

EU-Konformitätserklärung / EU Declaration of Conformity

Produktbezeichnung: Sanftstarter und Zubehör / Soft Starter and Accessories
 Product identification 3RW301 / 3RW302 / 3RW303 / 3RW304 / 3RW3003
 Hersteller: Siemens AG, DF CP
 Manufacturer
 Anschrift: DE-92220 Amberg
 Address

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

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

Niederspannungsrichtlinie:

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

EMV-Richtlinie:

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

RoHS-Richtlinie:

2011/65/EU Richtlinie des Europäischen Parlaments und des Rates vom 8. Juni 2011 zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten; Amtsblatt der EU L174, 1/07/2011, S. 88–110

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

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

Low Voltage Directive:

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

EMC Directive:

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

RoHS Directive:

2011/65/EU Directive of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment; Official Journal of the EU L174, 1/07/2011, p. 88–110

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Beschaffenheits- oder Haltbarkeitgarantie. 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

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:

Normen / standards:

Referenznummer
Reference number

EN 60947-4-2:2012

EN 50581:2012

EN 60947-5-1:2004+A1:2009

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

Siemens Aktiengesellschaft

Amberg 2016-06-08
Ort / place Datum der Ausstellung / date of issue

Peter Hartinger
Head of Verification and Certification

Markus Meier
Head of Project Management Electronics

i.V. 
Name / name Unterschrift / signature
Funktion / function

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Typprüfbescheinigung / Type Test Certificate

Erzeugnis / Product: **Fuseless load feeders**Typ: **3RA2.1, 3RA2.2, 3RA2.3, 3RA2.5**
Type: **3RV2.3 + 3RW.03,**
3RV2.4 + 3RT2.4 or 3RW.04Tech. Daten: **$U_{e\max} = 690V$,**
Specification: **$I_{e\max} = 100A$** Hersteller: **Siemens AG**
Manufacturer: **DF CP**Art der Prüfung / Type of test: **Vibration and Shock**Prüfer / **Mr. Pilhöfer**
Tested by:Labor / **LOVAG registered and DAkkS accredited**
Laboratory: **Testing Laboratory**
Siemens AG, Amberg

Angewandte Prüfbestimmungen / Test specifications applied:

IEC 60068-2-6:2007-12
IEC 60068-2-47:2005-04**IEC 60068-2-27:2008-02**
SN 31205:2016-03; 3M6

Durchgeführte Prüfungen / Tests conducted:

Vibration: 4 – 5.8 Hz / 15 mm; 5.8 – 150 Hz / 20 m/s² / 10 cycles
4 – 5.8 Hz / 15 mm; 5.8 – 500 Hz / 20 m/s² / 10 cycles**Shock: half-sine; 150 m/s² / 11 ms; 3 x positive shocks and 3 x negative shocks**

Prüfergebnis / Test results:

All requirements of the test specification are met.
For Accessories see Product Description 3010b.Bemerkungen / Remarks: **Issued: 2010-05-07****Index a, dated 2016-08-31: Test report 09033TMv01 replaced by Product Description and Test Summary 3010a. 3RA2.2 from certificate 3021 added. DIN EN standards added.****Index b, dated 2017-05-30: Product Description and Test Summary 3010a replaced by Product Description and Test Summary 3010b. 3RV2.3 + 3RW.03, 3RV2.4 + 3RT2.4 or 3RW.04 added. DIN EN standards removed.**

i.V.

DF CP R&D VC Mr. Hartinger

i.V.

DF CP R&D PMM Mr. Royer

SIEMENS AG**Digital Factory****Dr. Jan Mrosik, CEO**

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme;

Managing Board: Joe Kaeser, Chairman, President and Chief Executive Officer; Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Cedrik Neike, Michael Sen, Ralf P. Thomas;

Registered offices: Berlin and Munich, Germany; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322
Formular: April 2017

Type designation: 3RA2.1
3RA2.2
3RA2.3, 3RV2.3 + 3RW.03 (size S2)
3RA2.5
3RV2.4 + 3RT2.4 or 3RW.04 (size S3)

Manufacturer: **Siemens AG, DF CP**
Werner-von-Siemens-Str. 48, 92220 Amberg

Production site: **Siemens AG, DF CP**
Werner-von-Siemens-Str. 48, 92220 Amberg
Siemens AG, DF CP
Werner-von-Siemens-Str. 29, 93413 Cham

Nomenclature breakdown

Certificate No.: 3010b

3RA2	1	3	4	-4B	A	34	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
2 – Size S0, 3RT2.2
3 – Size S2, 3RT2.3 and 3RV2.31
(standard short circuit breaking capacity)
5 – Size S2, 3RT2.3 and 3RV2.32
(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 and D according VI of the Nomenclature Breakdown)

V. Setting Range

Suffix	From	to (A)
-0A	0.11	0.16
-0B	0.14	0.2
-0C	0.18	0.25
-0D	0.22	0.32
-0E	0.28	0.4
-0F	0.35	0.5
-0G	0.45	0.63
-0H	0.55	0.8
-0J	0.7	1
-0K	0.9	1.25
-1A	1.1	1.6
-1B	1.4	2
-1C	1.8	2.5
-1D	2.2	3.2
-1E	2.8	4
-1F	3.5	5
-1G	4.5	6.3
-1H	5.5	8
-1J	7	10
-1K	9	12.5
-4A	11	16
-4B	14	20
-4C	17	22
-4D	20	25
-4N	23	28

Nomenclature breakdown

Certificate No.: 3010b

Suffix	From	to (A)
-4E	27	32
-4S	9.5	14
-4T	12	17
-4B	13	20
-4D	18	25
-4E	22	32
-4P	28	36
-4U	32	40
-4F	28	40
-4V	35	45
-4G	36	45
-4H	40	50
-4W	42	52
-4Q	47	57
-4X	49	59
-4J	54	65
-4K	62	73

Continuation of Nomenclature breakdown:

- 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 Busbar adapter, screw terminals (only for Size S00 and S0)
 - E - Without Mounting rail adapter, spring terminals
 - F - With Mounting rail adapter (only for reverse starters Size S0 only), spring terminals
 - H - With Busbar adapter, spring terminals (only for Size S00 and S0)
- 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
 - 38 - 3RT2038 contactor
- VIII. Aux. Contacts of contactor
- 0 - without 1 NO + 1 NC
 - 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

Nomenclature breakdown

Certificate No.: 3010b

Accessories:

Link Module:

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
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

Mounting rail adapter

3RA2922-1A	Mounting rail adapter, 5 pieces
3RA2922-1AA00	Mounting rail adapter, 1 piece
3RA2932-1A	Mounting rail adapter, Size S2, 5 pieces
3RA2932-1AA00	Mounting rail adapter, Size S2, 1 piece
3RA2902-1B	Side Module for Mounting rail adapter, S2 and S3
8US1998-1AA00	Connection key for Mounting rail adapter
3RA2942-1A	Mounting rail adapter, Size S3, 5 pieces
3RA2942-1AA00	Mounting rail adapter, Size S3, 1 piece
3RA2911-1C	Spacer module, 5 pieces
3RA2911-1CA00	Spacer module, 1 piece
3RA2933-1BB1	Wiring Kit for Revers Load Feeders with Mounting Rail Adapter, Size S2

Busbar adapter

8US1251-5DS10

Busbar Adapter Direct Starter, Size S00, screw terminals

8US1251-5NT10

Busbar Adapter Direct Starter, Size S0, screw terminals

8US1251-5DS10

Busbar Adapter Reversing Starter, Size S00, screw terminals

8US1250-5AS10

Support for Reversing Starter, Size S00, screw terminals

8US1251-5DT11

Busbar Adapter Direct Starter, Size S00, spring terminals

8US1251-5NT11

Busbar Adapter Direct Starter, Size S0, spring terminals

8US1251-5DT11

Busbar Adapter Reversing Starter, Size S00, spring terminals

8US1251-5NT11

Busbar Adapter Reversing Starter, Size S0, spring terminals

8US1250-5AT10

Support for Reversing Starter, Size S00, spring terminals

8US1250-5AT10

Support for Reversing Starter, Size S0, spring terminals

8US1998-1CA10

Vibration & Shock Kit

Nomenclature breakdown circuit-breaker S3:

3RV20	4	1	-4F	A	1	0	..
I	II	III	IV	V	VI	VII	VIII

I. Basic Type

3RV20 -	Circuit Breaker for motor protection
3RV21 -	Circuit Breaker for motor protection with overload relay function
3RV23 -	Circuit Breaker for starter combination
3RV24 -	Circuit Breaker for transformer protection

II. Size of terminal for main circuit

4 -	up to 100 A
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III. Short Circuit characteristics:

1 -	standard short circuit breaking capacity, 65 kA / 400 V
2 -	higher short circuit breaking capacity, 100 kA / 400 V

IV. Setting Ranges

Suffix	from	to (A)
-4F	28	40
-4H	36	50
-4J	45	63
-4K	57	75
-4R	65	84
-4Y	75	93
-4M	80	100

V. Tripping Class

A -	setting ranges with instantaneous tripping and overload tripping Class 10
B -	setting ranges with instantaneous tripping and overload tripping Class 20 (only 100kA).
C -	with instantaneous tripping and without overload tripping

VI. Type of Terminals

1 -	Screw Terminal
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VII. Auxiliary Switches

(Combinations with certified accessories Type 3RV29...)

0 -	without
5 -	1NO + 1NC, top mounted

VIII. Others

.. -	Manufacturer's identification
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Continuation: Nomenclature Breakdown

Accessories:

Auxiliary contacts:

3RV2901	-1	A
I	II	III

I - Basic type

3RV2901 -	Auxiliary contact blocks for 3RV2
3RV2921 -	Alarm switch for 3RV2

II - Type of terminals

-1 -	Screw Terminal
-2 -	Spring terminals
-4 -	Ring lug terminals

III - Contact arrangements

A -	1NO + 1NC, side-mounting
B -	2NO, side-mounting
C -	2NC, side-mounting
D -	1NO + 1NC changeover, top-mounting
E -	1NO + 1NC, top-mounting
F -	2NO, top-mounting
G -	1NO + 1NC changeover, top-mounting, micro switch
J -	2NO + 2NC, side-mounting
M -	2NO + 2NC, side-mounting, alarm switch

Continuation: Nomenclature Breakdown

Undervoltage trip units, Shunt releases:

3RV2902	-1	A	B4
I	II	III	IV

I - Basic type

3RV2902 -	Undervoltage trip units, Shunt releases for 3RV2
3RV2922 -	Undervoltage trip unit with leading auxiliary contacts for 3RV2

II - Type of terminals

-1 -	Screw Terminal
-2 -	Spring terminals
-4 -	Ring lug terminals

III – Type of Accessory

A -	Undervoltage trip unit
C -	Undervoltage trip unit with leading auxiliary contacts
D -	Shunt trip unit

IV – Rated voltage for Undervoltage trip unit

B4 -	24V, dc
B0 -	24V, 50Hz
F0 -	110V, 50Hz; 120V, 60Hz
M1 -	208V, 60Hz
P0 -	230V, 50Hz; 240V, 60Hz
V0 -	400V, 50Hz; 440V, 60Hz
V1 -	415V, 50Hz; 480V, 60Hz
S0 -	500V, 50Hz; 600V, 60Hz
G6 -	100V, 50 Hz; 110V, 60Hz
N0 -	220V, 50Hz
N6 -	200V, 50Hz; 220V, 60Hz
Q0 -	380V, 50Hz
U0 -	240V, 50Hz

IV – Rated voltage for Shunt trip unit

B0 -	20-24V, 50/60Hz
F0 -	90-110V, 50/60Hz
P0 -	210-240V, 50/60Hz
V0 -	350-415V, 50/60Hz
S0 -	500V, 50/60Hz

Nomenclature Breakdown Contactor S3:

3RT20 45 -1 A P0 0 -.. VII
 I II III IV V VI

I. Basic Type

3RT20 - AC-3 contactor, 3NO main contacts
 3RT23 - AC1-contactor, 4NO main contacts
 3RT24 - AC1-contactor, 3NO main contacts
 3RT25 - AC-3 contactor, 2NO + 2NC main contacts

II. Size S3

AC-3 Motor contactor 3RT20, 3 pole:

45 - 400V / 80A
 46 - 400V / 95A
 47 - 400V / 110A

AC-1 contactor 3RT24, 3 pole:

46 - 690V / 140A
 48 - 690V / 160A

III. Type of Terminals

1 - Screw Terminal for main and auxiliary contacts
 3 - Screw terminals for main circuit and spring terminals for auxiliary and control circuit
 6 - Main circuit without box terminal

IV. Operating system

A - AC operating system
 C - AC operating system with factory assembled EMC protective unit Varistor type
 D - DC operating system with factory assembled EMC protective unit Varistor type
 E - AC operating system with factory assembled EMC protective unit RC combination type
 K - DC operating system with integrated Varistor
 N - UC operating system with integrated Varistor
 P - AC operating system with factory assembled EMC protective unit diode Combination

V. Operating voltage

24 Vac through 600 Vac
 12 Vdc through 250 Vdc
 20 Vac/Vdc through 280 Vac/Vdc

VI. Auxiliary Contact Arrangements

0 - 1 normally open and 1 normally closed
 6 - 2 normally open and 2 normally closed with one lateral mounted auxiliary contact on the right side

VII. Suffix letters and/or numbers specified commercial variations – Optional

For example:

-0AA3 - Contactor with extension of supply voltage
 -0CC0 - Contactor with communication interface
 -0GA0 - Contactor for low noise switching
 -0LA2 - Contactor for railway applications
 -3MA0 - Contactor with top mounted none removable auxiliary contact
 -4AA0 - AC-3 contactor, 4 pole, 4NO main contacts

Continuation: Nomenclature Breakdown

3RH29	I	1	II	1	III	-1	IV	F	V	A	VI	04	VII
I - Basic type													
3RH29 -	Auxiliary switches												
II - Size													
0 -	without meaning												
1 -	Size S00												
2 -	Size S0-S3												
III - Type of Accessory													
1 -	auxiliary switch												
2 -	coupling link												
3 -	coupling link												
4 -	coupling link for direct coil connection												
5 -	coupling link												
6 -	auxiliary switch												
8 -	mounting and wiring material												
IV – Type of Terminals													
0 -	without meaning												
1 -	screw terminals												
2 -	spring terminals (cage clamp)												
4 -	ring cable lug												
V – Type of auxiliary switch													
A -	front mounting, connection from above												
B -	front mounting, connection from below												
D -	side mounting, 2-pole												
L -	front mounting, 2-pole, connection from above												
M -	front mounting, 2-pole, connection from below												
N -	solid state aux. Switch, front mounting, 2-pole												
F -	front mounting, 4-pole												
G -	front mounting, 4-pole (for 3RH2140...)												
H -	front mounting, 4-pole												
W -	front mounting, 4-pole												
X -	front mounting, 4-pole												
Y -	front mounting, 4-pole												
VI – Features													
A -	without meaning												
B -	1x overlapping												
C -	2x overlapping												
E -	suitable for electronic												
F -	high contact reliability												

VII – Accessory contacts (type and conducting)

10 -	1NO
01 -	1NC
11 -	1NO + 1NC
12 -	1NO + 2NC
20 -	2NO
02 -	2NC
13 -	1NO + 3NC
22 -	2NO + 2NC
31 -	3NO + 1NC
40 -	4NO
04 -	4NC

Nomenclature breakdown motor starter:

3RW4 0 46 - 1 B B 1 4
I II III IV V VI VII VIII

I - Basic type

3RW4 – semiconductor motor starter “High Feature”
3RW3 - semiconductor motor starter

II - Kind of device

0 - Soft starter

III - Rated operational power P_e at 400V Rated operational current $I_{eAC-53a}$ at 400V

		Pe:	Ie:	Size:
36	-	22 kW	45 A	S2
37	-	30 kW	63 A	S2
38	-	37 kW	72 A	S2
46	-	45 kW	80 A	S3
47	-	55 kW	106 A	S3

IV - Type of Terminals

-1 - screw terminals
-2 - spring terminals

V - Special function

B - with bypass
T - with bypass and thermistor

VI - Phases controlled

B - two-phase controlled

VII - Rated control supply voltage, U_s

0 - 24 V ac/dc
1 - 110 - 230 V ac/dc

VIII - Rated operational voltage, U_e

4 - 200 up to 480 V ac
5 - 400 up to 600 V ac

Further accessories:

3RV2908-0P	Sealing Cap
3RV2901-0H	Cover
3RT2926-4EA13	Cover for ring-lug-terminals
3RA2902-1B	Side module for stand. mount. rail adapter
2RA2943-2AA1	Wiring kit for reversing starter, size S3
3RA2943-2AA2	Wiring kit for reversing starter, size S3
3RA2932-2D	Mechanical connector
3RA2910-0	Sealable cover for solid-state two-wire relay
3RA2912-0	Mechanical connector
3RA2908-1A	Sealable cover
3RA2934-2B	Mechanical interlock
3RA1943-1B	Wiring kit for mounding on standard mounting rail adapter
3RA1943-2A	Wiring kit for reversing starter, size S3
3RA1943-3D	Wiring module for contactor assembly S3
3RA1943-3E	Wiring module bottom for contactor combination S3

Comments:

Mounting rail adapter Size S2

- With contactor only screw mounted with wedge lock washer type BF
- With soft starter only snap mounted

Mounting rail adapter Size S3

- The load feeder for direct start, mounted on solid mounting rails (snap mounted), only tested without auxiliary switches, undervoltage trip units or shunt releases.

see type test certificate according to product standard.

Test summary

Certificate No.: 3010b

Test laboratory: *Type Test Center Siemens AG Amberg*
Werner-von-Siemens-Str. 48, 92220 Amberg

Manufacturer: *Siemens AG DF CP*
Werner-von-Siemens-Str. 48, 92220 Amberg
Siemens AG, DF CP
Werner-von-Siemens-Str. 29, 93413 Cham

Test object: *Load feeders S00 / S0 / S2 / S3*

Type designation: *3RA2.1*
3RA2.2
3RA2.3, 3RV2.3 + 3RW.03 (size S2)
3RA2.5
3RV2.4 + 3RT2.4 or 3RW.04 (size S3)

Test specification: *IEC 60068-2-6 (2007-12)*
IEC 60068-2-27 (2008-02)
IEC 60068-2-47 (2005-04)
SN 31205 (2016-03)

Test report No.: *09033TMv01*
09034TMv01
13076ENV01
15058PMV01

The Test summary consists of 26 pages and is only valid combined with the product description

Test summary

Certificate No.: 3010b

Test report No.: 09033TMv01

Test samples:

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
1	-001	motor starter protector	3RV2111-4AA10	E00 G/090212	snap mounted	all contacts
	-002	contactor	3RT2016-1AP01	E01 G/090127		connection
	-003	link module	3RA2921-1D	E01; 03/08		all contacts
	-005	lateral auxiliary switch	3RV2901-1J	E00 NQ/090309		
	-006	undervoltage trip unit	3RV2902-1AB4	E00 NQ/090227		
	-007	auxiliary switch block front mounted	3RH2911-1HA22	E00 HOZ/090310		
2	-009	motor starter protector	3RV2111-1JA10	E00; G/090316	snap mounted	all contacts
	-010	contactor	3RT2016-1BB41-0CC0	E01; G/090202		connection
	-011	link module	3RA1921-1D	E02; 08/03		all contacts
	-013	signaling switch	3RV2921-1M	E00; NQ/090304		connection
	-014	isolator module	3RV2928-1A	E02; NQ/081229		all contacts
	-015	transverse auxiliary switch	3RV2901-1G	E00; NQ/090220		
	-016	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090303		electric function
	-017	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090303		
	-018	logic module	3RA2814-1AW10	E00; L0090210		
3	-019	motor starter protector	3RV2111-1JA10	E00; G/090316	snap mounted	all contacts
	-020	contactor	3RT2016-1BB42	E01; G/090804		connection
	-021	contactor	3RT2016-1BB42	E01; G/090804		mechanic function
	-022	link module	3RA2921-1D	E01; 07/11		all contacts
	-023	wiring kit reversing starting	3RA2913-2AA1	E01; G/090319		
	-024	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-025	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-026	transverse auxiliary switch	3RV2901-1E	E00; NQ/090220		
	-027	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ/090304		
	-028	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ/090304		
5	-039	motor starter protector	3RV2111-4AA10	E00 G/090316	snap mounted	all contacts
	-040	contactor	3RT2025-1AP00	E01 G/090504		mechanic function
	-041	distance module	3RA2911-1CA00	E01 UTL/011208		connection
	-042	link module	3RA2921-1A	E01 BIA/090113		all contacts
	-044	transverse auxiliary switch	3RV2901-1E	E00 NQ/090220		
7	-051	motor starter protector	3RV2111-4AA10	E00 G/090318	snap mounted	all contacts
	-052	contactor	3RT2025-1BB40	E01 G/090511		connection
	-053	contactor	3RT2025-1BB40	E01 G/090511		mechanic function
	-054	link module	3RA2921-1B	E01; BIA/090114		all contacts
	-055	wiring kit reversing starting	3RA2923-2AA1	E01 G/090424		
	-056	mounting rail adapter	3RA2922-1A	E01 LHY/020209		
	-057	mounting rail adapter	3RA2922-1A	E01 LHY/020209		
	-058	transverse auxiliary switch	3RV2901-1E	E00 NQ/090220		

