



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate supersedes certificate number 11/20028 (E1) issued on 12.10.2016 which is hereby cancelled.

This certificate is issued to:

PRODUCER

Siemens AG
GWA
Werner-von-Siemens-Strasse 48
92220 Amberg
Germany

DESCRIPTION

SIRIUS INNOVATION – Low voltage switchgear load feeder, direct-on-line or reversing starter and accessories

TYPE

3RA2	1	1	0	-4B	A	15	0	...
I	II	III	IV	V	VI	VII	VIII	IX

I. Basic Type
3RA2 – Load feeders

II. Type of starter
1 – Direct starter
2 – Reversing starter

III. Size of contactor and 3RV20
1 – Size S00, 3RT2.1 and 3RV2.1
2 – Size S0, 3RT2.2 and 3RV2.2

Certificate No.

11/20028 (E2)

Issue Date

23 November 2018

Expiry Date

19 June 2021

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LR031.1.2013.12

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TYPE continued

- 3 – Size S2, 3RT2.3 and 3RV2.31
(standard short circuit breaking capacity)
- 4 – Size S3, 3RT2.4 and 3RV2.41
(standard short circuit breaking capacity)
- 5 – Size S2, 3RT2.3 and 3RV2.32
(higher short circuit breaking capacity)
- 6- Size S3, 3RT2.4 and 3RV2.42
(higher short circuit breaking capacity)

IV. Aux.-contacts of circuit breaker

- 0 – without
- 1 – 1 NO + 1 NC, side-mounted
- 2 – 2 NO, side-mounted
- 3 – 2 NC, side-mounted
- 4 – 1 change over, top mounted
- 5 – 1 NO + 1 NC, top mounted
- 6 – 1 NO + 1 NC with spring terminals, top mounted (only for versions A, B and D according VI of the Nomenclature Breakdown)

V. Setting Range

Suffix	From	to (A)	Size
-0A	0.11	0.16	S00, S0
-0B	0.14	0.2	S00, S0
-0C	0.18	0.25	S00, S0
-0D	0.22	0.32	S00, S0
-0E	0.28	0.4	S00, S0
-0F	0.35	0.5	S00, S0
-0G	0.45	0.63	S00, S0
-0H	0.55	0.8	S00, S0
-0J	0.7	1	S00, S0
-0K	0.9	1.25	S00, S0
-1A	1.1	1.6	S00, S0

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Suffix	From	to (A)	Size
-1B	1.4	2	S00, S0
-1C	1.8	2.5	S00, S0
-1D	2.2	3.2	S00, S0
-1E	2.8	4	S00, S0
-1F	3.5	5	S00, S0
-1G	4.5	6.3	S00, S0
-1H	5.5	8	S00, S0
-1J	7	10	S00, S0
-1K	9	12.5	S00, S0
-4S	9.5	14	S2
-4A	10	16	S00, S0
-4T	12	17	S2
-4B	13	20	S0, S2
-4C	16	22	S0
-4D	18	25	S0, S2
-4N	23	28	S0
-4E	27	32	S0
-4E	22	32	S2
-4P	28	36	S2
-4U	32	40	S2
-4F	28	40	S3
-4V	35	45	S2
-4H	36	50	S3
-4W	42	52	S2
-4X	49	59	S2
-4J	45	63	S3
-4J	54	65	S2

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TYPE continued

Suffix	From	to (A)	Size
-4K	57	75	S3
-4K	62	73	S2
-4R	65	84	S3
-4Y	75	93	S3
-4M	80	100	S3

VI. Type of backplate and terminals

- A - Without mounting rail adapter, screw terminals
- B - With mounting rail adapter (only for reverse starters size S0 only), screw terminals
- D - With fastbus adapter, screw terminals
- E - Without mounting rail adapter, spring terminals
- F - With mounting rail adapter (only for reverse starters Size S0 only), spring terminals
- H - With fastbus adapter, spring terminals, Size S00 and S0
- S - With fastbus adapter, spring terminals, Size S00

VII. Type of used contactor

- 15 - 3RT2015 contactor or 3RA2315 reversing contactor
- 16 - 3RT2016 contactor or 3RA2316 reversing contactor
- 17 - 3RT2017 contactor or 3RA2317 reversing contactor
- 18 - 3RT2018 contactor or 3RA2318 reversing contactor
- 24 - 3RT2024 contactor or 3RA2324 reversing contactor
- 25 - 3RT2025 contactor or 3RA2325 reversing contactor
- 26 - 3RT2026 contactor or 3RA2326 reversing contactor
- 27 - 3RT2027 contactor or 3RA2327 reversing contactor
- 34 - 3RT2034 contactor
- 35 - 3RT2035 contactor
- 36 - 3RT2036 contactor
- 37 - 3RT2037 contactor

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TYPE continued

- 38 - 3RT2038 contactor
- 45 - 3RT2045 contactor
- 46 - 3RT2046 contactor
- 47 - 3RT2047 contactor

- VIII. Aux. contacts of contactor
- 0 - without 1 NO + 1 NC for Size S0 and S2
- 1 - with 1 NO for Size S00 only
- 2 - with 1 NC for Size S00 only

- IX. Indicates coil, voltage and optional external overvoltage protection
- ... - Indicates coil voltage and external overvoltage protection

Accessories:

