-12-381-2126
VG95345T18C106	5SY4125-7	5925-12-382-8016
VG95345T18C107	5SY4132-7	
VG95345T18C108	5SY4140-7	
VG95345T18C109	5SY4150-7	
VG95345T18C110	5SY4163-7	
VG95345T18C201	5SY4206-7	5925-12-373-9863
VG95345T18C202	5SY4210-7	5925-12-368-3098
VG95345T18C203	5SY4213-7	
VG95345T18C204	5SY4216-7	5925-12-368-3187
VG95345T18C205	5SY4220-7	5925-12-383-3031
VG95345T18C206	5SY4225-7	5925-12-368-3190
VG95345T18C207	5SY4232-7	5925-12-368-3198
VG95345T18C208	5SY4240-7	
VG95345T18C209	5SY4250-7	
VG95345T18C210	5SY4263-7	
VG95345T18C301	5SY4306-7	5925-12-381-2243
VG95345T18C302	5SY4310-7	5925-12-367-2902
VG95345T18C303	5SY4313-7	
VG95345T18C304	5SY4316-7	5925-12-383-3036
VG95345T18C305	5SY4320-7	
VG95345T18C306	5SY4325-7	
VG95345T18C307	5SY4332-7	5925-12-385-0636
VG95345T18C308	5SY4340-7	

Anlage zur Zulassungsurkunde-Nr (Annex to Type approval certificate-No.)	U3.3e/16009	Seite 2 von 2 Seiten (Page of Pages)
Militärische Bezeichnung des Bauelements (Military designation of the component)	Teilekennzeichen des Bauelements (Part number of the component)	Versorgungs-Nummer (Federal Stock-No.)
VG95345T18C309	5SY4350-7	
VG95345T18C310	5SY4363-7	5925-12-389-7615

VDE Prüf- und Zertifizierungsinstitut

ZEICHENGENEHMIGUNG
MARKS APPROVAL

Siemens AG
Low Voltage
Siemensstraße 10
93055 Regensburg

ist berechtigt, für ihr Produkt /
is authorized to use for their product

Leitungsschutzschalter
Circuit-breaker
5SY3 ...-.; 5SY6 ...-.; 5SY4 ...-.; 5SY7 ...-.;
5SY4 ...-7XX..; 5SY4 ...-8XX..;
5SY4 ...-.KK11; 5SY7 110-6KK13

die hier abgebildeten markenrechtlich geschützten Zeichen
für die ab Blatt 2 aufgeführten Typen zu benutzen /
the legally protected Marks as shown below for the types referred to on page 2 ff.

Geprüft und zertifiziert nach /
Tested and certified according to

DIN EN 60898-1 (VDE 0641-11):2006-03; EN 60898-1:2003+A1:2004+Cor. 2004+A11:2005
DIN EN 60898-1/A12 (VDE 0641-11/A12):2009-02; EN 60898-1:2003/A12:2008
DIN EN 60898-1/A13 (VDE 0641-11/A13):2013-01; EN 60898-1:2003/A13:2012
DIN EN 62019 (VDE 0640):2015-07; EN 62019:1999 + A1:2003 + A11:2005 + A12:2014
DIN V VDE V 0641-100 (VDE V 0641 Teil 100):2011-05

Aktenzeichen: 40017-1200-0706 / 219634
File ref.:

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Zertifizierungsstelle / *Certification*

Ausweis-Nr. 40017097 Blatt 1
Certificate No. *Page*

Weitere Bedingungen siehe Rückseite und Folgeblätter /
further conditions see overleaf and following pages

Offenbach, 2006-03-10
(letzte Änderung / updated 2016-01-19)

M. Tasotti

VDE Zertifikate sind nur gültig bei Veröffentlichung unter: http://www.vde.com/zertifikat
VDE certificates are valid only when published on: *http://www.vde.com/certificate*

VDE

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Siemens AG Low Voltage, Siemensstraße 10, 93055 Regensburg

Aktenzeichen / *File ref.*
40017-1200-0706 / 219634 / CC2 / HF

letzte Änderung / *updated*
2016-01-19

Datum / *Date*
2006-03-10

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40017097.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40017097.

Leitungsschutzschalter
Circuit-breaker
5SY3 ...-.; 5SY6 ...-.; 5SY4 ...-.; 5SY7 ...-.; 5SY4 ...-7XX..; 5SY4 ...-8XX..; 5SY4 ...-.KK11; 5SY7 110-6KK13

Typ(en) / *Type(s)*

5SY3 ...-.
5SY6 ...-.
5SY4 ...-.
5SY7 ...-.
5SY4 ...-7XX..
5SY4 ...-8XX..
5SY4 ...-6KK11
5SY4 ...-7KK11
5SY7 110-6KK13

Bemessungsspannung *Rated voltage*	AC 230 V AC 230/400 V AC 400 V AC 250V AC 250/440 V AC 440 V
Bemessungsstrom *Rated current*	2 A; 4 A; 6 A; 10 A; 13 A; 16 A; 20 A; 25 A; 32 A; 40 A; 50 A; 63 A ("B") 0,3 A; 0,5 A; 1 A; 1,6 A; 2 A;2,5 A; 3 A; 3,5 A; 4 A; 5 A; 6 A; 8 A;10 A; 13 A; 15 A; 16 A; 20 A; 25 A; 30 A; 32 A; 35 A; 40 A; 45 A; 50 A; 60 A; 63 A ("C") 50 A; 63 A ("C"; 5SY4 ...-7XX..) 0,3 A; 0,5 A; 1 A; 1,6 A; 2 A; 3 A; 4 A; 6 A; 8 A; 10 A; 13 A; 16 A; 20 A; 25 A; 32 A; 40 A; 50 A; 63 A ("D") 40 A; 50 A; 63 A ("D"; 5SY4 ...-8XX..)
Bemessungsfrequenz *Rated frequency*	50/60 Hz