Test summary

Certificate No.: 3010b

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
	-059	auxiliary switch block front mounted	3RH2911-1LA11	E00 HOZ090319		
	-060	auxiliary switch block front mounted	3RH2911-1LA11	E00 HOZ090319		
8	-061	motor starter protector	3RV2111-4AA10	E00; G/090318	snap mounted	all contacts
	-062	contactor	3RT2016-1KF42-0LA0	E01; G/090707		connection
	-063	link module	3RA1921-1D	E02; 07/11		all contacts
	-065	signaling switch	3RV2921-1M	E00; NQ/090304		connection
	-066	isolator module	3RV2928-1A	E02; NQ/081229		all contacts
	-067	transverse auxiliary switch	3RV2901-1G	E00; NQ/090220		
	-068	auxiliary switch block front mounted	3RH2911-1LA11	E00; HQZ/090310		
9	-069	motor starter protector	3RV2011-1JA10	E00 G/090212	screw mounted	all contacts
	-070	contactor	3RT2016-1AP01	E01 G/090127		connection
	-072	link module	3RA1921-1D	E02; 07/11		
	-074	lateral auxiliary switch	3RV2901-1J	E00 NQ/090309		all contacts
	-075	undervoltage trip unit	3RV2902-1AB4	E00 NQ/090227		
	-076	auxiliary switch block front mounted	3RH2911-1HA22	E00 HOZ/090310		
10	-078	motor starter protector	3RV2111-1JA10	E00; G/090316	screw mounted	all contacts
	-079	contactor	3RT2016-1BB41-0CC0	E01; G/090209		connection
	-080	link module	3RA1921-1D	E02; 07/11		all contacts
	-082	signaling switch	3RV2921-1M	E00; NQ/090304		connection
	-083	isolator module	3RV2928-1A	E02; NQ/090304		
10	-084	transverse auxiliary switch	3RV2901-1G	E00; NQ/090220	screw mounted	all contacts
	-085	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090309		electric function
	-087	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090218		
	-088	logic module	3RA2814-1AW10	E00; L0090210		
11	-089	motor starter protector	3RV2011-1JA10	E00 G/090211	screw mounted	all contacts
	-090	contactor	3RT2017-1HB41	E01 G/090304		all contacts
	-091	link module	3RA1921-1D	E02; 07/11		connection
	-093	signaling switch	3RV2921-1M	E00 NQ/090304		all contacts
	-094	isolator module	3RV2928-1A	E02 NQ/081229		connection
	-095	transverse auxiliary switch	3RV2901-1G	E00 NQ/090220		all contacts
12	-097	motor starter protector	3RV2011-1JA10	E00; G/090212	geschraubt	all contacts
	-098	contactor	3RT2018-1GG21	E01; G/090303		connection
	-099	link module	3RA1921-1D	E02; 07/11		
	-101	undervoltage trip unit	3RV2902-1DP0	E00; NQ090309		all contacts
	-102	transverse auxiliary switch	3RV2901-1E	E00; NQ/090220		
	-103	auxiliary switch block front mounted	3RH2911-1HA22	E00; HQZ090310		
13	-105	motor starter protector	3RV2011-1JA10	E00; G/090216	screw mounted	all contacts
	-106	contactor	3RT2016-1AP02	E01; G/090303		
	-107	contactor	3RT2016-1AP02	E01; G/090303		
	-108	link module	3RA1921-1D	E02;05/08		connection

Test summary

Certificate No.: 3010b

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
	-109	wiring kit reversing starting	3RA2913-2AA1	E01; G/090319		mechanic function
	-110	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-111	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-112	transverse auxiliary switch	3RV2901-1E	E00; NQ/090220		all contacts
	-113	auxiliary switch block front mounted	3RH2911-1MA11	E00; HOZ/090128		
	-114	auxiliary switch block front mounted	3RH2911-1MA11	E00; HOZ/090310		
14	-115	motor starter protector	3RV2011-1JA10	E00; G/090216	screw mounted	all contacts
	-116	contactor	3RT2016-1KF42-OLA0	E01; G/090707		connection
	-117	link module	3RA1921-1D	E02; 07/11		all contacts
	-119	lateral auxiliary switch	3RV2901-1J	E00; NQ/090309		
	-120	undervoltage trip unit	3RV2902-1AB4	E00; NQ/090227		
15	-122	motor starter protector	3RV2111-4AA10	E00; G/090316	screw mounted	all contacts
	-123	contactor	3RT2025-1AP00	E01; G/090506		connection
	-125	link module	3RA2921-1A	E01 BIA/090113		all contacts
	-127	transverse auxiliary switch	3RV2901-1E	E00; NQ/090220		
	-128	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ/090127		
16	-130	motor starter protector	3RV2111-4AA10	E00; G/090316	screw mounted	all contacts
	-131	contactor	3RT2025-1BB40-0CC0	E01; G/090604		connection
	-132	link module	3RA2921-1B	E01; BIA/090114		all contacts
	-134	transverse auxiliary switch	3RV2901-1E	E00; NQ/090220		
	-135	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ/090304		
17	-137	motor starter protector	3RV2111-4AA10	E00 G/090316	screw mounted	all contacts
	-138	contactor	3RT2025-1AP00	E01 G/090506		connection
	-140	contactor	3RT2025-1AP00	E01 G/090506		mechanic function
	-142	link module	3RA2921-1A	E01 BIA/090113		all contacts
	-143	wiring kit reversing starting	3RA2923-2BB1	E01 G/090319		
	-144	mounting rail adapter	3RA2922-1AA00	E01 LHY/090202		
	-145	mounting rail adapter	3RA2922-1AA00	E01 LHY/090202		
	-146	transverse auxiliary switch	3RV2901-1E	E00 NQ/090220		
	-147	auxiliary switch block front mounted	3RH2911-1MA11	E00 HOZ/090305		
	-148	auxiliary switch block front mounted	3RH2911-1MA11	E00 HOZ/090305		
18	-149	motor starter protector	3RV2011-4AA10	E00; G/090707	snap mounted	all contacts
	-150	contactor	3RT2016-1KF42-OLA0	E01; G/090707		connection
	-151	link module	3RA1921-1D	E02; 05/08		all contacts
	-153	transverse auxiliary switch	3RV2901-1G	E00; NQ/090220		
	-154	undervoltage trip unit with leading auxiliary contacts	3RV2922-1CP0	E00; NQ/090309		
	-155	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		
	-156	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		
19	-157	motor starter protector	3RV2011-1JA20	E00; G/090327	snap mounted	all contacts
	-158	contactor	3RT2016-2AP01	E01; G/090128		

Test summary

Certificate No.: 3010b

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
	-159	link module	3RA2911-2A	E01; B/A/090302		connection
	-161	lateral auxiliary switch	3RV2901-2A	E00; NQ/090304		all contacts
	-162	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-163	signaling switch	3RV2921-2M	E01; NQ/080923		
	-164	undervoltage trip unit with leading auxiliary contacts	3RV2922-2CP0	E00; NQ/090309		
	-165	auxiliary switch block front mounted	3RH2911-2NF11	E00; HQZ090316		
	-167	LED module	3RT2926-1QT00	ZZ080725		electric function
20	-168	motor starter protector	3RV2011-1JA20	E01; G/090409	snap mounted	all contacts
	-169	contactor	3RT2016-2BB41-0CC0	E01; G/090302		connection
	-170	link module	3RA2911-2A	E01; B/A/090302		all contacts
	-172	lateral auxiliary switch	3RV2901-2A	E00; NQ/090304		
	-173	transverse auxiliary switch	3RV2901-2E	E00; NQ/090220		
	-174	signaling switch	3RV2921-2M	E01; NQ/081120		
	-175	undervoltage trip unit	3RV2902-2DF0	E00; NQ/090309		
	-176	auxiliary switch block side mounted	3RH2911-2DE11	E00; NQ/090303		electric function
	-177	auxiliary switch block side mounted	3RH2911-2DE11	E00; NQ/090303		
	-178	AS-i add-on module	3RA2712-2AA00	E00; LO/090401		
21	-179	motor starter protector	3RV2011-1JA20	E00; G/090327	snap mounted	all contacts
	-180	contactor	3RT2017-2HB41	E01; G/090304		connection
	-182	link module	3RA2911-2A	E01; B/A/090302		all contacts
	-183	auxiliary switch block side mounted	3RH2911-2DE11	E00; NQ/090303		
	-184	undervoltage trip unit with leading auxiliary contacts	3RV2922-2CP0	E00; NQ/090309		
	-185	auxiliary switch block side mounted	3RH2911-2DE11	E00; NQ/090303		
22	-186	motor starter protector	3RV2011-1JA20	E00; G/090327	snap mounted	all contacts
	-187	contactor	3RT2016-2BB42	E01; G/090309		connection
	-188	contactor	3RT2016-2BB42	E01; G/090304		mechanic function
	-189	link module	3RA2911-2A	E01; B/A/090302		all contacts
	-190	mounting rail adapter	3RA2922-1A	E01; LHY090202		
	-191	mounting rail adapter	3RA2922-1A	E01; LHY090202		
	-192	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		connection
	-193	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ090310		
	-194	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ090310		
	-207	wiring kit reversing starting	3RA2913-2AA2	b01; G090409		
23	-195	motor starter protector	3RV2011-1JA20	E00; G/090327	screw mounted	all contacts
	-196	contactor	3RT2016-2BB42	E01; G/090304		connection
	-197	contactor	3RT2016-2BB42	E01; G/090309		mechanic function
	-198	link module	3RA2911-2A	E01; B/A/090302		all contacts
	-199	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-200	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-201	transverse auxiliary switch	3RV2901-2E	E00; NQ/090220		

Test summary

Certificate No.: 3010b

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
	-202	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090310		connection
	-203	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090319		
	-214	wiring kit reversing starting	3RA2913-2AA2	E01; G/090409		
24	-204	motor starter protector	3RV2011-1JA20	E00; G/090327	snap mounted	all contacts
	-205	contactor	3RT2018-2GG21	E01; G/090303		connection
	-206	link module	3RA2911-2A	E01; BIA/090302		all contacts
	-208	transverse auxiliary switch	3RV2901-2E	E00; NQ/090220		
25	-211	motor starter protector	3RV2011-1JA20	E00; G/090327	snap mounted	all contacts
	-212	contactor	3RT2016-2KF42-0LA0	E00; G/090707		connection
	-213	link module	3RA2911-2A	E01; BIA/090302		all contacts
	-215	transverse auxiliary switch	3RV2901-2E	E00; NQ/090220		
26	-217	motor starter protector	3RV2011_1JA20	E01 G/090409	screw mounted	all contacts
	-218	contactor	3RT2016-2AP01	E01 G/090128		connection
	-220	link module	3RA2911-2A	E01 BIA/090302		
	-221	lateral auxiliary switch	3RV2901-2A	E00 NQ/090304		
	-222	transverse auxiliary switch	3RV2901-2E	E00 NQ/090218		
	-223	signaling switch	3RV2921-2M	E01 NQ/081120		
	-224	undervoltage trip unit with leading auxiliary contacts	3RV2922-2CP0	E00 NQ/090309		
	-225	auxiliary switch block front mounted	3RH2911-2GA22	E00 HOZ/090310		
27	-226	motor starter protector	3RV2011-1JA20	E01; G/090409	snap mounted	all contacts
	-227	contactor	3RT2016-2BB42	E01; G/090409		connection
	-228	contactor	3RT2016-2BB42	E01; G/090804		
	-229	link module	3RA2911-2A	E01; BIA/090302		
	-230	wiring kit reversing starting	3RA2913-2AA2	E01; G/090409		
	-231	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-232	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ/090310		
	-233	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ/090310		
29	-236	direct starter	3RA2110-4AD18-1BB4	---	busbar adapters reversing starter tested with 2 endstops for mounting rail on the adapter and with one X-L pin mounted according to the client	all contacts
	-237	transverse auxiliary switch	3RV2901-1F	E00; NQ/090217		connection
	-238	signaling switch	3RV2921-1M	E00; NQ/090304		
	-239	undervoltage trip unit with leading auxiliary contacts	3RV2922-1CP0	E00; NQ/090309		
	-240	auxiliary switch block front mounted	3RH2911-1MA11	E00; HQZ/090206		
	-241	busbar adapter	8US1251-5DS10	03 (NET037982600000)		
	-836	motor starter protector	3RV2011-4AA10	E00; G/090206		
	-837	contactor	3RT2018-1BB41	E01; G/090130		
	-838	link module	3RA2921-1B	E01; BIA/090114		
30	-045	motor starter protector	3RV2111-4AA10	E00; G/090316	snap mounted	all contacts
	-946	contactor	3RT2025-1BB440-0CC0	E01; G/090604		connection
	-047	link module	3RA2921-1B	E01; BIA/090114		mechanic function
	-948	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		

Test summary

Certificate No.: 3010b

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
	-049	transverse auxiliary switch	3RV2901-1E	E00; NQ/090218		all contacts
	-950	AS-i add-on module	3RA2712-1AA00	E01; L0090904		electric function
31	-280	motor starter protector	3RV2011-1JA10	E00; G/090216	snap mounted	all contacts
	-281	contactor	3RT2016-2AP01	E01; G/090128		connection
	-283	link module	3RA2911-2FA00	E01; BIA/090302		all contacts
	-284	signaling switch	3RV-2921-1M	E00; NQ/090304		connection
	-285	isolator module	3RV2928-1A	E01; NQ/071015		all contacts
	-286	transverse auxiliary switch	3RV-2901-1G	E00/ NQ/090220		connection
	-287	auxiliary switch block front mounted	3RH2911-2NF11	E00; HOZ/081211		all contacts
32	-288	motor starter protector	3RV2111-1JA10	E00; G/090316	screw mounted	all contacts
	-289	contactor	3RT2025-2BB40-0CC0	E01; G/090209		connection
	-290	link module	3RA2911-2FA00	E01; BIA/090302		all contacts
	-291	lateral auxiliary switch	3RV2901-1J	E00; NQ/090309		electric function
	-292	AS-i add-on module	3RA2712-2AA00	E00; L0090319		

Required test values:

Vibration test

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
vibration response investigation	4 - 150	5,8	15	20	10
vibration response investigation	4 - 500	5,8	15	20	10

Shock test

shock shape	number of shocks	acceleration m/s ²	shock duration ms
half-sine	3 positive 3 negative	150	11

Other information

Frequency range 4 – 150Hz: for electro mechanic devices

Frequency range 4 – 500Hz: for electronic devices

Test summary

Certificate No.: 3010b

Test results:

Vibration response investigation:

All samples were tested according to the specification and the requirements are met.

Only tested devices which had any deviation according to standard, are listed in the table below.

sample	tested device 09033TM	tested device mounting	operating condition	state change of contacts or other deviation		axis		
				type	ms	X	Y	Z
1	-007	snap	1	11-12	8.2	---	X	X
3	-019	snap	2	main	4.8	X	---	---
19	-165	snap	1	.1-.2	12	---	X	---
	-165	snap	1	.3-.4	5	---	X	---

Shock test:

All samples were tested according to the specification and the requirements are met.

Only tested devices which had any deviation to the standard, are listed in the table below.

sample	tested device 09033TM	tested device mounting	operating condition	shock: half-sine 11ms m/s ²	state change of contacts or other deviation		axis					
					type	ms	X		Y		Z	
							pos	neg	pos	neg	pos	neg
1	complete	snap	all conditions	60	tested	---	X	X	X	X	X	X
	-007	snap	1	40	11-12	0	---	---	---	ok	---	---
	-007	snap	1	40	21-22	0	---	---	---	ok	---	---
2	complete	snap	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
3	-165	snap	1	50	.1-.2	0	---	---	ok	---	---	---
5	-040	snap	1	110	main	0	---	---	---	---	ok	---
	-040	snap	1	70	21-22	0	---	---	---	---	ok	---
7	complete	snap	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
8	complete	snap	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
9	complete	snap	all conditions	60	tested	---	X	X	X	X	X	X
	-076	screw	1	40	11-12	0	---	---	---	ok	---	---
	-076	screw	1	40	21-22	0	---	---	---	ok	---	---
10	-088	screw	2	130	15-16	0	ok	---	---	---	---	---
	-088	screw	2	110	15-18	0	ok	---	---	---	---	---
	-088	screw	2	110	15-16	0	---	ok	---	---	---	---
	-088	screw	2	100	15-18	2,6	---	ok	---	---	---	---
12	-103	screw	1	130	.1-.2	0	---	---	ok	---	---	---
13	-113	screw	2	120	73-74	0	---	---	ok	---	---	---
	-113	screw	1	60	all	0	---	---	ok	---	---	---
	-113	screw	2	110	73-74	0,8	---	---	---	ok	---	---
	-114	screw	2	120	81-82	1,6	---	ok	---	---	---	---

Test summary

Certificate No.: 3010b

sample	tested device 09033TM	tested device mounting	operating condition	shock: half-sine 11ms m/s ²	state change of contacts or other deviation		axis					
					type	ms	X		Y		Z	
							pos	neg	pos	neg	pos	neg
	-114	screw	1	90	81-82	0	---	ok	---	---	---	---
	-114	screw	2	70	81-82	208	---	---	ok	---	---	---
	-113	screw	1	60	all	0	---	---	ok	---	---	---
	-106	screw	2	120	main	0	---	---	ok	---	---	---
	-106	screw	2	90	main	0	---	---	---	ok	---	---
	-107	screw	3	90	main	0	---	---	---	ok	---	---
14	-116	screw	2	130	main	0	---	---	ok	---	---	---
	-119	screw	1	90	31-32	1,4	---	---	---	ok	---	---
	-119	screw	1	90	21-22	1,4	---	---	---	ok	---	---
15	-122	screw	2	110	keeps condition	0	ok	ok	---	---	---	---
	-122	screw	2	110	main	0	---	---	ok	---	---	---
	-123	screw	2	110	main	0	---	---	ok	---	---	---
	-123	screw	1	70	13-14	0	---	---	---	ok	---	---
	-123	screw	1	70	21-22	0	---	---	---	ok	---	---
	-128	screw	1	70	53-54	0	---	---	---	ok	---	---
	-128	screw	1	50	71-72	0	---	---	---	ok	---	---
16	-131	screw	1	130	21-22	0	---	---	ok	---	---	---
	-131	screw	2	130	main	0	---	---	---	ok	---	---
	-134	screw	2	130	13-14	0	---	---	---	ok	---	---
	-135	screw	1	130	21-22	0	---	---	ok	---	---	---
	-135	screw	1	130	53-54	0	---	---	ok	---	---	---
	-135	screw	1	130	61-62	0	---	---	ok	---	---	---
	-135	screw	1	130	71-72	0	---	---	ok	---	---	---
	-135	screw	1	130	83-84	0	---	---	ok	---	---	---
17	-134	screw	1	100	21-22	0	---	---	---	ok	---	---
	-138	screw	2	100	main	0	---	---	ok	---	---	---
	-138	screw	2	130	13-14	0	---	---	ok	---	---	---
	-140	screw	3	80	main	0	---	---	ok	---	---	---
19	-140	screw	3	130	13-14	0	---	---	ok	---	---	---
	-165	screw	1	50	.1-.2	0	---	---	ok	---	---	---
20	-165	screw	1	50	.3-.4	0	---	---	ok	---	---	---
	-165	screw	1	50	.3-.4	0	---	---	ok	---	---	---
21	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
22	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
23	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
24	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
25	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
26	-225	screw	1	40	61-62	0	---	---	---	ok	---	---
	-225	screw	1	40	71-72	0	---	---	---	ok	---	---
27	-165	screw	1	50	.1-.2	0	---	---	ok	---	---	---
29	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
30	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
31	complete	screw	all conditions	60	all	0	ok	ok	ok	ok	ok	ok
32	-291	screw	1	120	21-22	0	---	---	ok	---	---	---
	-291	screw	1	110	31-32	0	---	---	ok	---	---	---

Test summary

Certificate No.: 3010b

Test report No.: 09034TMv01

Test samples:

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
1	-001	motor starter protector	3RV2021-4AA10	E00; G/090226	snap mounted	all contacts
	-002	contactor	3RT2025-1AP00	E01; G/090504		connection
	-003	link module	3RA2921-1A	E01; BIA/090113		mechanic function
	-004	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-005	signaling switch	3RV-2921-1M	E00; NQ/090304		
	-006	undervoltage trip unit with leading auxiliary contacts	3RV2922-1CP0	E00; NQ/090309		
	-007	transverse auxiliary switch	3RV-2901-1G	E00; NQ/090220		electric function
	-008	auxiliary switch block front mounted	3RH2911-1HA22	E00; HOZ/090310		connection
	-009	surge suppressor	3RT2926-1BD00	E00; MRE/090206		
	-010	adapter for contactor	3RT1926-4RD01+	E02; WDM/090303		
	-011	plug for contactor	3RT2900-4RE01	E02; WDM/090305		
3	-023	motor starter protector	3RV2121-4EA10	E00; G/090316	snap mounted	all contacts
	-024	contactor	3RT2028-1BB40	E01; G/090518		connection
	-025	contactor	3RT2028-1BB40	E01; G/090518		connection
	-026	link module	3RA2921-1B	E01; B/A/090114		mechanic function
	-027	wiring kit reversing starting	3RA2923-2AA1	E01; G/090424		all contacts
	-028	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-029	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-030	transverse auxiliary switch	3RV2901-1E	E00; NQ/090218		
	-031	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ090127		
	-032	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ090304		
4	-033	motor starter protector	3RV2021-4AA10	E00; G/090226	screw mounted	all contacts
	-034	contactor	3RT2025-1AP00	E01; G/090506		connection
	-035	link module	3RA2921-1A	E01; BIA/090113		all contacts
	-036	signaling switch	3RV-2921-1M	E00; NQ/090304		
	-037	undervoltage trip unit with leading auxiliary contacts	3RV2922-1CP0	E00; NQ/090309		
	-038	transverse auxiliary switch	3RV-2901-1G	E00; NQ/090220		electric function
	-039	auxiliary switch block front mounted	3RH2911-1HA22	E00; HOZ/090310		connection
	-040	surge suppressor	3RT2926-1BD00	E00; MRE/090206		
	-041	adapter for contactor	3RT1926-4RD01+	E02; WDM/090303		
	-042	plug for contactor	3RT1900-4RE01	E02; WDM/080514		
5	-045	motor starter protector	3RV2121-4AA10	E00; G/090316	screw mounted	all contacts
	-046	contactor	3RT2025-1BB40-0CC0	E01; G/090604		connection
	-047	link module	3RA2921-1B	E01; BIA/090114		mechanic function
	-048	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-049	lateral auxiliary switch	3RV2901-1A	E00; NQ/090304		
	-050	signaling switch	3RV2921-1M	E00; NQ/090304		