- 3RA1921-1D Link module between circuit breaker and contactor size S00, screw terminals, 10 pieces
- 3RA1921-1DA00 Link module between circuit breaker and contactor size S00, screw terminals, 1 piece
- 3RA2921-1A Link module between circuit breaker and contactor size S0, AC-coil, screw terminals, 10 pieces
- 3RA2921-1AA00 Link module between circuit breaker and contactor size S0, AC-Coil, screw terminals, 1 piece
- 3RA2921-1B Link module between circuit breaker and contactor size S0, DC-Coil, screw terminals, 10 pieces
- 3RA2921-1BA00 Link module between circuit breaker and contactor size S0, DC-Coil, screw terminals, 1 piece
- 3RA2911-2A Link module between circuit breaker and contactor size S00, spring terminals, 10 pieces
- 3RA2911-2AA00 Link module between circuit breaker and contactor size S00, spring terminals, 1 piece
- 3RA2921-2A Link module between circuit breaker and contactor size S0, spring terminals, 10 pieces

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- 3RA2911-2F Link Module between Circuit Breaker, screw terminals and Contactor Size S00, spring terminals, 10 pieces
- 3RA2911-2FA00 Link Module between Circuit Breaker, screw terminals and Contactor Size S00, spring terminals, 1 piece
- 3RA2921-2F Link Module between Circuit Breaker, screw terminals and Contactor Size S0, spring terminals, 10 pieces
- 3RA2921-2FA00 Link Module between Circuit Breaker, screw terminals and Contactor Size S0, spring terminals, 1 piece
- 3RA2921-2AA00 Link module between circuit breaker and contactor size S0, spring terminals, 1 piece
- 3RA2931-1A Link module between circuit breaker and contactor size S2, screw terminals, 5 pieces
- 3RA2931-1AA00 Link module between circuit breaker and contactor size S2, screw terminals, 1 piece
- 3RA1941-1A Link Module between Circuit Breaker and Contactor Size S3, screw terminals, 5 pieces
- 3RA1941-1AA00 Link Module between Circuit Breaker and Contactor Size S3, screw terminals, 1 piece
- 3RA2922-1A Mounting rail adapter, size S00/S0, 5 pieces
- 3RA2922-1AA00 Mounting rail adapter, size S00/S0, 1 piece
- 3RA2932-1A Mounting rail adapter, size S2, 5 pieces
- 3RA2932-1AA00 Mounting rail adapter, size S2, 1 piece
- 3RA2942-1A Mounting rail adapter, Size S3, 5 pieces
- 3RA2942-1AA00 Mounting rail adapter, Size S3, 1 piece
- 3RA2902-1B Side module for mounting rail adapter, S00-S3
- 8US1998-1AA00 Connection key for mounting rail adapter
- 3RA2911-1C Spacer module, 5 pieces
- 3RA2911-1CA00 Spacer module, 1 piece

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8US1251-5DS10	Fastbus adapter direct starter, size S00, screw terminals
8US1251-5NT10	Fastbus adapter direct starter, size S0, screw terminals
8US1251-5DS10	Fastbus adapter reversing starter, size S00, screw terminals
8US1250-5AS10	Support for reversing starter, size S00, screw terminals
8US1251-5NT10	Fastbus adapter reversing starter, size S0, screw terminals
8US1250-5AT10	Support for reversing starter, size S0, screw terminals
8US1251-5DT11	Fastbus adapter direct starter, size S00, spring terminals
8US1251-5NT11	Fastbus adapter direct starter, size S0, spring terminals
8US1251-5DT11	Fastbus adapter reversing starter, size S00, spring terminals
8US1250-5AT10	Support for reversing starter, size S00, spring terminals
8US1251-5NT11	Fastbus adapter reversing starter, size S0, spring terminals
8US1250-5AT10	Support for reversing starter, size S0, spring terminals
8US1261-6MT10	Fastbus adapter direct starter, size S2, screw terminals
8US1211-6MT10	Support for reversing starter, size S2, screw terminals
8US1998-1CA10	Vibration & shock kit, size S00/S0
8US1998-1DA10	Vibration & shock kit, size S2
3RA2923-1BB1	Wiring kit for revers load feeders with mounting rail adapter, screw terminal, size S0
3RA2923-1BB2	Wiring kit for revers load feeders with mounting rail adapter, spring terminal, size S0
3RA2913-1DB1	Wiring kit for revers load feeders with busbar Adapter, screw terminal, size S0/S00

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TYPE continued	3RA2923-1DB1	Wiring kit for revers load feeders with busbar adapter, screw terminal, size S0
	3RA2913-1EB1	Wiring kit for revers load feeders with busbar adapter, screw terminal, size S0/S00
	3RA2923-1EB1	Wiring kit for revers load feeders with busbar adapter, screw terminal, size S0
	3RA2913-1DB2	Wiring kit for revers load feeders with busbar adapter, spring terminal, size S00
	3RA2923-1DB2	Wiring kit for revers load feeders with busbar adapter, spring terminal, size S0
	3RA2933-1BB1	Wiring kit for revers load feeders with mounting rail adapter, size S2
	3RA2933-1DB1	Wiring kit for revers load feeders with busbar adapter, size S2
	3RA2943-1BB1	Wiring Kit for Revers Load Feeders with Mounting Rail Adapter, Size S3

APPLICATION Marine offshore and industrial applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2002.

STANDARD IEC 60947-4-1: 2012-07

RATINGS Operational voltage: 690V, 50/60Hz
Operational current: 0,11 – 100A

OTHER CONDITIONS Correction factor for ambient air temperature above 60°C is to be obtained from manufacturer

PLACE OF PRODUCTION Siemens AG
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Germany

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The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 37566-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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