Fortsetzung siehe Blatt 3 /
continued on page 3

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Siemens AG Low Voltage, Siemensstraße 10, 93055 Regensburg

Aktenzeichen / *File ref.*
40017-1200-0706 / 219634 / CC2 / HF

letzte Änderung / *updated*
2016-01-19

Datum / *Date*
2006-03-10

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40017097.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40017097.

Bemessungsschaltvermögen *Rated making and breaking capacity*	4,5 kA (5SY3 ...-.)
	6 kA (5SY6 ...-.)
	10 kA (5SY4 ...-.; 5SY4 ...-.XX..; 5SY4 ...-.KK..)
	15 kA (5SY7 ...-.)
	25 kA (5SY7 110-6KK13; B10; einpolig/single-pole)
Abstand des Gitterstromkreises *Grid distance*	35 mm
Energiebegrenzungsklasse *Energy limiting class*	3 (Typ/type 5SY3 ...-.; 5SY6 ...-.; 5SY4 ...-. ; B; C)
Auslösecharakteristik *Instantaneous tripping current*	B
	C
	D
Anzahl der Pole *Number of poles*	einpolig / single-pole
	einpolig +N / single-pole +neutral
	zweipolig / two-pole
	dreipolig / three-pole
	dreipolig +N / three-pole +neutral
	vierpolig / four-pole
Anbringungsart *Attachment type*	Tragschienenmontage / railmounting
Weitere Angaben *Further information*	siehe Anlage Nr. 1 vom 2015-11-11 *see annex no. 1 dated 2015-11-11*

Fortsetzung siehe Blatt 4 /
continued on page 4

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Siemens AG Low Voltage, Siemensstraße 10, 93055 Regensburg

Aktenzeichen / *File ref.*
40017-1200-0706 / 219634 / CC2 / HF

letzte Änderung / *updated*
2016-01-19

Datum / *Date*
2006-03-10

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40017097.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40017097.

Hilfsschalter
Auxiliary switch

Typ(en) *Type(s)*	5ST3 010; 5ST3 010-OHG 5ST3 011; 5ST3 011-OHG 5ST3 012; 5ST3 012-OHG 5ST3 020; 5ST3 020-OHG 5ST3 021; 5ST3 021-OHG 5ST3 022; 5ST3 022-OHG
Gebrauchskategorie *Utilization category*	a) AC-13 b) AC-14 c) DC-13 d) DC-13
Bemessungsbetriebsspannung *Rated operational voltage*	a) 400 V / 230 V b) 400 V / 230 V c) 220 V / 110 V d) 60 V / 24 V
Bemessungsbetriebsstrom *Rated operating current*	a) 2 A / 6 A b) 2 A / 6 A c) 1 A / 1 A d) 3 A / 6 A

Typ(en) *Type(s)*	5ST3 013; 5ST3 013-2 5ST3 014; 5ST3 014-2 5ST3 015; 5ST3 015-2
Bemessungsbetriebsspannung *Rated operational voltage*	a) DC 5 V b) DC 30 V
Bemessungsbetriebsstrom *Rated operating current*	a) DC 1 mA b) DC 50 mA

Typ(en) *Type(s)*	a) 5ST3 030; 5ST3 030-OHG b) 5ST3 031; 5ST3 031-OHG
Bemessungsbetriebsspannung *Rated operational voltage*	a) AC 110 - 415 V; DC 110 V b) AC 24 - 48 V; DC 24 - 48 V

Fortsetzung siehe Blatt 5 /
continued on page 5

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Siemens AG Low Voltage, Siemensstraße 10, 93055 Regensburg

Aktenzeichen / *File ref.*	letzte Änderung / *updated*	Datum / *Date*
40017-1200-0706 / 219634 / CC2 / HF	2016-01-19	2006-03-10

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40017097.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40017097.

Typ(en) *Type(s)*	a) 5ST3 040; 5ST3 043 b) 5ST3 041; 5ST3 044 c) 5ST3 042; 5ST3 045
Bemessungsbetriebsspannung *Rated operational voltage*	a) AC 230 V b) DC 110 V c) DC 24 V

Fernantrieb
Remote-controlled machanism

Typ(en) *Type(s)*	5ST3 050
Bemessungsbetriebsspannung *Rated operational voltage*	AC 230 V

Dieser Zeichengenehmigungs-Ausweis bildet eine Grundlage für die EG-Konformitätserklärung und CE-Kennzeichnung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität mit den grundlegenden Schutzanforderungen der **EG-Niederspannungsrichtlinie (2006/95/EG bis 19.04.2016, 2014/35/EU ab 20.04.2016).**
This Marks Approval is a basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and proves the conformity with the essential safety requirements of the ***EC Low-Voltage Directive (2006/95/EC until 2016-04-19, 2014/35/EU from 2016-04-20).***

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet CC2
Section CC2

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