Test summary

Certificate No.: 3010b

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
	-051	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		electric function
	-052	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		
	-053	logic module	3RA2814-1FW10	E00; L0/090210		
6	-054	motor starter protector	3RV2021-4AA10	E00; G/090226	screw mounted	all contacts
	-055	contactor	3RT2028-1KB40	E01; G/090506		connection
	-056	link module	3RA2921-1BA00	E01; B/A/090114		all contacts
	-057	lateral auxiliary switch	3RV2901-1J	E00; NQ/090309		electric function
	-058	undervoltage trip unit	3RV2902-1AB4	E00; NQ/090227		
7	-059	motor starter protector	3RV2021-4AA10	E00; G/090226	screw mounted	all contacts
	-060	contactor	3RT2025-1AP00	E01; G/090504		mechanic function
	-061	distance module	3RA2911-1CA00	E01; UTL/011208		all contacts
	-062	contactor	3RT2025-1AP00	E01; G/090506		mechanic function
	-063	distance module	3RA2911-1CA00	E01; UTL/011208		connection
	-064	link module	3RA2921-1A	E01; BIA/090113		connection
	-065	wiring kit reversing starting	3RA2923-2AA1	E01; G/090424		
	-066	transverse auxiliary switch	3RV2901-1E	E00; NQ/090218		all contacts
	-067	auxiliary switch block front mounted	3RV2911-1GA22	E00; HOZ090206		
	-068	auxiliary switch block front mounted	3RV2911-1GA22	E00; HOZ090206		
8	-069	motor starter protector	3RV2021-4AA10	E00; G/090226	screw mounted	all contacts
	-070	contactor	3RT2028-1NB30	E01; G/090610		connection
	-071	link module	3RA2921-1B	E01; BIA/090114		all contacts
	-072	transverse auxiliary switch	3RV2901-1E	E00; NQ/090218		
	-073	auxiliary switch block front mounted	3RH2911-1GA22	E00; HQZ/090304		
9	-074	motor starter protector	3RV2021-4AA20	E00; G/090406	snap mounted	all contacts
	-075	contactor	3RT2025-2AP00	E01; G/090330		connection
	-076	link module	3RA2921-2A	E01; B/A/090303		mechanic function
	-077	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-078	distance module	3RA2911-1C	E01; UTL/011208		mechanic function
	-079	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		electric function
	-080	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		
	-081	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		
	-082	sealable cover	3RT2916-4MA10	E01; 19.MRZ2008		
	-083	LED module	3RT2926-1QT00	ZZ/090126		
10	-084	motor starter protector	3RV2021-4EA20	E00; G/090325	snap mounted	all contacts
	-085	contactor	3RT2028-2AP00	E01; G/090402		mechanic function
	-086	distance module	3RA2911-1CA00	E01; UTL/011208		connection
	-087	link module	3RA2921-2A	E01; BIA/090303		mechanic function
	-088	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-090	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		

Test summary

Certificate No.: 3010b

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
	-091	auxiliary switch block side mounted	3RH2921-2DA11	E00; NQ/090303		mechanic function
	-092	auxiliary switch block side mounted	3RH2921-2DA11	E00; NQ/090303		
	-093	sealable cover	3RT2916-4MA10	E01; 19. MRZ 2008		
11	-094	motor starter protector	3RV2021-4AA20	E00; G/090406	snap mounted	all contacts connection mechanic function all contacts electric function
	-095	contactor	3RT2025-2BB40- 0CC0	E01; G/090423		
	-096	link module	3RA2921-2A	E01; BIA/090303		
	-097	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-098	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-099	IO-link add-on module	3RA2711-2AA00	E00; L0090323		
12	-100	motor starter protector	3RV2021-4EA20	E01; G/090401	screw mounted	all contacts connection all contacts
	-101	contactor	3RT2028-2BB40	E01; G/090327		
	-102	contactor	3RT2028-2BB40	E01; G/090327		
	-103	link module	3RA2921-2A	E01; BIA/090303		
	-104	wiring kit reversing starting	3RA2923-2BB2	E01; G/090428		
	-107	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-108	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ/090310		
13	-109	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ/090304	snap mounted	all contacts connection mechanic function electric function all contacts
	-110	motor starter protector	3RV2021-1AA20	E00; G/090401		
	-111	contactor	3RT2025-2NB30	E01; G/090423		
	-112	link module	3RA2921-2A	E01; BIA/090303		
	-113	mounting rail adapter	3RA2922-1A	E01; LHY/090202		
	-114	undervoltage trip unit with leading auxiliary contacts	3RV2922-2CP0	E00; NQ/090309		
14	-115	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090304	screw mounted	all contacts connection all contacts
	-116	motor starter protector	3RV2021-4EA20	E00; G/090401		
	-117	contactor	3RT2028-2BB40	E01; G/090327		
	-118	link module	3RA2921-2A	E01; BIA/090303		
	-120	lateral auxiliary switch	3RV2901-2A	E00; NQ/090304		
15	-121	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ090304	snap mounted	all contacts mechanic function all contacts mechanic function connection connection all contacts mechanic
	-122	motor starter protector	3RV2021-4AA20	E00; G/090406		
	-123	contactor	3RT2028-2AP00	E01; G/090325		
	-124	distance module	3RA2911-1CA00	E01; UTL/011208		
	-125	contactor	3RT2028-2AP00	E01; G/090401		
	-126	distance module	3RA2911-1CA00	E01; UTL/011208		
	-127	link module	3RA2921-2A	E01; BIA/090303		
	-128	wiring kit reversing starting	3RA2923-2BB2	E01; G/090428		
	-129	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-130	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090310		
	-131	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090310		
	-105	mounting rail adapter	3RA2922-1A	E01; LHY/090202		

Test summary

Certificate No.: 3010b

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
						function
	-106	mounting rail adapter	3RA2922-1A	E01; LHY/090202		mechanic function
16	-132	motor starter protector	3RV2021-4AA20	E00; G/090401	screw mounted	all contacts
	-133	contactor	3RT2025-2AP00	E01; G/090325		mechanic function
	-134	distance module	3RA2911-1CA00	E01; UTL/011208		all contacts
	-135	contactor	3RT2025-2AP00	E01; G/090325		mechanic function
	-136	distance module	3RA2911-1CA00	E01; UTL/011208		connection
	-137	link module	3RA2921-2A	E01; BIA/090303		connection
	-138	wiring kit reversing starting	3RA2923-2BB1	E01; G/090428		mechanic function
	-139	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-140	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-141	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		all contacts
	-142	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090310		all contacts
	-143	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090310		all contacts
17	-144	motor starter protector	3RV2021-4AA20	E00; G/090401	screw mounted	all contacts
	-145	contactor	3RT2025-2AP00	E00; G/090401		connection
	-146	link module	3RA2921-2A	E01; BIA/090303		mechanic function
	-147	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-148	auxiliary switch block front mounted	3RH2911-2GA22	E00; HOZ/090304		all contacts
21	-200	motor starter protector	3RV2021-4AA10	E00; G/090311	snap mounted	all contacts
	-201	contactor	3RT2025-2AP00	E01; G/090319		mechanic function
	-202	link module	3RA2921-2FA00	E01; BIA/090302		all contacts
	-203	signaling switch	3RV2921-1M	E00; NQ/090304		electric function
	-204	undervoltage trip unit with leading auxiliary contacts	3RV2922-1CP0	E00; NQ/090309		all contacts
	-205	transverse auxiliary switch	3RV2901-1G	E00; NQ/090220		all contacts
	-206	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		mechanic function
	-207	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		electric function
	-208	sealable cover	3RT2916-4MA10	E01; 090319		mechanic function
	-209	LED module	3RT2926-1QT00	ZZ/090126		electric function
	-225	distance module	3RA2911-1CA00	E01; UTL/011208		mechanic function
22	-210	motor starter protector	3RV2021-4AA10	E00; G/090309	snap mounted	all contacts
	-211	contactor	3RT2028-2KB40	E01; G/090422		connection
	-212	link module	3RA2921-2FA00	E01; BIA/090302		all contacts
	-213	lateral auxiliary switch	3RV2901-1J	E00; NQ/090309		electric function
	-214	undervoltage trip unit	3RV2902-1AB4	E00; NQ/090312		mechanic function
	-215	surge suppressor	3RT2926-1ES00	E00; MRE/090206		all contacts
	-224	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
23	-216	motor starter protector	3RV2121-4AA10	E00; G/090316	screw mounted	all contacts
	-217	contactor	3RT2025-2BB40- 0CC0	E01; G/090423		all contacts

Test summary

Certificate No.: 3010b

Sample no	Device no	Tested device	Order-No.	Date code	mounting	monitoring
	09034TM	link module	3RA2921-2FA00	E01; BIA/090302		connection
	-218	lateral auxiliary switch	3RV2901-1A	E01; NQ/081120		all contacts
	-219	signaling switch	3RV2921-1M	E00; NQ/090304		
	-220	auxiliary switch block side mounted	3RH2921-2DA11	E00; NQ/090218		
	-221	auxiliary switch block side mounted	3RH2921-2DA11	E00; NQ/090218		
	-222	IO-link add-on module	3RA2711-2AA00	E01; L00/090904		electric function
26	-014	motor starter protector	3RV2121-4AA10	E00; G/090316	snap mounted	all contacts
	-015	contactor	3RT2025-1BB40-0CC0	E01; G/090604		connection
	-016	link module	3RA2921-1BA00	E01; BIA/090114		mechanic function
	-717	mounting rail adapter	3RA2922-1A	E01; LHY/090202		all contacts
	-018	lateral auxiliary switch	3RV2901-1A	E00; NQ/090304		
	-019	signaling switch	3RV2921-1M	E00; NQ/090304		
	-020	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		
	-021	auxiliary switch block side mounted	3RH2921-1DA11	E00; NQ/090303		
	-722	logic module	3RA2814-1FW10	E01; LO/090526		electric function
27	-690	motor starter protector	3RV2021-4EA20	E01; G/090409	busbar adapters reversing starter tested with an endstop for mounting rail on the left side and with two sticks of the shock and vibration kit according to the client	all contacts
	-691	contactor	3RT2027-2BB40-0CC0	E01; G/091111		connection
	-692	contactor	3RT2027-2BB40-0CC0	E01; G/091111		all contacts
	-693	link module	3RA2921-2A	E01; BIA/090303		electric function
	-694	wiring kit reversing starting	3RA2923-2BB2	E01; G/090428		
	-791	lateral auxiliary switch	3RV2901-2A	E00; NQ/090304		
	-792	shunt trip unit	3RV2902-2DP0	E00; NQ/090309		
	-195	AS-i add-on module	3RA2712-2BB00	E00; LO/090331		connection
	-196	AS-i add-on module	3RA2711-2DB00	E00; LO/090325		mechanic function
	-797	busbar adapter	8US1251-5NT11	05 (NET037982000000)		
	-798	device holder	8US1250-5AT10	04 (NET037982100000)		

Other distinguishing marks:

Screw mounted motor starter protectors were mounted with push-in lugs 3RB1900-0B.
Sample 26 was tested with 2 mounting rails

Test summary

Certificate No.: 3010b

Test results:

Vibration test

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
vibration response investigation	4 - 150	5,8	15	20	10
vibration response investigation	4 - 500	5,8	15	20	10

Shock test

shock shape	number of shocks	acceleration m/s ²	shock duration ms
half-sine	3 positive 3 negative	150	11
half-sine	3 positive 3 negative	60	11

Other information

Frequency range 4 – 150Hz: for electro mechanic devices

Frequency range 4 – 500Hz: for electronic devices

Test results:

Vibration response investigation:

All samples were tested according to the specification and the requirements are met.

Only tested devices which had any deviation according to standard, are listed in the table below.

sample	tested device 09034TM	tested device mounting	operating condition	state change of contacts or other deviation		axis		
				type	ms	x	y	z
5	-049	screw	1	41-42	4,8	X	---	---
13	-111	snap	2	release	---	---	---	X
21	-201	snap	1	21-22	10,4	---	X	---
	-206	snap	1	31-34	12,6	---	X	---
	-206	snap	1	41-42	12,6	---	X	---

Test summary

Certificate No.: 3010b

sample	tested device 09034TM	tested device mounting	operating condition	state change of contacts or other deviation		axis		
				type	ms	X	Y	Z
22	-207	snap	1	51-52	14,4	---	X	---
	-207	snap	1	63-64	14,4	---	X	---
	-213	snap	1	21-22	7,4	---	---	X
	-213	snap	1	31-32	3,6	---	---	X
26	-722	snap	2	27-28	9,8	X	---	---

Shock test:

All samples were tested according to the specification and the requirements are met.

Only tested devices which had any deviation to the standard, are listed in the table below.

sample	tested device 09034TM	tested device mounting	operating condition	shock: half-sine 11ms m/s ²	state change of contacts or condition		axis					
					type	ms	X		Y		Z	
							pos	neg	pos	neg	pos	neg
1	-008	snap	1	50	11-12	0	---	---	ok	---	---	---
4	-039	screw	2	60	11-12	0	---	---	ok	---	---	---
	-039	screw	2	90	33-34	0	---	---	ok	---	---	---
	-034	screw	2	120	13-14	0	---	---	ok	---	---	---
	-034	screw	2	70	21-22	0	---	---	ok	---	---	---
5	-049	snap	1	50	9,2	0	ok	---	---	---	---	---
8	-069	screw	2	90	main	0	---	---	ok	---	---	---
	-069	screw	2	50	main	0	---	---	---	ok	---	---
	-070	screw	2	100	keeps condition	---	---	---	ok	---	---	---
	-070	screw	1	120	21-22	0	---	---	ok	---	---	---
	-070	screw	2	130	keeps condition	---	---	---	---	ok	---	---
	-070	screw	2	70	13-14	0	---	---	---	ok	---	---
	-070	screw	2	70	21-22	0	---	---	---	ok	---	---
	-073	screw	1	120	53-54	0	---	---	ok	---	---	---
	-073	screw	1	120	61-62	0	---	---	ok	---	---	---
	-073	screw	2	120	53-54	0	---	---	---	ok	---	---
	-073	screw	2	120	61-62	0	---	---	---	ok	---	---
9	complete	screw	all conditions	120	all	0	ok	ok	ok	---	---	---
	complete	screw	all conditions	150	all	0	---	---	---	ok	ok	---
	complete	screw	all conditions	140	all	0	---	---	---	---	---	ok
10	-091	snap	1	50	31-32	0	---	---	ok	---	---	---
	-092	snap	1	50	51-52	0	---	---	ok	---	---	---
12	-109	screw	2	110	71-72	0	---	---	ok	---	---	---
	-109	screw	1	110	71-72	0	---	---	ok	---	---	---
	-101	screw	2	110	main	0	---	---	---	ok	---	---
	-101	screw	2	130	13-14	0	---	---	---	ok	---	---
	-102	screw	3	130	main	0	---	---	---	ok	---	---
13	-111	snap	2	50	13-14	0	---	---	ok	---	---	---
15	-130	snap	1	40	61-62	0	---	---	---	ok	---	---
	-131	snap	1	40	71-72	0	---	---	---	ok	---	---

Test summary

Certificate No.: 3010b

sample	tested device 09034TM	tested device mounting	operating condition	shock: half-sine 11ms m/s ²	state change of contacts or condition		axis					
					type	ms	X		Y		Z	
26	-018	snap	1	50	41-42	1	pos	neg	pos	neg	pos	neg
	-018		1	40	41-42	0	ok	---	---	---	---	---
27	-791	busbar adapter	1	50	41-42	0,8	---	---	---	---	---	ok

Test report No.: 13076ENv01

Test samples:

Sample 13076EN	Device No	Tested Device	Date Code	Type Designation	Mounting	Monitoring
001	-001	Circuit Breaker	E01 G/140128	3RV2032-4EA10	Screw mounted	L1-T3
	-002	Contactactor	S2-1VS-1019	3RT2035-3AP00		13-14; 21-22
	-003	Link Module	---	3RA2931-1AA00		---
	-004	Transverse Aux. Switch	E01 NQ130115	3RV2901-1D		11-12-14
	-005	Signaling Switch	E01 NQ/121121	3RV2921-2M		57-58; 65-66; 77-78; 85-86
	-006	Auxilliary Switch Block Front	E02 LO131112	3RH2911-1MA11		73-74; 81-82
	-007	3-Phase Infeed Terminal	E01 EYA/140109	3RV2935-5A		---
003	-017	Circuit Breaker	E01 G/140312	3RV2031-4GB10	Snap mounted	L1-T3
	-018	Contactactor	S2-1VS-0999	3RT2036-1AP00		L1-T3; 13-14; 21-22
	-019	Link Module	---	3RA2931-1A(A00)		---
	-020	Lateral Aux. Switch	E01 NQ/121220	3RV2901-1J		13-14; 21-22; 31-32; 43-44
	-021	undervoltage release	E01 NQ/140102	3RV2922-1CP0		07-08
	-022	Phase Barrier	E01 EYA/131210	3RV2938-1K		---
	-023	Auxilliary Switch Block Side	E03 NQ/140103	3RH2921-1DA11		31-32; 43-44
	-024	Auxilliary Switch Block Side	E03 NQ/140103	3RH2921-1DA11		51-52; 63-64
	-025	Sealable Cover	---	3RT2916-4MA10		---
004	-026	Circuit Breaker	E01 G/140417	3RV2131-4JA10	Snap mounted	L1-T3; NC; NO
	-027	Contactactor	---	3RT2037-3NB30		L1-T3; 13-14
	-028	Link Module	---	3RA2931-1A(A00)		---
	-029	Lateral Aux. switch	E01 NQ/121122	3RV2901-2A		33-34; 41-42
	-030	Transverse Aux Switch	E01 NQ121122	3RV2901-1G		11-12-14
	-031	Scale Cover	---	3RV2908-0P		---
	-032	Auxilliary contact block side	E03 NQ/131205	3RH2921-2DE11		33-34; 41-42
	-033	Auxilliary contact block side	E03 NQ/131205	3RH2921-2DE11		51-52; 63-64
	-034	Logic	E04 LO130927	3RA2815-2FW10		27-28; 35-36
	-046	Circuit Breaker	E01 G/140327	3RV2032-4JA10	Screw mounted	L1-T1; L2-T2; L3-T3
006	-047	Contactactor	S2-1VS-0979	3RT2037-1AP00		13-14
	-048	Contactactor	S2-1VS-0980	3RT2037-1AP00		13-14
	-049	Link Module	---	3RA2931-1A(A00)		---
	-050	Lateral Aux. Switch	E01 NQ/121220	3RV2901-1J		13-14; 21-22; 31-32; 43-44

Test summary

Certificate No.: 3010b

Sample	Device No	Tested Device	Date Code	Type Designation	Mounting	Monitoring
13076EN						
	-051	Undervoltage Release	E01 NQ/130116	3RV2922-1CP0		07-08
	-052	Phase Barrier	E01 EYA/131210	3RV2938-1K		- - -
	-053	Auxilliary Switch Block Side	E03 NQ/140103	3RH2921-1DA11		31-32; 43-44
	-054	Auxilliary Switch Block Side	E03 NQ/140103	3RH2921-1DA11		51-52; 63-64
	-055	Function Module for AS-I	- - -	3RA2712-2AA00		- - -
	-056	Wiring Kit		3RA2933-2AA1		
	-057	Mounting Rail Adapter		3RA2932-1A(A00)		
	-058	Mounting Rail Adapter		3RA2932-1A(A00)		
	-059	Side Module for Mounting Rail Adapter		3RA1902-1B		
012	-110	Circuit Breaker	E01 G/140327	3RV2032-4JA10	Snap mounted	L1-T3
	-111	Softstarter	E06 G/131202	3RW4036-2BB14		13-14(24)-(23); 95-96-98
	-112	Link Module	- - -	3RA2931-1A(A00)		- - -
	-129	Lateral Aux. Switch	E01 NQ/121123	3RV2901-1A		33-34; 41-42
	-114	Undervoltage release	E01 NQ/131111	3RV2902-1AB4		- - -
	-115	Mounting Rail Adapter	- - -	3RA2932-1CA00		- - -
014	-123	Circuit Breaker	E01 G/140327	3RV2032-4JA10	Screw mounted	L1-T3
	-124	Softstarter	E05 G/140109	3RW3036-1BB14		L1-T3; 13-14
	-125	Link Module	- - -	3RA2931-1A(A00)		- - -
	-126	Auxilliary Switch Block Side	E01 NQ/131007	3RV2901-1J		13-14; 21-22; 31-32; 43-44
	-127	Voltage Release	E01 NQ/121129	3RV2902-1DB0		- - -
	-128	3-Phase Incoming Terminal	E01 EYA/140109	3RV1935-5E		- - -
102	-501	Motor Starter Protectors	G/140508 E01	3RV2031-4SA10	Screw mounted	L1-T3
	-502	Contactor	G/140409 X00	3RT2035-3NB30-0CC0		L1-T3; 13-14; 21-22
	-503	Contactor	G/140409 X00	3RT2035-1NB30		L1-T3; 13-14; 21-22
	-504	Link Module	- - -	3RA2931-1AA00		- - -
	-505	Lateral aux. switch	NQ/101201 E01	3RV2901-2A		33-34; 41-42
	-506	Signaling switch	NQ/101201 E01	3RV2921-2M		57-58; 65-66; 77-78; 85-86
	-507	Phase barrier	EYA/131210 E01	3RV2938-1K		- - -
	-508	Function module for AS-I	LO/140321 E04	3RA2712-2BA00		- - -
	-509	Wiring kit	NQ140428 E01	3RA2933-2AA2		- - -
114	-541	Motor Starter Protectors	G/140602 E01	3RV2032-4JA10	Screw mounted With wedge lock washer type BF	- - -
	-542	Contactor	G/140915 E01	3RT2038-1NB30		
	-543	Link Module	- - -	3RA2931-1A(A00)		
	-544	Transverse Aux Switch	E01 NQ/140108	3RV2901-2E		
	-545	Lateral aux. switch	E01 NQ/111123	3RV2901-1A		
	-546	Undervoltage release	E01 NQ/130311	3RV2922-4CV1		
	-547	Logic	LO141010 E03	3RA2813-1AW10		
	-548	Auxilliary Switch Block Side	LO141006 E03	3RH2921-1DA11		
	-549	Auxilliary Switch Block Side	LO141006 E03	3RH2921-1DA11		
	-550	Mounting Rail Adapter	- - -	3RA2932-1CA00		
	-551	Phase Barrier	EYA/131210 E01	3RV2938-1K		

Test summary

Certificate No.: 3010b

Test results:

Vibration response investigation according to IEC 60068-2-6 part 8.2 and DIN EN 60068-2-6 part 8.2

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
vibration response investigation	4 - 150	-	-	7	0,5

Endurance by sweeping to IEC 60068-2-6 part 8.3.1 and DIN EN 60068-2-6 part 8.3.1

Test values according to SN31205

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
endurance by sweeping	4* - 150	5,8	15	20	10

Shock test according to IEC 60068-2-27 and DIN EN 60068-2-27

Test values according to SN31205

shock shape	number of shocks	acceleration m/s ²	shock duration ms
half-sine	3 positive 3 negative	150	11

Test summary

Certificate No.: 3010b

Test results

Sample No. 13076EN	Tests		
	vibration response investigation according to: IEC 60068-2-6 part 8.2	endurance by sweeping according to: IEC 60068-2-6 part 8.3.1	shock according to: IEC 60068-2-27 1)
001	passed	passed	80 m/s ²
003	passed	passed	50 m/s ²
004	passed	passed	40 m/s ²
006	passed	passed	50 m/s ²
012	passed	passed	40 m/s ²
014	passed	passed	80 m/s ²
102	passed	passed	80 m/s ²
114	passed	passed	60 m/s ²

Test summary

Certificate No.: 3010b

Test report No.: 15058PMV01

Sample No. 15058PM	Device no	Tested device	Date code	Type designation	mounting	monitoring
002	-001	motor starter protector	G/160302 *E01*	3RV2041-4MA10	snap mounted	L1-T3
	-002	link module	SK/160301 *E01*	3RA1941-1A		- - -
	-003	contactor	S3-VS-0048	3RT2047-1AP00		L1-T3; 13-14
	-004	contactor	S3-VS-0015	3RT2047-1AP00		L1-T3; 13-14
	-005	signaling switch	NQ/101201 *E01*	3RV2921-4M		57-58; 77-78; 85-86
	-006	shunt release	NQ/100719 *E01*	3RV2902-4DB0		- - -
	-007	transverse aux. switch	NQ/100126 *E01*	3RV2901-4E		13-14; 21-22
	-008	aux. switch block front	LO/151023 *E03*	3RH2911-1HA31		11-12; 23-24
	-009	aux. switch block front	LO/151023 *E03*	3RH2911-1HA31		11-12; 33-34
	-010	wiring kit	- - -	3RA2943-2AA1		- - -
	-011	mech. Interlock	LO/160526 *E01*	3RA2924-2B		
	-012	mounting rail adapter	- - -	3RA2942-1A(1AA0)		
	-013	mounting rail adapter		3RA2942-1A(1AA0)		
003	-001	motor starter protector	G/160215 *E05*	3RV2042-4MB10	screw mounted	L1-T3
	-002	link module	SK/160301 *E01*	3RA1941-1K		- - -
	-003	contactor	S3-VS-1018	3RT2047-3AP00		L1-T3; 13-14; 21-22
	-004	signaling switch	LO/160629 *E01*	3RV2921-2M		57-58; 65-66; 77-78; 85-86
	-005	Undervoltage release with leading aux. contacts	LO/160121 *E01*	3RV2922-1CP0		07-08
	-006	lateral aux. switch	LO/160109 *E01*	3RV2901-2B		33-34; 43-44
	-007	sealable cover	- - -	3RV2908-0P		- - -
	-008	aux. switch block, side	LO/151111 *E03*	3RH2911-2DA11		41-42; 53-54
	-009	aux. switch block, side	LO/151111 *E03*	3RH2911-2DA11		21-22; 33-34
	-010	mounting rail adapter	- - -	3RA2942-1A(1AA0)		- - -

Test summary

Certificate No.: 3010b

Sample No. 15058PM	Device no	Tested device	Date code	Type designation	mounting	monitoring
004	-001	motor starter protector	G/160122 *E05*	3RV2142-4MA10	screw mounted	4,0 / 0,8Nm
	-002	link module	SK/160301 *E01*	3RA1941-1K		- - -
	-003	contactor	VS-S3-1019	3RT2047-3AP00		4,0 / - - -Nm
	-011	mounting rail adapter	- - -	3RA2942-1A(1AA0)		- - -
006	-001	motor starter protector	G/160122 *E05*	3RV2042-4KB10	snap mounted	4,0Nm
	-002	link module	SK/160301 *E01*	3RA1941-1K		- - -
	-003	contactor	G/160706 *E01*	3RT2045-1NB30		4,0 / 0,8Nm
	-009	transverse aux. switch	LO/160506 *E01*	3RV2901-1E		0,8Nm
	-011	mounting rail adapter	- - -	3RA2942-1A(1AA0)		- - -
007	-001	motor starter protector	G/160627 *E07*	3RV2042-4MA10	screw mounted	L1-T3
	-002	Soft starter	G/160218 *E01*	3RW4047-1TB04		L1-T3; 13-14/24-23; 95-96-98
	-003	Link module	SK/160301 *E01*	3RA1941-1K		- - -
	-004	Lateral aux. Switch	LO/160513 *E01*	3RV2901-1A		33-34; 41-42
	-005	Terminal block	G/160125 *E02*	3RV1948-1K		- - -
804	-001	motor starter protector	G/160429 *E01*	3RV2142-4MA10	screw mounted	95-96; 97-98
	-002	link module	SK/160301 *E01*	3RA1941-1K		- - -
	-003	contactor	VS-S3-1020	3RT2047-3AP00		13-14; 21-22
	-004	terminal cover	- - -	3RT1946-4EA2		- - -
	-005	transverse aux. switch	LO/160411 *E01*	3RV2901-1G		11-12-14
	-006	lateral aux. switch	LO/160426 *E01*	3RV2901-2A		33-34; 41-42
	-007	lateral aux. switch	LO/160617 *E03*	3RH2921-2DA11		51-52; 63-64
	-008	lateral aux. switch	LO/160617 *E03*	3RH2921-2DA11		31-32; 43-44
	-009	solid-state time-delay aux. Switch	LO/151127 *E03*	3RA2813-2FW10		27-28; 35-36
	-010	mounting rail adapter	- - -	3RA2942-1A(1AA0)		- - -

Test summary

Certificate No.: 3010b

Test results:

Vibration response investigation according to IEC 60068-2-6 part 8.2 and DIN EN 60068-2-6 part 8.2

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
vibration response investigation	5 - 500	-	-	7	0,5

Endurance by sweeping to IEC 60068-2-6 part 8.3.1 and DIN EN 60068-2-6 part 8.3.1

Test values according to SN31205

test	frequency range [Hz]	cross-over frequency [Hz]	amplitude below the cross-over frequency [mm]	acceleration above the cross-over frequency [m/s ²]	Number of sweep cycles
endurance by sweeping	4* - 500	5,81	15	20	10

Shock test according to IEC 60068-2-27 and DIN EN 60068-2-27

Test values according to SN31205

shock shape	number of shocks	acceleration m/s ²	shock duration ms
half-sine	3 positive 3 negative	60	11

Test summary

Certificate No.: 3010b

Sample No. 15058PM	Tests		
	vibration response investigation according to: IEC 60068-2-6 part 8.2	endurance by sweeping according to: IEC 60068-2-6 part 8.3.1	shock according to: IEC 60068-2-27
002	passed	passed	60m/s ²
003	passed	passed	60m/s ²
004	passed	passed	60m/s ²
006	passed	passed	60m/s ²
007	passed	passed	60m/s ²
804	Passed	passed	50m/s ²

The load feeder for direct start, mounted on solid mounting rails (snap mounted), only tested without any auxiliary switches, undervoltage trip units or shunt releases.

Test summary

Certificate No.: 3010b

The tests were carried out on devices, representative for the whole series, fixed on page 2 up to 16 of the product description

The tests were carried out in the

Type Test Center Siemens AG Amberg
Werner-von-Siemens-Str. 48, 92220 Amberg
Accredited-No.: **D-PL-11055-04-00**

The test results are in accordance with the test specification

Remarks

Certificate No.: 3010b

- 09033TMv01:** Test of load feeder size S00 with accessories according to SN 31205 (2008-01).
The test results are in accordance with the test specification.
- 09034TMv01:** Test of load feeder size S0 with accessories according to SN 31205 (2008-01).
The test results are in accordance with the test specification.
- 13076ENV01:** Test of load feeder size S2 with accessories according to SN 31205 (2008-01).
The test results are in accordance with the test specification.
- 15058PMV01:** Test of load feeder size S3 with accessories according to SN 31205 (2016-03).
The test results are in accordance with the test specification.

Amberg, 2017-04-03

Location, Date



Signature
(Authorized representative)
Mr. Pilhöfer



Reviewed
(Laboratory manager)
Mr. Bogner

Typprüfbescheinigung / Type Test Certificate

Erzeugnis / Product: **Fuseless load feeders**Typ: **3RA2.1, 3RA2.2, 3RA2.3, 3RA2.5**
Type: **3RV2.3 + 3RW.03,**
3RV2.4 + 3RT2.4 or 3RW.04Tech. Daten:
Specification: **$U_e \max = 690V$,**
 $I_e \max = 100A$ Hersteller:
Manufacturer: **Siemens AG**
DF CPArt der Prüfung / Type of test: **Noise and Shock (Railway Applications)**Prüfer /
Tested by: **Mr. Pilhöfer**Labor /
Laboratory: **LOVAG registered and DAkkS accredited**
Testing Laboratory
Siemens AG, AmbergAngewandte Prüfbestimmungen / Test specifications applied:
IEC 61373:2010-05

Durchgeführte Prüfungen / Tests conducted:

Railway Applications for category 1, Class B**Noise: 5 – 150 Hz / ASD-level: 1,857 (m/s²)²/Hz / RMS value: 7,9 m/s² / 5h**
5 – 150Hz / ASD-level: 0,0298 (m/s²)²/Hz / RMS value: 1,0 m/s² / 10 min**Shock: half-sine; 50m/s² or 30m/s² / 30ms; 3 x positive shocks and 3x negative shocks**

Prüfergebnis / Test results:

All requirements of the test specification are met.
For Accessories see Product Description 3022c.Bemerkungen / Remarks: **Issued: 2010-08-11****Index a, dated 2015-12-15: Standard version updated, test report 09033TMv03 covers also DIN EN 61373:2011-04.****Index b, dated 2016-03-22: Test report 09033TMv03 replaced by Product Description and Test Summary 3022b. 3RA2.2 from certificate 3023 added. 3RA2.3 and 3RA2.5 added. IEC 61373 added.****Index c, dated 2017-05-16: Product Description and Test Summary 3022b replaced by Product Description and Test Summary 3022c. 3RV2.3 + 3RW.03, 3RV2.4 + 3RT2.4 or 3RW.04 added. DIN EN 61373 removed.**

i.V.

DF CP R&D VC Mr. Hartinger

i.V.

DF CP R&D PMM Mr. Royer

SIEMENS AG**Digital Factory****Dr. Jan Mrosik, CEO**

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme;

Managing Board: Joe Kaeser, Chairman, President and Chief Executive Officer; Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Cedrik Neike, Michael Sen, Ralf P. Thomas;

Registered offices: Berlin and Munich, Germany; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322
Formular: April 2017

Type designation: 3RA2.1
3RA2.2
3RA2.3, 3RV2.3 + 3RW.03 (size S2)
3RA2.5
3RV2.4 + 3RT2.4 or 3RW.04 (size S3)

Manufacturer: **Siemens AG DF CP**
Werner-von-Siemens-Str. 48, 92220 Amberg

Production site: **Siemens AG DF CP**
Werner-von-Siemens-Str. 48, 92220 Amberg
Siemens AG, DF CP
Werner-von-Siemens-Str. 29, 93413 Cham

3RA2	1	3	4	-4B	A	34	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
 - 2 – Size S0, 3RT2.2
 - 3 – Size S2, 3RT2.3 and 3RV2.31
(standard short circuit breaking capacity)
 - 5 – Size S2, 3RT2.3 and 3RV2.32
(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 and D according VI of the Nomenclature Breakdown)

V. Setting Range

Suffix	From	to (A)
-0A	0.11	0.16
-0B	0.14	0.2
-0C	0.18	0.25
-0D	0.22	0.32
-0E	0.28	0.4
-0F	0.35	0.5
-0G	0.45	0.63
-0H	0.55	0.8
-0J	0.7	1
-0K	0.9	1.25
-1A	1.1	1.6
-1B	1.4	2
-1C	1.8	2.5
-1D	2.2	3.2
-1E	2.8	4
-1F	3.5	5
-1G	4.5	6.3
-1H	5.5	8
-1J	7	10
-1K	9	12.5
-4A	11	16
-4B	14	20
-4C	17	22
-4D	20	25
-4N	23	28

Nomenclature breakdown

Certificate No.: 3022c

Suffix	From	to (A)
-4E	27	32
-4S	9.5	14
-4T	12	17
-4B	13	20
-4D	18	25
-4E	22	32
-4P	28	36
-4U	32	40
-4F	28	40
-4V	35	45
-4G	36	45
-4H	40	50
-4W	42	52
-4Q	47	57
-4X	49	59
-4J	54	65
-4K	62	73

Continuation of Nomenclature breakdown:

- 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 Busbar 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 Busbar adapter, spring terminals
- 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
 - 38 - 3RT2038 contactor
- VIII. Aux. Contacts of contactor
- 0 - without 1 NO + 1 NC
 - 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:

Link Module:

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
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

Mounting rail adapter

3RA2922-1A	Mounting rail adapter, 5 pieces
3RA2922-1AA00	Mounting rail adapter, 1 piece
3RA2932-1A	Mounting rail adapter, Size S2, 5 pieces
3RA2932-1AA00	Mounting rail adapter, Size S2, 1 piece
3RA2902-1B	Side Module for Mounting rail adapter, S2 and S3
8US1998-1AA00	Connection key for Mounting rail adapter
3RA2942-1A	Mounting rail adapter, Size S3, 5 pieces
3RA2942-1AA00	Mounting rail adapter, Size S3, 1 piece
3RA2911-1C	Spacer module, 5 pieces
3RA2911-1CA00	Spacer module, 1 piece

Busbar adapter

8US1251-5DS10
8US1251-5NT10
8US1261-6MT10

Busbar Adapter Direct Starter, Size S00, screw terminals
Busbar Adapter Direct Starter, Size S0, screw terminals
Busbar Adapter Direct Starter, Size S2, screw terminals

8US1251-5DS10
8US1250-5AS10
8US1211-6MT10

Busbar Adapter Reversing Starter, Size S00, screw terminals
Support for Reversing Starter, Size S00, screw terminals
Support for Reversing Starter, Size S2, screw terminals

8US1251-5DT11
8US1251-5NT11

Busbar Adapter Direct Starter, Size S00, spring terminals
Busbar Adapter Direct Starter, Size S0, spring terminals

8US1251-5DT11
8US1251-5NT11

Busbar Adapter Reversing Starter, Size S00, spring terminals
Busbar Adapter Reversing Starter, Size S0, spring terminals

8US1250-5AT10
8US1250-5AT10

Support for Reversing Starter, Size S00, spring terminals
Support for Reversing Starter, Size S0, spring terminals

8US1998-1DA45
8US1998-1DA10

Positioner piece 45mm
Vibration & Shock Kit, Size S2

3RA2933-1BB1
3RA2933-1DB1

Wiring Kit for Revers Load Feeders with Mounting Rail Adapter, Size S2
Wiring Kit for Revers Load Feeders with Busbar Adapter, Size S2

Nomenclature breakdown circuit-breaker S3:

3RV20	4	1	-4F	A	1	0	..
I	II	III	IV	V	VI	VII	VIII

I. Basic Type

3RV20 - Circuit Breaker for motor protection
 3RV21 - Circuit Breaker for motor protection with overload relay function
 3RV23 - Circuit Breaker for starter combination
 3RV24- Circuit Breaker for transformer protection

II. Size of terminal for main circuit

4 - up to 100 A

III. Short Circuit characteristics:

1 - standard short circuit breaking capacity, 65 kA / 400 V
 2 - higher short circuit breaking capacity, 100 kA / 400 V

IV. Setting Ranges

Suffix	from	to (A)
-4F	28	40
-4H	36	50
-4J	45	63
-4K	57	75
-4R	65	84
-4Y	75	93
-4M	80	100

V. Tripping Class

A - setting ranges with instantaneous tripping and overload tripping Class 10
 B - setting ranges with instantaneous tripping and overload tripping Class 20 (only 100kA).
 C - with instantaneous tripping and without overload tripping

VI. Type of Terminals

1 - Screw Terminal

VII. Auxiliary Switches

(Combinations with certified accessories Type 3RV29...)

0 - without
 5 - 1NO + 1NC, top mounted

VIII. Others

.. - Manufacturer's identification

Continuation: Nomenclature Breakdown

Accessories:

Auxiliary contacts:

3RV2901	-1	A
I	II	III

I - Basic type

3RV2901 -	Auxiliary contact blocks for 3RV2
3RV2921 -	Alarm switch for 3RV2

II - Type of terminals

-1 -	Screw Terminal
-2 -	Spring terminals
-4 -	Ring lug terminals

III - Contact arrangements

A -	1NO + 1NC, side-mounting
B -	2NO, side-mounting
C -	2NC, side-mounting
D -	1NO + 1NC changeover, top-mounting
E -	1NO + 1NC, top-mounting
F -	2NO, top-mounting
G -	1NO + 1NC changeover, top-mounting, micro switch
J -	2NO + 2NC, side-mounting
M -	2NO + 2NC, side-mounting, alarm switch

Continuation: Nomenclature Breakdown

Undervoltage trip units, Shunt releases:

3RV2902	-1	A	B4
I	II	III	IV

I - Basic type

3RV2902 -	Undervoltage trip units, Shunt releases for 3RV2
3RV2922 -	Undervoltage trip unit with leading auxiliary contacts for 3RV2

II - Type of terminals

-1 -	Screw Terminal
-2 -	Spring terminals
-4 -	Ring lug terminals

III - Type of Accessory

A -	Undervoltage trip unit
C -	Undervoltage trip unit with leading auxiliary contacts
D -	Shunt trip unit

IV - Rated voltage for Undervoltage trip unit

B4 -	24V, dc
B0 -	24V, 50Hz
F0 -	110V, 50Hz; 120V, 60Hz
M1 -	208V, 60Hz
P0 -	230V, 50Hz; 240V, 60Hz
V0 -	400V, 50Hz; 440V, 60Hz
V1 -	415V, 50Hz; 480V, 60Hz
S0 -	500V, 50Hz; 600V, 60Hz
G6 -	100V, 50 Hz; 110V, 60Hz
N0 -	220V, 50Hz
N6 -	200V, 50Hz; 220V, 60Hz
Q0 -	380V, 50Hz
U0 -	240V, 50Hz

IV - Rated voltage for Shunt trip unit

B0 -	20-24V, 50/60Hz
F0 -	90-110V, 50/60Hz
P0 -	210-240V, 50/60Hz
V0 -	350-415V, 50/60Hz
S0 -	500V, 50/60Hz

Nomenclature Breakdown Contactor S3:

3RT20 45 -1 A P0 0 -.. VII
 I II III IV V VI

I. Basic Type

3RT20 - AC-3 contactor, 3NO main contacts
 3RT23 - AC1-contactor, 4NO main contacts
 3RT24 - AC1-contactor, 3NO main contacts
 3RT25 - AC-3 contactor, 2NO + 2NC main contacts

II. Size S3

AC-3 Motor contactor 3RT20, 3 pole:

45 - 37 kW
 46 - 45 kW
 47 - 55 kW

AC-1 contactor 3RT24, 3 pole:

46 - 690V / 140A
 48 - 690V / 160A

III. Type of Terminals

1 - Screw Terminal for main and auxiliary contacts
 3 - Screw terminals for main circuit and spring terminals for auxiliary and control circuit
 6 - Main circuit without box terminal

IV. Operating system

A - AC operating system
 C - AC operating system with factory assembled EMC protective unit Varistor type
 D - DC operating system with factory assembled EMC protective unit Varistor type
 E - AC operating system with factory assembled EMC protective unit RC combination type
 K - DC operating system with integrated Varistor
 N - UC operating system with integrated Varistor
 P - AC operating system with factory assembled EMC protective unit diode Combination

V. Operating voltage

24 Vac through 600 Vac
 12 Vdc through 250 Vdc
 20 Vac/Vdc through 280 Vac/Vdc

VI. Auxiliary Contact Arrangements

0 - 1 normally open and 1 normally closed
 6 - 2 normally open and 2 normally closed with one lateral mounted auxiliary contact on the right side

VII. Suffix letters and/or numbers specified commercial variations – Optional

For example:

-0AA3 - Contactor with extension of supply voltage
 -0CC0 - Contactor with communication interface
 -0GA0 - Contactor for low noise switching
 -0LA2 - Contactor for railway applications
 -3MA0 - Contactor with top mounted none removable auxiliary contact
 -4AA0 - AC-3 contactor, 4 pole, 4NO main contacts

Continuation: Nomenclature Breakdown

3RH29 I	1 II	1 III	-1 IV	F V	A VI	04 VII
I - Basic type						
3RH29 -	Auxiliary switches					
II - Size						
0 -	without meaning					
1 -	Size S00					
2 -	Size S0-S3					
III - Type of Accessory						
1 -	auxiliary switch					
2 -	coupling link					
3 -	coupling link					
4 -	coupling link for direct coil connection					
5 -	coupling link					
6 -	auxiliary switch					
8 -	mounting and wiring material					
IV – Type of Terminals						
0 -	without meaning					
1 -	screw terminals					
2 -	spring terminals (cage clamp)					
4 -	ring cable lug					
V – Type of auxiliary switch						
A -	front mounting, connection from above					
B -	front mounting, connection from below					
D -	side mounting, 2-pole					
L -	front mounting, 2-pole, connection from above					
M -	front mounting, 2-pole, connection from below					
N -	solid state aux. Switch, front mounting, 2-pole					
F -	front mounting, 4-pole					
G -	front mounting, 4-pole (for 3RH2140...)					
H -	front mounting, 4-pole					
W -	front mounting, 4-pole					
X -	front mounting, 4-pole					
Y -	front mounting, 4-pole					
VI – Features						
A -	without meaning					
B -	1x overlapping					
C -	2x overlapping					
E -	suitable for electronic					
F -	high contact reliability					

VII – Accessory contacts (type and conducting)

10 -	1NO
01 -	1NC
11 -	1NO + 1NC
12 -	1NO + 2NC
20 -	2NO
02 -	2NC
13 -	1NO + 3NC
22 -	2NO + 2NC
31 -	3NO + 1NC
40 -	4NO
04 -	4NC

Nomenclature breakdown motor starter:

$\frac{3RW4}{I}$ $\frac{0}{II}$ $\frac{46}{III}$ - $\frac{1}{IV}$ $\frac{B}{V}$ $\frac{B}{VI}$ $\frac{1}{VII}$ $\frac{4}{VIII}$

I - Basic type

3RW4 – semiconductor motor starter “High Feature”
 3RW3 - semiconductor motor starter

II - Kind of device

0 - Soft starter

III - Rated operational power P_e at 400V Rated operational current $I_{eAC-53a}$ at 400V

		Pe:	Ie:	Size:
36	-	22 kW	45 A	S2
37	-	30 kW	63 A	S2
38	-	37 kW	72 A	S2
46	-	45 kW	80 A	S3
47	-	55 kW	106 A	S3

IV - Type of Terminals

-1 - screw terminals
 -2 - spring terminals

V - Special function

B - with bypass
 T - with bypass and thermistor

VI - Phases controlled

B - two-phase controlled

VII - Rated control supply voltage, U_s

0 - 24 V ac/dc
 1 - 110 - 230 V ac/dc

VIII - Rated operational voltage, U_e

4 - 200 up to 480 V ac
 5 - 400 up to 600 V ac

Further accessories:

3RV2908-0P	Sealing Cap
3RV2901-0H	Cover
3RT2926-4EA13	Cover for ring-lug-terminals
3RA2902-1B	Side module for stand. mount. rail adapter
2RA2943-2AA1	Wiring kit for reversing starter, size S3
3RA2943-2AA2	Wiring kit for reversing starter, size S3
3RA2932-2D	Mechanical connector
3RA2910-0	Sealable cover for solid-state two-wire relay
3RA2912-0	Mechanical connector
3RA2908-1A	Sealable cover
3RA2934-2B	Mechanical interlock
3RA1943-1B	Wiring kit for mounding on standard mounting rail adapter
3RA1943-2A	Wiring kit for reversing starter, size S3
3RA1943-3D	Wiring module for contactor assembly S3
3RA1943-3E	Wiring module bottom for contactor combination S3

Comments:

Mounting rail adapter size S3

- the screw mounted load feeders with coupling contactors (3RT2.4.-.K...) only tested without any auxiliary switches mounted on the contactors.

Busbar adapter size S0/S00

- 8US1998-1DA45 - Positioner piece 45mm replaces 8US1998-1CA10 - Vibration & Shock Kit

see type test certificate according to product standard.

Test summary

Certificate No.: 3022c

Test laboratory: *Type Test Center Siemens AG Amberg*
Werner-von-Siemens-Str. 48, 92220 Amberg

Manufacturer: *Siemens AG DF CP*
Werner-von-Siemens-Str. 48, 92220 Amberg
Siemens AG, DF CP
Werner-von-Siemens-Str. 29, 93413 Cham

Test object: *Load feeders S00 / S0 / S2 / S3*

Type designation: *3RA2.1*
3RA2.2
3RA2.3, 3RV2.3 + 3RW.03 (size S2)
3RA2.5
3RV2.4 + 3RT2.4 or 3RW.04 (size S3)

Test specification: *IEC 61373 (2010-05)*

Test report No.: *09033TMv03*
09034TMv03
13076ENV41
15058PMV02
15086ER01

The Test summary consists of 23 pages and is only valid combined with the product description

Test summary

Certificate No.: 3022c

Test report No.: 09033TMv03

Test samples:

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
50	-270	direkt starter	3RA2110-4AA18-1BB4 (complete MLFB)	---	snap mounted	all contacts
	-271	transverse auxiliary switch block	3RV2901-1D	E00; NQ/090227		
	-272	lateral auxiliary switch block	3RV2901-1A	E00; NQ/090304		
	-273	signaling switch	3RV2921-1M	E00; NQ/090304		connection
	-274	isolator module	3RV2928-1A	E02; NQ/081229		
	-275	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090303		all contacts
	-276	auxiliary switch block side mounted	3RH2911-1DA11	E00; NQ/090303		
	-277	logic module	3RA2811-1CW10	E01; L0/090525		electric function
	-870	motor starter protector	3RV2011-4AA10	E00; G/090206		all contacts
	-871	contactor	3RT2018-1BB41	E01; G/090203		
	-872	link module	3RA1921-1DA00	E01		connection
51	-244	direct starter	3RA2110-4AE18-1AP0 (complete MLFB)	---	screw mounted	all contacts
	-245	transverse auxiliary switch	3RV2901-2E	E00; NQ/090218		
	-246	lateral auxiliary switch block	3RV2901-2A	E00; NQ/090304		
	-247	signaling switch	3RV2921-2M	E00; NQ/080204		
	-248	auxiliary switch block front mounted	3RH2911-2NF11	E00; HQZ/081211		
	-844	motor starter protector	3RV2011-4AA20	E00; G/090323		
	-845	contactor	3RT2018-2AP01	E01; G/091106		
	-846	link module	3RA2911-2AA00	E01		connection
52	-249	reversing starter	3RA2210-4AE18-2BB4 (complete MLFB)	- - -	snap mounted	all contacts
	-250	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		mechanic function
	-251	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		all contacts
	-252	lateral auxiliary switch block	3RV2901-2A	E00; NQ/090304		
	-253	undervoltage trip unit	3RV2902-2AP0	E00; NQ/090309		
52	-254	auxiliary switch block front mounted	3RH2911-1LA11	E00; HQZ/090206	snap mounted	all contacts
	-255	auxiliary switch block front mounted	3RH2911-1LA11	E00; HQZ/090206		
	-849	motor starter protector	3RV2011-4AA20	E00; G/090323		
	-850	contactor	3RT2018-2BB42	E01; G/090203		
	-851	contactor	3RT2018-2BB42	E01; G/090203		
	-852	link module	3RA29 11-2AA00	E01		
	-853	wiring kit reversing starting	3RA29 13-2AA2	E01		connection

Test summary

Certificate No.: 3022c

Sample no	Device no 09033TM	Tested device	Order-No.	Date code	mounting	monitoring
53	-256	reversing starter	3RA2210-4AA18-2BB4 (complete MLFB)	---	screw mounted	all contacts
	-257	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		mechanic function
	-258	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		
	-259	lateral auxiliary switch block	3RV2901-1J	E00; NQ/090309		all contacts
	-260	undervoltage trip unit	3RV2902-1AP0	E00; NQ/090309		
	-261	terminal block	3RV2928-1H	E02; EYA/081219		connection
	-262	AS-I add-on module	3RA2712-1BB00	E00; LO/090319		electric function
	-263	AS-I add-on module	3RA2711-1DB00	E00; LO/090319		
	-856	motor starter protector	3RV2011-4AA10	E00; G/090206		
	-857	contactor	3RT2018-1BB42-0CC0	E01; G/091202		all contacts
	-859	contactor	3RT2018-1BB42-0CC0	E01; G/091202		
	-860	link module	3RA19 21-1DA00	E01		
	-861	wiring kit reversing starting	3RA29 13-2AA1	E01		connection
54	-264	direct starter	3RA2110-AD18-1BB4 (complete MLFB)	---	busbar adapters reversing starter tested with vibration and shock kit 8US1998-1CA10	all contacts
	-265	transverse auxiliary switch	3RV2901-1F	E00; NQ/090217		
	-266	signaling switch	3RV2921-1M	E00; NQ/090304		
	-267	undervoltage trip unit	3RV2922-1CP0	E00; NQ/090309		
	-268	auxiliary switch block front mounted	3RH2911-1MA11	E00;HQZ/090128		
	-269	busbar adapter	8US1251-5DS10	04 NET037982000000		connection
	-864	motor starter protector	3RV2011-4AA10	E00; G/090311		all contacts
	-865	contactor	3RT2018-1BB41	E01; G/090130		
	-866	link module	3RA19 21-1DA00	E01		connection

Required test values:

Vibration test

test	frequency range Hz	load duration each axis	category 1 , class B		standard specific. paragraph
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
functional test	5 – 150Hz	5 h	1,857	7,9	8.1
long life test	5 – 150Hz	10 min	0,0298	1,0	9.1

Test summary

Certificate No.: 3022c

Shock test

category	orientation	peak acceleration m/s ²	nominal duration ms	standard specific. paragraph
1 B	Vertical Transverse Longitudinal	30 30 50	30	10.5

Test results:

Sample No.	Tests		
	Long life test according to: DIN EN 61373 part 9.1	Functional test according to: DIN EN 61373 part 8.1	shock according to: DIN EN 61373 part 10.5 1)
50	passed	passed	50m/s ²
51	passed	passed	50m/s ²
52	passed	passed	50m/s ²
53	passed	passed	50m/s ²
54	passed	passed	50m/s ²

Test summary

Certificate No.: 3022c

Test report No.: 09034TMv03

Test samples:

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
30	-149	direkt starter	3RA2120-4EE27-0AP0	---	snap mounted	all contacts
	-150	transverse auxiliary switch block	3RV2901-2E	E00; G/090218		
	-151	lateral auxiliary switch block	3RV2901-2B	E00; NQ/090304		
	-152	signaling switch	3RV2921-2M	E01; NQ/080923		
	-153	auxiliary switch block front mounted	3RH2911-2GA22	E00; HQZ/090310		mechanic function
	-154	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		all contacts
	-849	motor starter protector	3RV2021-4EA20	E00; G/090327		
	-850	contactor	3RT2027-2AP00	E01; G/090331		connection
	-851	link module	3RA29 21-1AA00	E01		
31	-155	direkt starter	3RA2120-4EA28-0BB4	---	screw mounted	all contacts
	-156	transverse auxiliary switch block	3RV2901-1E	E00;NQ/090305		
	-157	lateral auxiliary switch block	3RV2901-1B	E00;NQ/090304		
	-158	signaling switch	3RV2921-1M	E00; NQ/090218		
	-159	isolator module	3RV2928-1A	E02;NQ/091026		connection
	-160	auxiliary switch block side mounted	3RH2911-1DA11	E00;NQ/090303		all contacts
	-161	auxiliary switch block side mounted	3RH2911-1DA11	E00;NQ/090303		
	-162	logic modul	3RA2814-1FW10	E01;LO/090526		electric function
	-855	motor starter protector	3RV2021-4EA10	E01;G/090811		all contacts
	-856	contactor	3RT2027-1BB40-0CC0	E01; G/090824		
	-857	link module	3RA2921-1BA00	E01		connection
32	-163	reversing starter	3RA2220-4EB27-0AP0	---	snap mounted	all contacts
	-164	lateral auxiliary switch block	3RV2901-1J	E00; NQ/090309		
	-165	undervoltage trip unit	3RV2922-1CP0	E00; NQ/090309		connection
	-166	terminal block	3RV2928-1K	E01; L0/090417		
	-167	auxiliary switch block front mounted	3RH2911-1MA11	E00; HQZ/090128		all contacts
	-168	auxiliary switch block front mounted	3RH2911-1MA11	E00; HQZ/090128		
	-169	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		mechanic function
	-170	mounting rail adapter	3RA2922-1AA00	E01; LHY/090202		
	-863	motor starter protector	3RV2021-4EA10	E00; G/090311		all contacts

Test summary

Certificate No.: 3022c

Sample no	Device no 09034TM	Tested device	Order-No.	Date code	mounting	monitoring
	-864	contactor	3RT2028-1AP00	E01; G/090525		connection
	-865	contactor	3RT2028-1AP00	E01; G/090525		
	-866	link module	3RA29 21-1BA00	E01		
	-867	wiring kit reversing starting	3RA29 23-2AA1	E01		
33	-171	reversing starter	3RA2220-4EF27-0BB4	---	screw mounted	all contacts
	-172	lateral auxiliary switch block	3RV2901-2A	E00; NQ/090304		
	-173	undervoltage trip unit	3RV2902-2DB0	E00; NQ/090309		
	-174	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		
	-175	auxiliary switch block side mounted	3RH2921-2DE11	E00; NQ/090303		
	-176	IO-link add-on module	3RA2711-2BB0	E00; L0090409		electric function
	-177	IO-link add-on module	3RA2711-2DB00	E00; L00090325		
	-871	motor starter protector	3RV2021-4EA20	E00; G/090325		all contacts
	-872	contactor	3RT2028-2BB40-0CC0	E01; G/090824		
	-873	contactor	3RT2028-2BB40-0CC0	E01; G/090824		connection
	-874	link module	3RA29 21-2AA00	E01		
	-875	wiring kit reversing starting	3RA29 23-2AA2	E01		
34	-178	reversing starter	3RA2220-4EA27-0BB4	---	bar adapters reversing starter tested with vibration and shock kit 8US1998-1CA10	all contacts
	-179	lateral auxiliary switch block	3RV2901-2A	E00; NQ/090304		
	-180	shunt trip unit	3RV2902-2DP0	E00; NQ/090309		electric function
	-183	AS-i add-on module	3RA2712-2BB00	E00; LO/090318		
	-184	AS-i add-on module	3RA2711-2DB00	E00; LO/090325		connection
	-185	busbar adapter	8US1251-5DT11	04 NET037982000 000		
	-186	busbar adapter	8US1250-5AT10	04 NET037982000 000		all contacts
	-878	motor starter protector	3RV2021-4EA20	E01; G/090409		
	-879	contactor	3RT2027-2BB40-0CC0	E01; G/091112		
	-880	contactor	3RT2027-2BB40-0CC0	E01; G/091112		
	-882	wiring kit reversing starting	3RA2923-2AA2	E01		
						connection

Test summary

Certificate No.: 3022c

Required test values:

Vibration test

test	frequency range Hz	load duration each axis	category 1 , class B		standard specific. paragraph
			ASD – level (m/s ²)/Hz	RMS value m/s ²	
functional test	5 – 150Hz	5 h	1,857	7,9	8.1
long life test	5 – 150Hz	10 min	0,0298	1,0	9.1

Shock test

category	orientation	peak acceleration m/s ²	nominal duration ms	standard specific. paragraph
1 B	Vertical Transverse Longitudinal	30 30 50	30	10.5

Test results:

Sample No.	Tests		
	Long life test according to: DIN EN 61373 part 9.1	Functional test according to: DIN EN 61373 part 8.1	shock according to: DIN EN 61373 part 10.5 1)
30	passed	passed	30m/s ²
31	passed	passed	50m/s ²
32	passed	passed	30m/s ²
33	passed	passed	50m/s ²
34	passed	passed	50m/s ²

Test summary

Certificate No.: 3022c

Test report No.: 13076ENV41

Test samples:

Sample 13076EN	Device No.	Tested device	Date code	Type designation	Contact termination	Terminal torque	Mounting type	Mounting torque	Monitoring		
040	-1280	Motor Starter Protectors	E01; G/150512	3RV2032-4EA10	Screw	3,0 Nm	Screw	1,2 Nm	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)		
	-1281	Contactor	E01; G/141209	3RT2035-3AP00		3,0 / 0,8 Nm			---	---	
	-282	Connecting Module	---	3RA2931-1A(A00)		---			---	---	
	-283	Transverse aux. switch	E01; NQ/130115	3RV2901-1D	Spring	0,8 Nm		---	NO (11-14), NC (11-12)		
	-284	Alarm switch	E01; NQ/131209	3RV2921-2M		---		---	NO (57-58, 77-78), NC (65-66, 85-86)		
	-285	Aux. switch block front	E02; LO/131112	3RH2911-1MA11		Screw		0,8 Nm	---	NO (73-74), NC (81-82)	
	-286	Incoming terminal	E01; EYA/140109	3RV2935-5A				3,0 Nm	---	---	
041	-1287	Motor Starter Protectors	E01; G/150511	3RV2031-4SA10	Screw	3Nm	Screw	1.5Nm	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)		
	-1288	Contactor	E01; G/150204	3RT2035-3NB30- 0CC0	Screw	3Nm / 0.8Nm				---	
	-1289	Contactor	E01; G/150423	3RT2035-1NB30						---	
	-290	Connecting Module	---	3RA2931-1A(A00)	---	---			---		
	-291	Auxilliary contact block side	E01; NQ/131120	3RV2901-2A	Spring	---			NO (33-34), NC (41-42)		
	-292	Alarm switch	E01; 131209	3RV2921-2M	Spring	---			NO (57-58, 77-78), NC (65-66, 85-86)		
	-293	Phase barrier	E01; EYA/131210	3RV2938-1K	---	---			---		
	-294	Wendestarter AS-I	E01; LO/131102	3RA2712-1BA00	Screw	---			---		
	-295	Wende-verdrahtung	---	3RA2933-2A	---	---			---		
042	-1296	Motor Starter Protectors	E01; G/150508	3RV2031-4VB10	Screw	3,0 Nm	Snap	---	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)		
	-1297	Contactor	E01; G/150423	3RT2036-1AP00		3,0 / 0,8 Nm				---	
	-298	Connecting Module	---	3RA2931-1A(A00)	---	---				---	
	-299	Auxilliary contact block side	E01; NQ/131007	3RV2901-1J	Screw	0,8 Nm			NO (13-14, 43-44), NC (21-22, 31-32)		
	-300	undervoltage release	E01; NQ/130116	3RV2922-1CP0		0,8 Nm			---		
	-301	Phase barrier	E01; EYA/131210	3RV2938-1K	---	---			---		
	-302	Lateral aux. switch block	E01; NQ/140103	3RH2921-1DA11	Screw	0,8 Nm			NO (43-44 / 63-64), NC (31-32 / 51-52)		
	-303	Lateral aux. switch block	E01; NQ/140103	3RH2921-1DA11		0,8 Nm			NO (43-44 / 63-64), NC (31-32 / 51-52)		
043	-1305	Motor Starter Protectors	E01; G/150512	3RV2131-4KA10	Screw	3Nm	Snap	---	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)		
	-1306	Contactor	E01; G/150511	3RT2037-3NB30	Screw / Spring	3Nm / ---				---	
	-307	Connecting Module	---	3RA2931-1A(A00)						---	
	-308	Auxilliary contact block side	E01; NQ/131120	3RV2901-2A	Spring	---			NO (33-34), NC (41-42)		
	-309	Transverse aux. switch	E01; NQ/10817	3RV2901-1G	Screw	0.8Nm			NO (11-14), NC (11-12)		
	-310	Scale cover	RDW 130705	3RV2908-0P	---	---			---		
	-311	Lateral aux. switch block	E03; NQ/131128	3RH2921-2DA11	Spring	---			NO (43-44 / 63-64), NC (31-32 / 51-52)		
	-312	Lateral aux. switch block	E03; NQ/131128	3RH2921-2DA11	Spring	---			NO (43-44 / 63-64), NC (31-32 / 51-52)		
	-313	Electr. time-delayed aux. switch	E04; LO/130927	3RA2815-2FW10	Spring	---			NO (27-28), NC (35-36)		
044	-1314	Motor Starter Protectors	E01; G/150511	3RV2031-4VA10	Screw	3,0 Nm	Screw	1,2 Nm	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)		
	-1315	Contactor	E01; G/150511	3RT2036-3NB30		3,0 Nm				1,2 Nm	
	-316	Connecting Module	---	3RA2931-1A(A00)	---	---		---			
	-317	Auxilliary contact block side	E01; NQ/131120	3RV2901-2A	Spring	---		---	NO (33-34), NC (41-42)		
	-318	Transverse aux. switch	E01; NQ/140108	3RV2901-2E	Spring	---		---	NO (13-14), NC (21-22)		
	-319	Undervoltage release with leading aux	E01; NQ/130311	3RV2922-4CV1	Screw	0,8 Nm		---	---		
	-320	Lateral aux. switch block	E03; NQ/131205	3RH2921-2DE11	Spring	---		---	NO (33-34 / 63-64), NC (41-42 / 51-52)		

Test summary

Certificate No.: 3022c

Sample 13076EN	Device No.	Tested device	Date code	Type designation	Contact termination	Terminal torque	Mounting type	Mounting torque	Monitoring	
	-321	Lateral aux. switch block	E03; NQ/131205	3RH2921-2DE11	Spring	---		---		
	-322	Terminal cover	---	3RT2936-4EA2	---	---		---	---	
	-323	Electr. time-delayed aux. switch	E04; LO/130927	3RA2813-1AW10	Screw	0,8 Nm		---	NO (15-18) NC (15-16)	
	-324	Mounting rail adapter	---	3RA2932-1A(A00)	---	---		1,2 Nm	---	
045	-1325	Motor Starter Protectors	E01; G/150512	3RV2032-4KA10	Screw	3Nm	Screw	1.5Nm	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)	
	-1326	Contactor	E01; G/150330	3RT2037-1NB30-0CC0	Screw	3Nm / 0.8Nm				
	-1327	Contactor	E01; G/150612	3RT2037-1NB30						
	-328	Connecting Module	---	3RA2931-1A(A00)	---	---			---	
	-329	Auxilliary contact block side	E01; NQ/131007	3RV2901-1J	Screw	0.8Nm			NO (13-14, 43-44), NC (21-22, 31-32)	
	-330	undervoltage release	Eo1; NQ/140612	3RV2922-1CP0	Screw	0.8Nm			---	
	-331	Phase barrier	E01; EYA/131210	3RV2938-1K	---	---			---	
	-332	Hischa seit	E03; NQ/140103	3RH2921-1DA11	Screw	0.8Nm			NO (63-64), NC (51-52)	
	-333	Hischa seit	E03; NQ/140103	3RH2921-1DA11	Screw	0.8Nm			NO (43-44), NC (31-32)	
	-334	AS-I reversing start Basemod	E02; LO/140414 S31	3RA2712-2BA00	Spring	---			---	
	-1334	AS-I reversing start Coupmod			Spring	---			---	
	-335	Wende-verdrahtung	---	3RA2933-2A	---	---			---	
	-336	Hutschienen-adapter	---	3RA2932-1A(A00)	---	---			---	
	-337	Hutschienen-adapter	---	3RA2932-1A(A00)	---	---			---	
	-338	Side module for Mounting rail adapter	---	3RA1902-1B	---	---			---	
	046	-1339	Motor Starter Protectors	E01; G/150512	3RV2032-4EA10	Screw			3Nm	Snap
-1340		Contactor	E01; G141209	3RT2035-3AP00	Screw / Spring	3Nm / ---				
-341		Connecting Module	---	3RA2931-1A(A00)	---	---	---			
-342		Transverse aux. switch	E01; NQ/140108	3RV2901-2E	Spring	---	NO (13-14), NC (21-22)			
-343		Voltage release	E01; NQ/131120	3RV2902-1DB0	Screw	3Nm	---			
-344		Coupling kink	E01; LO/141005	3RH2914-2GP11	Spring	---	---			
-345		Mounting rail adapter	---	3RA2932-1A(A00)	---	---	---			
-346		Infeed terminal top Type E	E01; EYA/140110	3RV2935-5E	Screw	0.8Nm	---			
047	-1347	Motor Starter Protectors	E01; G/150507	3RV2031-4SB10	Screw	3Nm	Snap	---	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)	
	-1348	Contactor	E01; G/150423	3RT2035-1NB30	Screw	3Nm / 0.8Nm				
	-1349	Contactor	E01; G/150423	3RT2035-1NB30	Screw					
	-350	Connecting Module	---	3RA2931-1A(A00)	---	---			---	
	-351	Transverse aux. switch	E01; NQ/140107	3RV2901-2E	Spring	---			NO (13-14), NC (21-22)	
	-352	Alarm switch	E01; NQ/131209	3RV2921-2M	Spring	---			NO (57-58, 77-78), NC (65-66, 85-86)	
	-353	Undervoltage release	E01; NQ/130724	3RV2922-2CP0	Spring	---			---	
	-354	Terminal cover	---	3RT2936-4EA2	---	---			---	
	-355	Terminal cover	---	3RT2936-4EA2	---	---			---	
	-356	Aux. switch block front	E02; LO/140109	3RH2911-1LA11	Screw	0.8Nm			NO (73-74), NC (81-82)	
	-357	Aux. switch block front	E02; LO/140626	3RH2911-1LA11	Srew	0.8Nm			NO (73-74), NC (81-82)	
	-358	Wiring kit	---	3RA2933-2A	---	---			---	
	-359	Mounting rail adapter	---	3RA2932-1A(A00)	---	---			---	
	-360	Mounting rail adapter	---	3RA2932-1A(A00)	---	---			---	
	-361	Side module for Mounting rail adapter	---	3RA1902-1B	---	---			---	
	048	-1362	Motor Starter Protectors	E01; G/150512	3RV2032-4KA10	Screw			3Nm	8US
-1363		Contactor	E01; G/141212	3RT2037-1NB30-0CC0	Screw	3Nm / 0.8Nm				
-364		Connecting Module	---	3RA2931-1A(A00)	---	---	---			

Test summary

Certificate No.: 3022c

Sample	Device	Tested device	Date code	Type designation	Contact	Terminal	Mounting	Mounting	Monitoring
13076EN	No.				termination	torque	type	torque	
	-365	Hischa quer	E01; NQ/130817	3RV2901-1G	Screw	0.8Nm			NO (11-14), NC (11-12)
	-366	Meldeschalter	E01; NQ/ 121210	3RV2921-1M	Screw	0.8Nm			NO (57-58, 77-78), NC (65-66, 85-86)
	-367	Spannungs-auslöser	E01; NQ/121120	3RV2902-1DB0	Screw	0.8Nm			---
	-1368	IO-Link Direktstarter	E05; LO151018	3RA2711-1AA00	Screw	0.8Nm			---
	-369	8US Adapter	---	8US1261-6MT10	---	---			---
049	-1370	Motor Starter Protectors	E01; G/150507	3RV2031-4SB10	Screw	3Nm	8US		L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)
	-1371	Contactor	E01; G/150423	3RT2035-1NB30	Screw	3Nm / 0.8Nm			---
	-372	Connecting Module	---	3RA2931-1A(A00)	---	---			---
	-373	Lateral aux. switch	E01; NQ/101201	3RV2901-4A	Screw	0.8Nm			NO (33-34), NC (41-42)
	-374	Undervoltage release	E01; 130724	3RV2922-2CP0	Screw	0.8Nm			---
	-375	Terminal cover	---	3RT2936-4EA2	---	---			---
	-376	Aux. switch block front	E02; LO/140109	3RH2911-1LA11	Screw	0.8Nm			NO (73-74), NC (81-82)
	-377	8US Adapter		8US1261-6MT10	---	---			---
050	-1378	Motor Starter Protectors	E01; G/150512	3RV2032-4WB10	Screw	3Nm	8US	---	L1, L2, L3 T1, T2, T3 Contactor Aux: NO (13-14), NC (21-22)
	-1379	Contactor	E01; G/150423	3RT2036-1AP00	Screw	3Nm / 0.8Nm			---
	-1380	Contactor	E01; G/150423	3RT2036-1AP00	Screw	3Nm / 0.8Nm			---
	-381	Connecting Module	---	3RA2931-1A(A00)	---	---			---
	-382	Lateral aux. switch	E01; NQ/121123	3RV2901-1A	Screw	0.8Nm			NO (33-34), NC (41-42)
	-383	Voltage release	E01; NQ/131120	3RV2902-1DB0	Screw	0.8Nm			---
	-384	Aux. switch block front	E02; LO/131112	3RH2911-1MA11	Screw	0.8Nm			NO (73-74), NC (81-82)
	-385	Aux. switch block front	E02; LO/140625	3RH2911-1MA11	Screw	0.8Nm			NO (73-74), NC (81-82)
	-386	Wiring kit	---	3RA2933-2A	---	---			---
	-387	8US Adapter	---	8US1261-6MT10	----	---			---
	-388	8US Adapter	---	8US1211-6MT10	----	---			---
051	-1389	Motor Starter Protectors	E01; G/150512	3RV2032-4KA10	Screw	3Nm	Snap	---	L1, L2, L3 T1, T2, T3 Softstarter Aux: NO (13-14, 23-24, 95-98) NC (95-96)
	-390	Soft starter	E06; G/131202	3RW4036-2BB14	Screw / Spring	3Nm			---
	-391	Connecting Module	---	3RA2931-1A(A00)	---	---			---
	-392	Auxilliary contact block side	E01; NQ/131120	3RV2901-2A	Spring	0.8Nm			NO (33-34), NC (41-42)
	-393	Undervoltage release	E01; NQ/131111	3RV2902-1AB4	Screw	0.8Nm			---
	-394	Mounting rail adapter	---	3RA2932-1CA00	---	---			---
052	-1395	Motor Starter Protectors	E01; G/150511	3RV2031-4VA10	Screw	3Nm	Screw	1.5Nm	L1, L2, L3 T1, T2, T3 Softstarter Aux: NO (13-14, 23-24, 95-98) NC (95-96)
	-1396	Sanftstarter	E07; G/151020	3RW4038-2BB04	Screw / Spring	3Nm / ---			---
	-397	Connecting Module	---	3RA2931-1A(A00)	---	---			---
	-398	Auxilliary switch block transverse	E01; NQ/100126	3RV2901-4E	Screw	0.8Nm			NO (13-14), NC (21-22)
	-399	Meldeschalter	E01; NQ/101201	3RV2921-4M	Screw	0.8Nm			NO (57-58, 77-78), NC (65-66, 85-86)
	-400	Undervoltage release	E01; NQ/130724	3RV2922-2CP0	Spring	---			---
	-401	Mounting rail adapter		3RA2932-1CA00	---	---			---
053	-1402	Motor Starter Protectors	E01; G/150512	3RV2032-4KA10	Screw	3Nm	Screw	1.5Nm	L1, L2, L3 T1, T2, T3 Softstarter Aux: NO (13-14)
	-403	Soft starter	E05; G/140109	3RW3036-1BB14	Screw	3Nm / 0.6Nm			---
	-404	Connecting Module	---	3RA2931-1A(A00)	---	---			---
	-405	Auxilliary contact block side	E01; NQ/131007	3RV2901-1J	Screw	0.8Nm			NO (13-14, 43-44), NC (21-22, 31-32)
	-406	Voltage release	E01; NQ/131120	3RV2902-1DB0	Screw	0.8Nm			---
	-407	Infeed terminal top Type E	E01; EYA/140110	3RV2935-5E	Screw	0.8Nm			---

Required test values:

long life test according to DIN EN 61373 part 9.1 and IEC 61373 part 9.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
long life test	5 – 150Hz	5 h	0,964	5,59	Vertical Transverse Longitudinal

functional test according to DIN EN 61373 part 8.1 and IEC 61373 part 8.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
functional test	5 – 150Hz	10 min	0,0301	0,99	Vertical Transverse Longitudinal

shock test according to DIN EN 61373 part 10.5 and IEC 61373 part 10.5

test	orientation	peak acceleration m/s ²	nominal duration ms	standard specific. paragraph
shock test	Vertical Transverse Longitudinal	50 50 50	30	10.5

Test results:

Sample No. 13076EN	Tests		
	Long life test according to: DIN EN 61373 part 9.1	Functional test according to: DIN EN 61373 part 8.1	shock according to: DIN EN 61373 part 10.5 1)
040	passed	passed	50m/s ²
041	passed	passed	40m/s ²
042	passed	passed	50m/s ²
043	passed	passed	30m/s ²
044	passed	passed	30m/s ²
045	passed	passed	25m/s ²
046	passed	passed	50m/s ²
047	passed	passed	25m/s ²
048	passed	passed	35m/s ²
049	passed	passed	25m/s ²
050	passed	passed	40m/s ²
051	passed	passed	30m/s ²
052	passed	passed	50m/s ²
053	passed	passed	50m/s ²

Test summary

Certificate No.: 3022c

Test report No.: 15058PMV02

Test samples:

Sample No. 15058PM	Device no	Tested device	Date code	Type designation	mounting	monitoring
401	-001	motor starter protector	G/160302 *E01*	3RV2042-4FA10	screw mounted	L1-T1; L2-T2; L3-T3
	-002	link module	SK/160301 *E01*	3RA1941-1A		- - -
	-003	contactor	S3-VS-1022	3RT2045-1NB30- OCC0		L1-T3; 13-14; 21-22
	-004	contactor	G/160706 *E01*	3RT2045-1NB30		L1-T3; 13-14; 21-22
	-005	terminal block	G/160125 *E02*	3RV2948-1K		- - -
	-006	lateral aux. switch	LO/160613 *E01*	3RV2901-1J		13-14; 21-22; 31-32; 43-44
	-007	Undervoltage release with leading aux. contacts	LO/160121 *E01*	3RV2922-1CP0		07-08
	-008	Function module for Asi	LO/160203 *E05*	3RA2712-1BA00		- - -
	-009	wiring kit	- - -	3RA2943-2AA1		
	-010	mech. Interlock	LO/160519 *E01*	3RA2924-2B		
	-011	mounting rail adapter	- - -	3RA2942-1A(1AA0)		
	-012	mounting rail adapter		3RA2942-1A(1AA0)		
402	-001	motor starter protector	G/160726 *E01*	3RV2041-4MA10	snap mounted	L1-T1; L2-T2; L3-T3
	-002	link module	SK/160301 *E01*	3RA1941-1A		- - -
	-003	contactor	G/160721 *E01*	3RT2041-1AP00		L1-T1; L2-T2; L3-T3; 13-14
	-004	contactor	G/160721 *E01*	3RT2041-1AP00		L1-T1; L2-T2; L3-T3; 13-14
	-005	signaling switch	NQ/101201 *E01*	3RV2921-4M		57-58; 65-66; 77-78; 85-86
	-006	shunt release	NQ/100719 *E01*	3RV2902-4DP0		- - -
	-007	transverse aux. switch	NQ/100126 *E01*	3RV2901-4E		13-14; 21-22
	-008	aux. switch block front	LO/151023 *E03*	3RH2911-4FB22		11-12; 23-24; 33-34; 43-44
	-009	aux. switch block front	LO/151023 *E03*	3RH2911-4FB22		11-12; 23-24; 33-34; 43-44
	-010	wiring kit	- - -	3RA2943-2AA1		- - -
	-011	mech. Interlock	LO/160526 *E01*	3RA2924-2B		
	-012	mounting rail adapter	- - -	3RA2942-1A(1AA0)		
	-013	mounting rail adapter	- - -	3RA2942-1A(1AA0)		

Test summary

Certificate No.: 3022c

Sample No. 15058PM	Device no	Tested device	Date code	Type designation	mounting	monitoring
401	-001	motor starter protector	G/160302 *E01*	3RV2042-4FA10	screw mounted	L1-T1; L2-T2; L3-T3
	-002	link module	SK/160301 *E01*	3RA1941-1A		- - -
	-003	contactor	S3-VS-1022	3RT2045-1NB30- OCC0		L1-T3; 13-14; 21-22
	-004	contactor	G/160706 *E01*	3RT2045-1NB30		L1-T3; 13-14; 21-22
	-005	terminal block	G/160125 *E02*	3RV2948-1K		- - -
	-006	lateral aux. switch	LO/160613 *E01*	3RV2901-1J		13-14; 21-22; 31-32; 43-44
	-007	Undervoltage release with leading aux. contacts	LO/160121 *E01*	3RV2922-1CP0		07-08
	-008	Function module for Asi	LO/160203 *E05*	3RA2712-1BA00		- - -
	-009	wiring kit	- - -	3RA2943-2AA1		
	-010	mech. Interlock	LO/160519 *E01*	3RA2924-2B		
	-011	mounting rail adapter	- - -	3RA2942-1A(1AA0)		
	-012	mounting rail adapter		3RA2942-1A(1AA0)		
402	-001	motor starter protector	G/160726 *E01*	3RV2041-4MA10	snap mounted	L1-T1; L2-T2; L3-T3
	-002	link module	SK/160301 *E01*	3RA1941-1A		- - -
	-003	contactor	G/160721 *E01*	3RT2041-1AP00		L1-T1; L2-T2; L3-T3; 13-14
	-004	contactor	G/160721 *E01*	3RT2041-1AP00		L1-T1; L2-T2; L3-T3; 13-14
	-005	signaling switch	NQ/101201 *E01*	3RV2921-4M		57-58; 65-66; 77-78; 85-86
	-006	shunt release	NQ/100719 *E01*	3RV2902-4DP0		- - -
	-007	transverse aux. switch	NQ/100126 *E01*	3RV2901-4E		13-14; 21-22
	-008	aux. switch block front	LO/151023 *E03*	3RH2911-4FB22		11-12; 23-24; 33-34; 43-44
	-009	aux. switch block front	LO/151023 *E03*	3RH2911-4FB22		11-12; 23-24; 33-34; 43-44
	-010	wiring kit	- - -	3RA2943-2AA1		- - -
	-011	mech. Interlock	LO/160526 *E01*	3RA2924-2B		
	-012	mounting rail adapter	- - -	3RA2942-1A(1AA0)		
	-013	mounting rail adapter	- - -	3RA2942-1A(1AA0)		

Test summary

Certificate No.: 3022c

Sample No. 15058PM	Device no	Tested device	Date code	Type designation	mounting	monitoring
406	-001	motor starter protector	G/160426 *E01*	3RV2042-4KB10	snap mounted	L1-T1; L2-T2; L3-T3
	-002	link module	SK/160725 *E01*	3RA1941-1A		- - -
	-003	contactor	S3-VS-1011	3RT2046-1KB40		L1-T1; L2-T2; L3-T3; 13-14
	-004	transverse aux. switch	LO/160123 *E01*	3RV2901-1E		13-14; 21-22
	-005	lateral aux. switch	LO/160613 *E01*	3RV2901-1J		31-32; 13-14
	-006	sealable cover	- - -	3RV2908-0P		- - -
	-007	aux. switch block, front	LO/160908 *E03*	3RH2911-1LA20		73-74; 83-84
	-008	mounting rail adapter	- - -	3RA2942-1A(1AA0)		- - -
407	-001	motor starter protector	G/160425 *E01*	3RV2042-4MA10	screw mounted	L1-T1; L2-T2; L3-T3
	-002	Soft starter	G/160913 *E07*	3RW4047-1TB04		L1-T3; 13-14 / 24-23; 95-96-98
	-003	Link module	SK/160725 *E01*	3RA1941-1K		- - -
	-004	Lateral aux. Switch	LO/160606 *E01*	3RV2901-1A		33-34; 41-42
	-005	Terminal block with phase barriers	G/160125 *E02*	3RV1948-1K		- - -
	-006	Undervoltage release	LO/160121 *E01*	3RV2911-1CP0		07-08

Test summary

Certificate No.: 3022c

Required test values:

long life test according to DIN EN 61373 part 9.1 and IEC 61373 part 9.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
long life test	5 – 150Hz	5 h	0,964	5,59	Vertical Transverse Longitudinal

functional test according to DIN EN 61373 part 8.1 and IEC 61373 part 8.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
functional test	5 – 150Hz	10 min	0,0301	0,99	Vertical Transverse Longitudinal

shock test according to DIN EN 61373 part 10.5 and IEC 61373 part 10.5

test	orientation	peak acceleration m/s ²	nominal duration ms	standard specific. paragraph
shock test	Vertical Transverse Longitudinal	50 50 50	30	10.5

Test results:

Sample No. 15058PM	Tests		
	Long life test according to: DIN EN 61373 part 9.1	Functional test according to: DIN EN 61373 part 8.1	shock according to: DIN EN 61373 part 10.5 1)
401	passed	passed	30m/s ²
402	passed	passed	30m/s ²
403	passed	passed	50m/s ²
404	passed	passed	30m/s ²
405	passed	passed	30m/s ²
406	passed	passed	30m/s ²
407	passed	passed	50m/s ²

- 1) the screw mounted load feeders with coupling conductors (3RT2.4.-.K...) only tested without auxiliary switches.

Test summary

Certificate No.: 3022c

Test report No.: 15086ER01

Test samples:

Sample No. 15086EM	Device no	Tested device	Date code	Type designation	mounting	monitoring
401	LOAD FEEDER DIRECT START		G/151118 *E02*	3RA2110-1ED15-1BB4	---	
	-001	CIRCUIT-BREAKER	G/151019 *E02*	3RV2011-1EA10	8US Busbar system	L1-T1; L2-T2; L3-T3
	-002	CONTACTOR	G/151020 *E06*	3RT2015-1BB41		L1-T1; L2-T2; L3-T3; 13-14
	-003	DEVICE ADAPTER S00/0	---	8US1251-5DS11		---
402	LOAD FEEDER REVERSING		G/151118 *E02*	3RA2210-4AS18-2BB4	---	
	-001	CIRCUIT-BREAKER	G/151021 *E02*	3RV2011-4AA20	8US Busbar system	L1-T1; L2-T2; L3-T3
	-002	CONTACTOR	G/150522 *E06*	3RT2018-2BB42		L1-T1; L2-T2; L3-T3
	-003	CONTACTOR	G/150522 *E06*	3RT2018-2BB42		L1-T1; L2-T2; L3-T3
	-004	DEVICE ADAPTER	---	8US1251-5DS10		---
	-005	DEVICE HOLDER		8US1250-5AS10		
	-006	LATERAL AUX.SWITCH BLOCK,SIDE	LO/160120 *E03*	3RH2911-2DA11		41-42
	-007	LATERAL AUX.SWITCH BLOCK,SIDE	LO/151014 *E03*	3RH2911-2DA11		33-34
	-008	AUX.SWITCH BLOCK,FRONT	LO/151024 *E03*	3RH2911-2HA31		11-12; 33-34
	-009	AUX.SWITCH BLOCK,FRONT	LO/151024 *E03*	3RH2911-2HA31		23-24; 43-44
	-010	UNDERVOLTAGE RELEASE	NQ//150313 *E01*	3RV2902-2AP0		---
	-011	TRANSVERSE AUX. SWITCH	LO/151107 *E01*	3RV2901-2E		21-22
	-012	LATERAL AUXILIARY SWITCH	LO/160129 *E01*	3RV2901-2A		33-34
403	LOAD FEEDER REVERSING		G/151202 *E02*	3RA2220-4DD27-0BB4	---	
	-001	CIRCUIT-BREAKER	G/150921 *E02*	3RV2021-4DA10	8US Busbar system	L1-T1; L2-T2; L3-T3
	-002	CONTACTOR	G/151118 *E02*	3RT2027-1BB40		L1-T1; L2-T2; L3-T3; 13-14
	-003	CONTACTOR	G/151118 *E02*	3RT2027-1BB40		L1-T1; L2-T2; L3-T3; 13-14
	-004	DEVICE HOLDER	WNR/151005 *E01*	8US1250-5AS10		---
	-005	DEVICE ADAPTER	WNR/151122 *E01*	8US1251-5DS10		

Sample No. 15086EM	Device no	Tested device	Date code	Type designation	mounting	monitoring
404	LOAD FEEDER FUSELESS REVERSING		G/151118 *E02*	3RA2220-4DH27-0BB4	---	
	-001	CIRCUIT-BREAKER	G/151006 *E02*	3RV2021-4DA20	8US Busbar system	L1-T1; L2-T2; L3-T3
	-002	CONTACTOR	G/151023 *E02*	3RT2027-2BB40		L1-T1; L2-T2; L3-T3; 13-14
	-003	CONTACTOR	G/151023 *E02*	3RT2027-2BB40		L1-T1; L2-T2; L3-T3; 13-14
	-004	TRANSVERSE AUX	LO/151107 *E01* NQ/120223 *E01*	3RV2901-2E		21-22
	-005	VOLTAGE RELEASE		3RV2902-2DP0		---
	-006	AUX.SWITCH BLOCK,FRONT	LO/151024 *E03*	3RH2911-2HA31		11-12; 33-34
	-007	AUX.SWITCH BLOCK,FRONT	LO/151024 *E03*	3RH2911-2HA31		23-24; 43-44
	-008	LATERAL AUX.SWITCH BLOCK,SIDE	LO/160120 *E03*	3RH2911-2DA11		21-22
	-009	LATERAL AUX.SWITCH BLOCK,SIDE	LO/160120 *E03*	3RH2911-2DA11		53-54
	-010	DEVICE ADAPTER	---	8US1251-5NT11		---
	-011	DEVICE HOLDER		8US1250-5AT10		
	405	LOAD FEEDER DIRECT		G/151118 *E02*	3RA2120-4DH27-0AP0	---
-001		CIRCUIT-BREAKER	G/151006 *E02*	3RV2021-4DA20	8US Busbar system	L1-T1; L2-T2; L3-T3
-002		CONTACTOR	G/150909 *E02*	3RT2027-2AP00		L1-T1; L2-T2; L3-T3; 13-14; 21-22
-003		TRANSVERSE AUX. SWITCH	LO/151107 *E01*	3RV2901-2E		13-14; 21-22
-004		LATERAL AUX.SWITCH BLOCK,SIDE	LO/151006 *E03*	3RH2911-2DA11		51-52; 63-64
-005		LATERAL AUX.SWITCH BLOCK,SIDE	LO/151006 *E03*	3RH2911-2DA11		21-22; 33-34
-006		DEVICE ADAPTER	---	8US1251-5NT11		---

Test summary

Certificate No.: 3022c

Required test values:

long life test according to DIN EN 61373 part 9.1 and IEC 61373 part 9.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
long life test	5 – 150Hz	5 h	0,964	5,59	Vertical Transverse Longitudinal

functional test according to DIN EN 61373 part 8.1 and IEC 61373 part 8.1

test	frequency range Hz	load duration each axis	category 1 , class B		orientation
			ASD – level (m/s ²) ² /Hz	RMS value m/s ²	
functional test	5 – 150Hz	10 min	0,0301	0,99	Vertical Transverse Longitudinal

shock test according to DIN EN 61373 part 10.5 and IEC 61373 part 10.5

test	orientation	peak acceleration m/s ²	nominal duration ms	standard specific. paragraph
shock test	Vertical Transverse Longitudinal	50 50 50	30	10.5

Test results:

Sample No. 15086EM	Tests		
	Long life test according to: DIN EN 61373 part 9.1	Functional test according to: DIN EN 61373 part 8.1	shock according to: DIN EN 61373 part 10.5 1)
401	passed	passed	50m/s ²
402	passed	passed	50m/s ²
403	passed	passed	50m/s ²
404	passed	passed	50m/s ²
405	passed	passed	40m/s ²

Test summary

Certificate No.: 3022c

The tests were carried out on devices, representative for the whole series, fixed on page 2 up to 15 of the product description

Exept for for test report 13076ENV41, tests were carried out in the

Type Test Center Siemens AG Amberg
Werner-von-Siemens-Str. 48, 92220 Amberg
Accredited-No.: **D-PL-11055-04-00**

The tests for test report 13076ENV41 were carried out in the

Test Laboratory Siemens Ltd., Kalwa,
Thane Belapur Road, Thane - 400601, India

The test results are in accordance with the test specification

Remarks

Certificate No.: 3022c

- 09033TMV03:** Test of load feeder size S00 with accessories according to DIN EN 61373 (1999-11). The test results are in accordance with the test specification and cover also DIN EN 61373 (2011-04) and IEC 61373 (2010-05)
- 09034TMV03:** Test of load feeder size S0 with accessories according to DIN EN 61373 (1999-11). The test results are in accordance with the test specification and cover also DIN EN 61373 (2011-04) and IEC 61373 (2010-05)
- 13076ENV41:** Test of load feeder size S2 with accessories according to DIN EN 61373 (2011-04) and IEC 61373 (2010-05). The test results are in accordance with the test specification.
- 15058PMV02:** Test of load feeder size S3 with accessories according to and IEC 61373 (2010-05). The test results are in accordance with the test specification
- 15086ER01:** Test of load feeder size S0/S00 with accessories according to and IEC 61373 (2010-05). The test results are in accordance with the test specification

Amberg, 2017-05-16

Location, Date



Signature
(Authorized representative)
Mr. Pilhöfer



Reviewed
(Laboratory manager)
Mr. Bogner

SIEMENS

Prüf-Nr./Q-Nr.: **3296a**
Certificate No.:

Dienststelle: **DF CP R&D VC 2 / Schröck**
Department:

Ort: **Amberg** Tag: **2016-01-29**
Place: Date:

Anlagen: **Product Description 3296a**
Enclosures:

Typprüfbescheinigung / Type Test Certificate

Erzeugnis / Product: **Load Feeder - Combination of Circuit-Breakers and AC Semiconductor Motor Starters**

Typ: **3RV203 + 3RW303,**
Type: **3RW403 or 3RW442**

Tech. Daten: **$U_e = 400V, I_q = 10..32kA$**
Specification: **$U_e = 500V, I_q = 5..32kA$**
 $U_e = 690V, I_q = 10/15kA$

Hersteller: **Siemens AG**
Manufacturer: **DF CP**

Art der Prüfung / Type of test: **Performance under short-circuit conditions**

Prüfer / **Mr. Stadlbauer**
Tested by:

Labor / **LOVAG registered and DAkkS accredited**
Laboratory: **Testing Laboratory**
Siemens AG, Amberg

Angewandte Prüfbestimmungen / Test specifications applied:
IEC 60947-4-2:2011-05

Durchgeführte Prüfungen / Tests conducted:

Test Sequence III: Performance under short-circuit conditions

Prüfergebnis / Test results:

All requirements of the test specification are met.

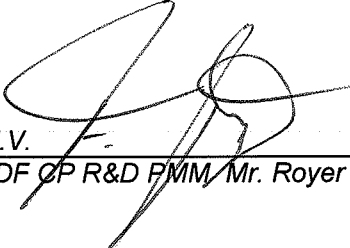
Bemerkungen / Remarks: **Issued: 2015-11-20**

Index a, dated 2016-01-29: Product description 3296 replaced by product description 3296a. 500V and 690V combinations added.

i.V.


DF CP R&D VC Mr. Hartinger

i.V.


DF CP R&D PMM Mr. Royer

SIEMENS AG

Digital Factory

Anton S. Huber, CEO

Siemens Aktiengesellschaft: Chairman of the Supervisory Board: Gerhard Cromme;
Managing Board: Joe Kaeser, Chairman, President and Chief Executive Officer; Roland Busch, Lisa Davis, Klaus Helmrich, Janina Kugel, Siegfried Russwurm,
Ralf P. Thomas;
Registered offices: Berlin and Munich, Germany; Commercial registries: Berlin Charlottenburg, HRB 12300, Munich, HRB 6684; WEEE-Reg.-No. DE 23691322
Formular: December 2015

Product description

Certificate No.: 3296a

Type designation: 3RV203.. + 3RW303..
3RV203.. + 3RW403..
3RV203.. + 3RW442..

Manufacturer: Siemens AG, GWA
Werner-von-Siemens-Str. 48, 92220 Amberg

Production site: Siemens AG, GWA
Werner-von-Siemens-Str. 48, 92220 Amberg

Siemens AG, GWA
Werner-von-Siemens-Str. 29, 93413 Cham

Overview series 3RV2.3..

	3RV20	3	1	-4A	A	1	0	..
	I	II	III	IV	V	VI	VII	VIII
I.	Basic Type							
	3RV20 - Circuit Breaker for motor protection							
II.	Size of terminal for main circuit							
	3 - up to 80 A							
III.	Short Circuit characteristics:							
	1 - standard short circuit breaking capacity, 65 kA / 400 V							
	2 - higher short circuit breaking capacity, 100 kA / 400 V							
IV.	Setting Ranges							
	Suffix	from		to (A)				
	-4S	9,5		14				
	-4A	11		16				
	-4T	12		17				
	-4B	14		20				
	-4D	18		25				
	-4E	22		32				
	-4P	28		36				
	-4U	32		40				
	-4F	28		40				
	-4V	35		45				
	-4G	36		45				
	-4H	40		50				
	-4W	42		52				
	-4X	49		59				
	-4J	54		65				
	-4K	62		73				
	-4R	70		80				
V.	Tripping Class							
	A - setting ranges with instantaneous tripping and overload tripping Class 10							
	B - setting ranges with instantaneous tripping and overload tripping Class 20 (only up to 65 A).							
VI.	Type of Terminals							
	1 - Screw Terminal							
VII.	Auxiliary Switches							
	(Combinations with certified accessories Type 3RV29...)							
	0 - without							
	1 - 1NO + 1NC, side mounted							
	2 - 2NO, side mounted							
	3 - 2NC, side mounted							
	4 - 1NO/NC Changeover, top mounted							
	5 - 1NO + 1NC, top mounted							
	6 - 2NO, top mounted							
VIII.	Others							
	.. - Manufacturer's identification							

Accessories:

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
3RA2932-1CA00	Mounting rail adapter
3RV2935-5A	3-phase Line-Side Terminal
3RV2935-5E	3-phase Line-Side Terminal for Self-protected Motor Starter
3RV1935-1A	3-phase busbar for 2 devices 55mm distance
3RV1935-1B	3-phase busbar for 3 devices 55mm distance
3RV1935-1C	3-phase busbar for 4 devices 55mm distance
3RV1935-3A	3-phase busbar for 2 devices 75 mm distance
3RV1935-3B	3-phase busbar for 3 devices 75 mm distance
3RV1935-3C	3-phase busbar for 4 devices 75 mm distance

3RW3	0	36	-	1	B	B	1	4
I	II	III		IV	V	VI	VII	VIII

I - Basic type

3RW3 – AC semiconductor motor starter

II – Kind of device

0 - Soft starter

III – Rated operational power P_e at 400V

Rated operational current $I_{eAC-53a}$ at 400V

	Pe:	Ie:
36 -	22 kW	45 A
37 -	30 kW	63A
38 -	37 kW	72 A

IV - Type of Terminals

1 - screw terminals
2 - spring terminals

V - Special function

B - with bypass

VI - Phases controlled

B - two-phase controlled

VII - Rated control supply voltage, U_s

0 - 24 V ac/dc
1 - 110 - 230 V ac/dc

VIII - Rated operational voltage, U_e

4 - 200 up to 480 V ac

Overview series 3RW40..

3RW4 **0** **36** **-** **1** **B** **B** **1** **4**
 I II III IV V VI VII VIII

I - Basic type

3RW4 – AC semiconductor motor starter

II - Kind of device

0 - Soft starter

III - Rated operational power P_e at 400V Rated operational current $I_{eAC-53a}$ at 400V

	P_e :	I_e :
36 -	22 kW	45 A
37 -	30 kW	63 A
38 -	37 kW	72 A

IV - Type of Terminals

-1 - screw terminals
 -2 - spring terminals

V - Special function

B - with bypass
 T - with bypass and thermistor

VI - Phases controlled

B - two-phase controlled

VII - Rated control supply voltage, U_s

0 - 24 V ac/dc
 1 - 110 - 230 V ac/dc

VIII - Rated operational voltage, U_e

4 - 200 up to 480 V ac
 5 - 400 up to 600 V ac

Overview series 3RW44..

3RW4 **4** **22** **-** **6** **B** **C** **4** **4**
 I II III IV V VI VII VIII

- I** Basic unit designation:
AC semiconductor motor controller

- II** Kind of device:

4 - Softstarter high end

- III** Rated operational power P_e :
Rated operational current I_e : for utilization category AC-53a

	P_e :	I_e :
22	- 15 kW	29 A
23	- 18,5 kW	36 A
24	- 22 kW	47 A
25	- 30 kW	57 A
26	- 37 kW	77 A

- IV** Type of terminals:

 1 - screw connections standard
 2 - main conductor: bus bar connections / auxiliary conductors: spring type
 3 - main conductor: screw connections / auxiliary conductors: spring type terminal
 6 - main conductor: bus bar connections / auxiliary conductors: screw terminal

- V** Special function:

B - with bypass

- VI** Number of the controlled phases:

C - three phase controlled

- VII** Rated control supply voltage, U_s :

 3 - AC 115 V
 4 - AC 230 V

- VIII** Rated operational voltage, U_e :

 4 - 200 - 460 V
 5 - 400 - 600 V
 6 - 400 - 690 V

Table: load feeders

Test: 9.3.4 Performance under short-circuit conditions

The tables below show all possible combinations.

Every type of terminals of the soft starter is possible.

Every control supply voltage of the soft starter is possible.

According to manufacturers operating manual a link module in combination with a mounting rail adapter or cables can be used for the connection of circuit breaker and soft starter 3RW30.. or 3RW40...

For the connection of circuit breaker and soft starter 3RW44.. only cables can be used.

3RW30..., Class 10:

$U_e = 400\text{ V}$, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
45	3RV20 31-4VA10	3RW30 36-1BB14	35 - 45	20
45	3RV20 31-4WA10	3RW30 36-1BB14	42 - 52	10
63	3RV20 31-4JA10	3RW30 37-1BB14	54 - 65	10
72	3RV20 31-4KA10	3RW30 38-1BB14	62 - 73	10

3RW40..., Class 10:

$U_e = 400\text{ V}$, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
45	3RV20 31-4VA10	3RW40 36-1BB14	35 - 45	20
45	3RV20 31-4WA10	3RW40 36-1BB14	42 - 52	10
63	3RV20 31-4JA10	3RW40 37-1BB14	54 - 65	10
72	3RV20 31-4KA10	3RW40 38-1BB14	62 - 73	10

3RW44..., Class 10:

$U_e = 400\text{ V}$, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
29	3RV20 31-4EA10	3RW44 22-1BC44	22 - 32	32
36	3RV20 31-4VA10	3RW44 23-1BC44	35 - 45	32
47	3RV20 31-4WA10	3RW44 24-1BC44	42 - 52	32
57	3RV20 31-4JA10	3RW44 25-1BC44	54 - 65	32
77	3RV20 31-4RA10	3RW44 26-1BC44	70 - 80	32

3RW40..., Class 10:

$U_e = 500\text{ V}$, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
45	3RV20 31-4WA10	3RW40 36-1BB15	42 - 52	10
63	3RV20 31-4JA10	3RW40 37-1BB15	54 - 65	5
72	3RV20 31-4KA10	3RW40 38-1BB15	62 - 73	5

Technical data

Certificate No.: 3296a

3RW44, Class 10:

U_e = 500 V, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
29	3RV20 31-4EA10	3RW44 22-1BC45	22 - 32	32
36	3RV20 31-4VA10	3RW44 23-1BC45	35 - 45	32
47	3RV20 31-4WA10	3RW44 24-1BC45	42 - 52	32
57	3RV20 31-4JA10	3RW44 25-1BC45	54 - 65	32
77	3RV20 31-4RA10	3RW44 26-1BC45	70 - 80	32

3RW44, Class 10:

U_e = 690 V, Coordination type 1

I _e AC53a [A]	Circuit breaker	Soft starter	Current range [A]	I _q [kA]
29	3RV20 31-4EA10	3RW44 22-1BC46	22 - 32	15
36	3RV20 31-4VA10	3RW44 23-1BC46	35 - 45	15
47	3RV20 31-4WA10	3RW44 24-1BC46	42 - 52	15
57	3RV20 31-4JA10	3RW44 25-1BC46	54 - 65	10
77	3RV20 31-4RA10	3RW44 26-1BC46	70 - 80	10

Confirmation

Bestätigung

Product identification:
Produktbezeichnung

Fused load feeders consisting of, *Sicherungsbehaltete Verbraucherabzweige bestehend aus*
3RT201, 3RT202, 3RT203, 3RT204, 3RT105, 3RT1.6, 3RT1.7, 3TF6
3RU211, 3RU212, 3RU213, 3RU214
3RB3.1, 3RB3.2, 3RB3.3, 3RB3.4, 3RB2.5, 3RB2.6
3UF70/3UF71
3RB22/23/24, 3RB29.6
3RR2.41, 3RR2.42, 3RR2.43
3RW301, 3RW302, 3RW303, 3RW304
3RF34

Manufacturer:
Hersteller

Siemens AG, DF CP

Address:
Anschrift

DE-92220 Amberg

Fused load feeders coordination type 1 / 2
according IEC 60947-4-1/-4-2 up to AC 690 V
*Sicherungsbehaltete Verbraucherabzweige, Zuordnungsart 1 / 2
nach IEC 60947-4-1/-4-2 bis AC 690 V*

We confirm that the fused load feeders, mentioned above corresponding to attached annex and in compliance with the installation guidelines fulfill the conditions for the coordination type 1 / 2 mentioned in the enclosures according to IEC 60947-4-1, Edition 3.1 (07-2012) and IEC 60947-4-2, Edition 3.0 (05-2011).

Hiermit bestätigen wir, dass oben genannte sicherungsbehaltete Verbraucherabzweige, wie in den beigefügten Tabellen aufgelistet und unter Einhaltung der entsprechenden Aufbaurichtlinien die Anforderung der Zuordnungsart 1 / 2 nach IEC 60947-4-1, Edition 3.1 (07-2012) und IEC 60947-4-2, Edition 3.0 (05-2011) erfüllen.

Siemens Aktiengesellschaft
DF CP R&D
92220 Amberg

2017-06-07 Amberg
date of issue place

This confirmation does not imply any guarantee of quality or durability. The safety instructions of the accompanying product documentation shall be observed.
Diese Bestätigung enthält keine Beschaffenheits- oder Haltbarkeitsgarantie. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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1 Selection tables for fused load feeders up to 690 V

1.1	Short-circuit protection: 3RT, 3TF6 contactor, type of coordination 1 and 2	2
1.2	Short-circuit protection 3RU2 thermal overload relay, type of coordination 1 and 2.....	3
1.3	Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, type of coordination 1 and 2	5
1.4	Short-circuit protection: 3RT, 3TF6 contactor + 3RB solid-state overload relay.....	14
1.5	Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay and 3UF7	22
1.6	Short-circuit protection: 3RT2 contactor + 3RR2 monitoring relay, type of coordination 1 and 2.....	33
1.7	Short-circuit protection: 3RW30 Soft starter + 3RT2 contactor + 3RU2 thermal overload relay.....	34
1.8	Short-circuit protection: 3RF34 Solid-state contactor, type of coordination 1 and 2.....	35
1.9	Short-circuit protection: Motor feeders with 3RW3 + 3RT2 + 3RB30/3RB31	36
1.10	BS88 Fuse Links	38

1.1 Short-circuit protection: 3RT, 3TF6 contactor, type of coordination 1 and 2

Short-circuit protection up to 690 V / 100 kA (contactors $\geq$ S6: 50kA)
Type of coordination 1 and 2

Table 1- 1 Fuse links for protection according to IEC 60947-4-1

Contactor	Fuse links ¹⁾					
	gG [A]		aM [A]		British Standards BS88 ³⁾ (415 V / 80 kA) [A]	
Article No.	Type of coordination ²⁾					
	1	2	1	2	1	2
Size S00						
3RT2015	35	20	20	16	35	20
3RT2016	35	20	20	16	35	20
3RT2017	50	20	20	16	35	20
3RT2018	50	25	25	20	50	25
Size S0						
3RT2023	63	25	32	20	63	25
3RT2024	63	25	32	20	63	25
3RT2025	63	25	32	20	63	25
3RT2026	100	35	50	20	100	35
3RT2027	125	50	50	25	125	50
3RT2028	125	50	50	25	125	50
Size S2						
3RT2035	160	80	80	50	125	63
3RT2036	160	80	80	50	125	63
3RT2037	250	125	160	63	200	100
3RT2038	250	160	160	80	200	125
Size S3						
3RT2045	250	160	160	80	200	125
3RT2046	250	160	160	100	200	125
3RT2047	250	200	160	100	200	160
Size S6 (only up to 50kA)						
3RT1054	355	315	–	160	–	250
3RT1055	355	315	–	200	–	315
3RT1056	355	315	–	200	–	315
Size S10 (only up to 50kA)						
3RT1064	500	400	–	250	–	400
3RT1264	500	500	–	400	–	450
3RT1065	500	400	–	315	–	400

Contactor	Fuse links ¹⁾					
	gG [A]		aM [A]		British Standards BS88 ³⁾ (415 V / 80 kA) [A]	
Article No.	Type of coordination ²⁾					
	1	2	1	2	1	2
3RT1265	500	500	–	400	–	450
3RT1066	500	400	–	315	–	400
3RT1266	500	500	–	400	–	450
Size S12 (only up to 50kA)						
3RT1075	630	500	–	400	–	450
3RT1275	800	800	–	630	–	800
3RT1076	630	500	–	500	–	500
3RT1276	800	800	–	630	–	800
Size 14 (only up to 50kA)						
3TF68	1.000	500	–	630	–	500
3TF69	1.250	630	–	630	–	630

1) Please take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-1

3) For BS88 fuses, fuse links are to be used according to table 2 (see page 38)

1.2 Short-circuit protection 3RU2 thermal overload relay, type of coordination 1 and 2

Short-circuit protection up to 690 V / 100 kA
Type of coordination 1 and 2

Table 1- 2 Fuse links for protection according to IEC 60947-4-1

Thermal overload relay		Fuse links ¹⁾					
		gG [A]		aM [A]		British Standards BS88 ³⁾ (415 V / 80 kA) [A]	
Article No.	Setting range [A]	Type of coordination ²⁾					
		1	2	1	2	1	2
Size S00							
3RU2116-0A..	0.11 ... 0.16	35	0.5	35	–	25	–
3RU2116-0B..	0.14 ... 0.20	35	1	35	–	25	–
3RU2116-0C..	0.18 ... 0.25	35	1	35	–	25	–
3RU2116-0D..	0.22 ... 0.32	35	1.6	35	–	25	2
3RU2116-0E..	0.28 ... 0.40	35	2	35	–	25	2
3RU2116-0F..	0.35 ... 0.50	35	2	35	–	25	2

Thermal overload relay		Fuse links ¹⁾					
		gG [A]		aM [A]		British Standards BS88 ³⁾ (415 V / 80 kA) [A]	
Article No.	Setting range [A]	Type of coordination ²⁾					
		1	2	1	2	1	2
3RU2116-0G..	0.45 ... 0.63	35	2	35	–	25	4
3RU2116-0H..	0.55 ... 0.80	35	4	35	–	25	4
3RU2116-0J..	0.70 ... 1.0	35	4	35	–	25	6
3RU2116-0K..	0.90 ... 1.25	35	4	35	–	25	6
3RU2116-1A..	1.10 ... 1.60	40	6	35	–	40	10
3RU2116-1B..	1.4 ... 2.0	40	6	35	–	40	10
3RU2116-1C..	1.8 ... 2.5	40	10	35	–	40	10
3RU2116-1D..	2.2 ... 3.2	40	10	35	–	40	16
3RU2116-1E..	2.8 ... 4.0	40	16	35	6	40	16
3RU2116-1F..	3.5 ... 5.0	40	20	35	6	40	20
3RU2116-1G..	4.5 ... 6.3	40	20	35	10	40	25
3RU2116-1H..	5.5 ... 8.0	40	25	35	10	40	32
3RU2116-1J..	7.0 ... 10	40	35	35	16	40	35
3RU2116-1K..	9.0 ... 12.5	40	35	35	20	40	35
3RU2116-4A..	11 ... 16	50	40	40	20	50	40
Size S0							
3RU2126-1C..	1.8 ... 2.5	125	10	35	–	125	10
3RU2126-1D..	2.2 ... 3.2	125	10	35	–	125	16
3RU2126-1E..	2.8 ... 4.0	125	16	35	6	125	16
3RU2126-1F..	3.5 ... 5.0	125	20	35	6	125	20
3RU2126-1G..	4.5 ... 6.3	125	20	35	10	125	25
3RU2126-1H..	5.5 ... 8.0	125	25	35	10	125	32
3RU2126-1J..	7.0 ... 10	125	35	35	16	125	35
3RU2126-1K..	9.0 ... 12.5	125	35	35	20	125	35
3RU2126-4A..	11 ... 16	125	40	35	20	125	40
3RU2126-4B..	14 ... 20	125	50	35	25	125	50
3RU2126-4C..	17 ... 22	125	63	63	35	125	63
3RU2126-4D..	20 ... 25	125	63	63	35	125	63
3RU2126-4N..	23 ... 28	125	80	63	40	125	63
3RU2126-4E..	27 ... 32	125	80	63	40	125	63
3RU2126-4P..	30 ... 36	125	80	63	50	125	63
3RU2126-4F..	34 ... 40	125	80	63	50	125	80
Size S2							
3RU2136-4A..	11 ... 16	80	40	50	20	80	40
3RU2136-4B..	14 ... 20	125	50	100	25	125	50
3RU2136-4D..	18 ... 25	125	63	100	35	125	63
3RU2136-4E..	22 ... 32	125	80	100	50	125	80
3RU2136-4F..	28 ... 40	125	80	100	50	125	80

Thermal overload relay		Fuse links ¹⁾					
		gG [A]		aM [A]		British Standards BS88 ³⁾ (415 V / 80 kA) [A]	
Article No.	Setting range [A]	Type of coordination ²⁾					
		1	2	1	2	1	2
3RU2136-4G..	36 ... 45	125	100	100	63	125	100
3RU2136-4H..	40 ... 50	125	100	100	80	125	100
3RU2136-4Q..	47 ... 57	200	100	160	80	200	100
3RU2136-4J..	54 ... 65	250	125	224	100	250	125
3RU2136-4K..	62 ... 73	250	160	224	125	250	160
3RU2136-4R..	70 ... 80	250	160	224	125	250	160
Size S3							
3RU2146-4F..	28 ... 40	160	80	125	50	160	80
3RU2146-4H..	36 ... 50	160	125	125	100	160	125
3RU2146-4J..	45 ... 63	200	125	160	100	200	125
3RU2146-4K..	57 ... 75	250	160	224	125	250	160
3RU2146-4L..	70 ... 90	250	160	224	125	250	160
3RU2146-4M..	80 ... 100	250	200	224	160	250	200

1) Please take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-1

3) For BS88 fuses, fuse links are to be used according to table 2 (see page 38)

1.3 Short-circuit protection: 3RT2 contactor + 3RU2 thermal overload relay, type of coordination 1 and 2

Short-circuit protection up to 690 V / 100 kA

Type of coordination 1 and 2

Table 1- 3 Fuse links for protection according to IEC 60947-4-1 operating class gG, (NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	I _u	I _o	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2116-0A..	0,11	0,16	stand alone	0,16	0,16	0,16	35	0,5	35	-	25	-
3RU2116-0A..	0,11	0,16	3RT2015..	0,16	0,16	0,16	35	0,5	20	-	25	-

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	I _u	I _o	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2116-0B..	0,14	0,20	stand alone	0,2	0,2	0,2	35	1	35	-	25	-
3RU2116-0B..	0,14	0,20	3RT2015..	0,2	0,2	0,2	35	1	20	-	25	-
3RU2116-0C..	0,18	0,25	stand alone	0,25	0,25	0,25	35	1	35	-	25	-
3RU2116-0C..	0,18	0,25	3RT2015..	0,25	0,25	0,25	35	1	20	-	25	-
3RU2116-0D..	0,22	0,32	stand alone	0,32	0,32	0,32	35	1,6	35	-	25	2
3RU2116-0D..	0,22	0,32	3RT2015..	0,32	0,32	0,32	35	1,6	20	-	25	2
3RU2116-0E..	0,28	0,40	stand alone	0,4	0,4	0,4	35	2	35	-	25	2
3RU2116-0E..	0,28	0,40	3RT2015..	0,4	0,4	0,4	35	2	20	-	25	2
3RU2116-0F..	0,35	0,50	stand alone	0,5	0,5	0,5	35	2	35	-	25	2
3RU2116-0F..	0,35	0,50	3RT2015..	0,5	0,5	0,5	35	2	20	-	25	2
3RU2116-0G..	0,45	0,63	stand alone	0,63	0,63	0,63	35	2	35	-	25	4
3RU2116-0G..	0,45	0,63	3RT2015..	0,63	0,63	0,63	35	2	20	-	25	4
3RU2116-0H..	0,55	0,80	stand alone	0,8	0,8	0,8	35	4	35	-	25	4
3RU2116-0H..	0,55	0,80	3RT2015..	0,8	0,8	0,8	35	4	20	-	25	4
3RU2116-0J..	0,70	1,00	stand alone	1	1	1	35	4	35	-	25	6
3RU2116-0J..	0,70	1,00	3RT2015..	1	1	1	35	4	20	-	25	6
3RU2116-0K..	0,90	1,25	stand alone	1,25	1,25	1,25	35	4	35	-	25	6
3RU2116-0K..	0,90	1,25	3RT2015..	1,25	1,25	1,25	35	4	20	-	25	6
3RU2116-1A..	1,10	1,60	stand alone	1,6	1,6	1,6	40	6	35	-	40	10
3RU2116-1A..	1,10	1,60	3RT2015..	1,6	1,6	1,6	35	6	20	-	35	10
3RU2116-1B..	1,40	2,00	stand alone	2	2	2	40	6	35	-	40	10
3RU2116-1B..	1,40	2,00	3RT2015..	2	2	2	35	6	20	-	35	10
3RU2116-1C..	1,80	2,50	stand alone	2,5	2,5	2,5	40	10	35	-	40	10
3RU2116-1C..	1,80	2,50	3RT2015..	2,5	2,5	2,5	35	10	20	-	35	10
3RU2116-1D..	2,2	3,2	stand alone	3,2	3,2	3,2	40	10	35	-	40	16
3RU2116-1D..	2,2	3,2	3RT2015..	3,2	3,2	3,2	35	10	20	-	35	16
3RU2116-1E..	2,8	4	stand alone	4	4	4	40	16	35	6	40	16
3RU2116-1E..	2,8	4	3RT2015..	4	4	4	35	16	20	6	35	16
3RU2116-1F..	3,5	5	stand alone	5	5	5	40	20	35	6	40	20
3RU2116-1F..	3,5	5	3RT2015..	5	5	-	35	20	20	6	35	20
3RU2116-1F..	3,5	5	3RT2016..	5	5	5	35	20	20	6	35	20
3RU2116-1G..	4,5	6,3	stand alone	6,3	6,3	6,3	40	20	35	10	40	25

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2116-1G..	4,5	6,3	3RT2015..	6,3	-	-	35	20	20	10	35	20
3RU2116-1G..	4,5	6,3	3RT2016..	6,3	6,3	6,3	35	20	20	10	35	20
3RU2116-1H..	5,5	8	stand alone	8	8	8	40	25	35	10	40	32
3RU2116-1H..	5,5	8	3RT2015..	-	-	-	-	-	-	-	-	-
3RU2116-1H..	5,5	8	3RT2016..	8	-	-	35	20	20	10	35	20
3RU2116-1H..	5,5	8	3RT2017..	8	8	-	40	20	20	10	35	20
3RU2116-1H..	5,5	8	3RT2018..	8	8	8	40	25	25	10	40	25
3RU2116-1J..	7	10	stand alone	10	10	10	40	35	35	16	40	35
3RU2116-1J..	7	10	3RT2016..	-	-	-	-	-	-	-	-	-
3RU2116-1J..	7	10	3RT2017..	10	-	-	40	20	20	16	35	20
3RU2116-1J..	7	10	3RT2018..	10	10	-	40	25	25	16	40	25
3RU2116-1J.. ⁴⁾	7	10	3RT2024..	10	10	-	40	25	32	16	40	25
3RU2116-1J.. ⁴⁾	7	10	3RT2025..	10	10	10	40	25	32	16	40	25
3RU2116-1K..	9	12,5	stand alone	12,5	12,5	12,5	40	35	35	20	40	35
3RU2116-1K..	9	12,5	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2116-1K..	9	12,5	3RT2018..	12,5	-	-	40	25	25	20	40	25
3RU2116-1K.. ⁴⁾	9	12,5	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2116-1K.. ⁴⁾	9	12,5	3RT2025..	12,5	12,5	12,5	40	25	32	20	40	25
3RU2116-1K.. ⁴⁾	9	12,5	3RT2026..	12,5	12,5	12,5	40	35	35	20	40	35
3RU2116-4A..	11	16	stand alone	16	16	16	50	40	40	20	50	40
3RU2116-4A..	11	16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2116-4A..	11	16	3RT2018..	16	-	-	50	25	25	20	50	25
3RU2116-4A.. ⁴⁾	11	16	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2116-4A.. ⁴⁾	11	16	3RT2025..	16	16	-	50	25	32	20	50	25
3RU2116-4A.. ⁴⁾	11	16	3RT2026..	16	16	-	50	35	40	20	50	35
3RU2116-4A.. ⁴⁾	11	16	3RT2027..	16	16	16	50	40	40	20	50	40
3RU2116-4A.. ⁴⁾	11	16	3RT2028..	16	16	16	50	40	40	20	50	40
3RU2126-1C..	1,8	2,5	stand alone	2,5	2,5	2,5	125	10	35	-	125	10
3RU2126-1C.. ⁴⁾	1,8	2,5	3RT2015..	2,5	2,5	2,5	35	10	20	-	35	10
3RU2126-1C..	1,8	2,5	3RT2024..	2,5	2,5	2,5	63	10	32	-	63	10
3RU2126-1D..	2,2	3,2	stand alone	3,2	3,2	3,2	125	10	35	-	125	16
3RU2126-1D.. ⁴⁾	2,2	3,2	3RT2015..	3,2	3,2	3,2	35	10	20	-	35	16

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2126-1D..	2,2	3,2	3RT2024..	3,2	3,2	3,2	63	10	32	-	63	16
3RU2126-1E..	2,8	4	stand alone	4	4	4	125	16	35	6	125	16
3RU2126-1E.. ⁴⁾	2,8	4	3RT2015..	4	4	4	35	16	20	6	35	16
3RU2126-1E..	2,8	4	3RT2024..	4	4	4	63	16	32	6	63	16
3RU2126-1F..	3,5	5	stand alone	5	5	5	125	20	35	6	125	20
3RU2126-1F.. ⁴⁾	3,5	5	3RT2015..	5	5	-	35	20	20	6	35	20
3RU2126-1F.. ⁴⁾	3,5	5	3RT2016..	5	5	5	35	20	20	6	35	20
3RU2126-1F..	3,5	5	3RT2024..	5	5	5	63	20	32	6	63	20
3RU2126-1G..	4,5	6,3	stand alone	6,3	6,3	6,3	125	20	35	10	125	25
3RU2126-1G.. ⁴⁾	4,5	6,3	3RT2015..	6,3	-	-	35	20	20	10	35	20
3RU2126-1G.. ⁴⁾	4,5	6,3	3RT2016..	6,3	6,3	6,3	35	20	20	10	35	20
3RU2126-1G..	4,5	6,3	3RT2024..	6,3	6,3	6,3	63	20	32	10	63	25
3RU2126-1H..	5,5	8	stand alone	8	8	8	125	25	35	10	125	32
3RU2126-1H.. ⁴⁾	5,5	8	3RT2015..	-	-	-	-	-	-	-	-	-
3RU2126-1H.. ⁴⁾	5,5	8	3RT2016..	8	-	-	35	20	20	10	35	20
3RU2126-1H.. ⁴⁾	5,5	8	3RT2017..	8	8	-	50	20	20	10	35	20
3RU2126-1H.. ⁴⁾	5,5	8	3RT2018..	8	8	8	50	25	25	10	50	25
3RU2126-1H..	5,5	8	3RT2024..	8	8	8	63	25	32	10	63	25
3RU2126-1J..	7	10	stand alone	10	10	10	125	35	35	16	125	35
3RU2126-1J.. ⁴⁾	7	10	3RT2016..	-	-	-	-	-	-	-	-	-
3RU2126-1J.. ⁴⁾	7	10	3RT2017..	10	-	-	50	20	20	16	35	20
3RU2126-1J.. ⁴⁾	7	10	3RT2018..	10	10	-	50	25	25	16	50	25
3RU2126-1J..	7	10	3RT2024..	10	10	-	63	25	32	16	63	25
3RU2126-1J..	7	10	3RT2025..	10	10	10	63	25	32	16	63	25
3RU2126-1K..	9	12,5	stand alone	12,5	12,5	12,5	125	35	35	20	125	35
3RU2126-1K.. ⁴⁾	9	12,5	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2126-1K.. ⁴⁾	9	12,5	3RT2018..	12,5	-	-	50	25	25	20	50	25
3RU2126-1K..	9	12,5	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2126-1K..	9	12,5	3RT2025..	12,5	12,5	12,5	63	25	32	20	63	25
3RU2126-4A..	11	16	stand alone	16	16	16	125	40	35	20	125	40
3RU2126-4A.. ⁴⁾	11	16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2126-4A.. ⁴⁾	11	16	3RT2018..	16	-	-	50	25	25	20	50	25

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2126-4A..	11	16	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2126-4A..	11	16	3RT2025..	16	16	-	63	25	32	20	63	25
3RU2126-4A..	11	16	3RT2026..	16	16	-	100	35	35	20	100	35
3RU2126-4A..	11	16	3RT2027..	16	16	16	125	40	35	20	125	40
3RU2126-4A..	11	16	3RT2028..	16	16	16	125	40	35	20	125	40
3RU2126-4B..	14	20	stand alone	20	20	20	125	50	35	25	125	50
3RU2126-4B..	14	20	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4B..	14	20	3RT2026..	20	-	-	100	35	35	20	100	35
3RU2126-4B..	14	20	3RT2027..	20	20	20	125	50	35	25	125	50
3RU2126-4B..	14	20	3RT2028..	20	20	20	125	50	35	25	125	50
3RU2126-4C..	17	22	stand alone	22	22	22	125	63	63	35	125	63
3RU2126-4C..	17	22	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4C..	17	22	3RT2026..	22	-	-	100	35	50	20	100	35
3RU2126-4C..	17	22	3RT2027..	22	22	-	125	50	50	25	125	50
3RU2126-4C..	17	22	3RT2028..	22	22	-	125	50	50	25	125	50
3RU2126-4C.. ⁴⁾	17	22	3RT2035..	22	22	22	125	63	63	35	125	63
3RU2126-4D..	20	25	stand alone	25	25	25	125	63	63	35	125	63
3RU2126-4D..	20	25	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2126-4D..	20	25	3RT2026..	25	-	-	100	35	50	20	100	35
3RU2126-4D..	20	25	3RT2027..	25	25	-	125	50	50	25	125	50
3RU2126-4D..	20	25	3RT2028..	25	25	-	125	50	50	25	125	50
3RU2126-4D.. ⁴⁾	20	25	3RT2035..	25	25	-	125	63	63	35	125	63
3RU2126-4D.. ⁴⁾	20	25	3RT2036..	25	25	-	125	63	63	35	125	63
3RU2126-4D.. ⁴⁾	20	25	3RT2037..	25	25	25	125	63	63	35	125	63
3RU2126-4N..	23	28	stand alone	28	28	28	125	80	63	40	125	63
3RU2126-4N..	23	28	3RT2026..	-	-	-	-	-	-	-	-	-
3RU2126-4N..	23	28	3RT2027..	28	28	-	125	50	50	25	125	50
3RU2126-4N..	23	28	3RT2028..	28	28	-	125	50	50	25	125	50
3RU2126-4N.. ⁴⁾	23	28	3RT2035..	28	28	-	125	80	63	40	125	63
3RU2126-4N.. ⁴⁾	23	28	3RT2036..	28	28	-	125	80	63	40	125	63
3RU2126-4N.. ⁴⁾	23	28	3RT2037..	28	28	28	125	80	63	40	125	63
3RU2126-4E..	27	32	stand alone	32	32	32	125	80	63	40	125	63

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2126-4E..	27	32	3RT2026..	-	-	-	-	-	-	-	-	-
3RU2126-4E..	27	32	3RT2027..	32	32	-	125	50	50	25	125	50
3RU2126-4E..	27	32	3RT2028..	32	32	-	125	50	50	25	125	50
3RU2126-4E.. ⁴⁾	27	32	3RT2035..	32	32	-	125	80	63	40	125	63
3RU2126-4E.. ⁴⁾	27	32	3RT2036..	32	32	-	125	80	63	40	125	63
3RU2126-4E.. ⁴⁾	27	32	3RT2037..	32	32	32	125	80	63	40	125	63
3RU2126-4P..	30	36	stand alone	36	36	36	125	80	63	50	125	63
3RU2126-4P..	30	36	3RT2027..	-	-	-	-	-	-	-	-	-
3RU2126-4P..	30	36	3RT2028..	36	-	-	125	50	50	25	125	50
3RU2126-4P.. ⁴⁾	30	36	3RT2035..	36	36	-	125	80	63	50	125	63
3RU2126-4P.. ⁴⁾	30	36	3RT2036..	36	36	-	125	80	63	50	125	63
3RU2126-4P.. ⁴⁾	30	36	3RT2037..	36	36	36	125	80	63	50	125	63
3RU2126-4F..	34	40	stand alone	40	40	40	125	80	63	50	125	80
3RU2126-4F..	34	40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2126-4F.. ⁴⁾	34	40	3RT2035..	40	40	-	125	80	63	50	125	63
3RU2126-4F.. ⁴⁾	34	40	3RT2036..	40	40	-	125	80	63	50	125	63
3RU2126-4F.. ⁴⁾	34	40	3RT2037..	40	40	40	125	80	63	50	125	80
3RU2136-4A..	11	16	stand alone	16	16	16	80	40	50	20	80	40
3RU2136-4A.. ⁴⁾	11	16	3RT2017..	-	-	-	-	-	-	-	-	-
3RU2136-4A.. ⁴⁾	11	16	3RT2018..	16	-	-	50	25	25	20	50	25
3RU2136-4A.. ⁴⁾	11	16	3RT2024..	-	-	-	-	-	-	-	-	-
3RU2136-4A.. ⁴⁾	11	16	3RT2025..	16	16	-	63	25	32	20	63	25
3RU2136-4A.. ⁴⁾	11	16	3RT2026..	16	16	-	80	35	50	20	80	35
3RU2136-4A.. ⁴⁾	11	16	3RT2027..	16	16	16	80	40	50	20	80	40
3RU2136-4A.. ⁴⁾	11	16	3RT2028..	16	16	16	80	40	50	20	80	40
3RU2136-4A..	11	16	3RT2035..	16	16	16	80	40	50	20	80	40
3RU2136-4B..	14	20	stand alone	20	20	20	125	50	100	25	125	50
3RU2136-4B.. ⁴⁾	14	20	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2136-4B.. ⁴⁾	14	20	3RT2026..	20	-	-	100	35	50	20	100	35
3RU2136-4B.. ⁴⁾	14	20	3RT2027..	20	20	20	125	50	50	25	125	50
3RU2136-4B..	14	20	3RT2028..	20	20	20	125	50	50	25	125	50
3RU2136-4D..	18	25	stand alone	25	25	25	125	63	100	35	125	63

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2136-4D.. ⁴⁾	18	25	3RT2025..	-	-	-	-	-	-	-	-	-
3RU2136-4D.. ⁴⁾	18	25	3RT2026..	25	-	-	100	35	50	20	100	35
3RU2136-4D.. ⁴⁾	18	25	3RT2027..	25	25	-	125	50	50	25	125	50
3RU2136-4D.. ⁴⁾	18	25	3RT2028..	25	25	-	125	50	50	25	125	50
3RU2136-4D..	18	25	3RT2035..	25	25	-	125	63	80	35	125	63
3RU2136-4D..	18	25	3RT2036..	25	25	-	125	63	80	35	125	63
3RU2136-4D..	18	25	3RT2037..	25	25	25	125	63	100	35	125	63
3RU2136-4E..	22	32	stand alone	32	32	32	125	80	100	50	125	80
3RU2136-4E.. ⁴⁾	22	32	3RT2026..	-	-	-	-	-	-	-	-	-
3RU2136-4E.. ⁴⁾	22	32	3RT2027..	32	32	-	125	50	50	25	125	50
3RU2136-4E.. ⁴⁾	22	32	3RT2028..	32	32	-	125	50	50	25	125	50
3RU2136-4E..	22	32	3RT2035..	32	32	-	125	80	80	50	125	63
3RU2136-4E..	22	32	3RT2036..	32	32	-	125	80	80	50	125	63
3RU2136-4E..	22	32	3RT2037..	32	32	32	125	80	100	50	125	80
3RU2136-4F..	28	40	stand alone	40	40	40	125	80	100	50	125	80
3RU2136-4F.. ⁴⁾	28	40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2136-4F..	28	40	3RT2035..	40	40	-	125	80	80	50	125	63
3RU2136-4F..	28	40	3RT2036..	40	40	-	125	80	80	50	125	63
3RU2136-4F..	28	40	3RT2037..	40	40	40	125	80	100	50	125	80
3RU2136-4G..	36	45	stand alone	45	45	45	125	100	100	63	125	100
3RU2136-4G..	36	45	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2136-4G..	36	45	3RT2036..	45	45	-	125	80	80	50	125	63
3RU2136-4G..	36	45	3RT2037..	45	45	45	125	100	100	63	125	100
3RU2136-4H..	40	50	stand alone	50	50	50	125	100	100	80	125	100
3RU2136-4H..	40	50	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2136-4H..	40	50	3RT2036..	50	50	-	125	80	80	50	125	63
3RU2136-4H..	40	50	3RT2037..	50	50	-	125	100	100	63	125	100
3RU2136-4H..	40	50	3RT2038..	50	50	50	125	100	100	80	125	100
3RU2136-4Q..	47	57	stand alone	57	57	57	200	100	160	80	200	100
3RU2136-4Q..	47	57	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2136-4Q..	47	57	3RT2037..	57	57	-	200	100	160	63	200	100
3RU2136-4Q..	47	57	3RT2038..	57	57	57	200	100	160	80	200	100

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2136-4J..	54	65	stand alone	65	65	65	250	125	224	100	250	125
3RU2136-4J..	54	65	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2136-4J..	54	65	3RT2037..	65	65	-	250	125	160	63	200	100
3RU2136-4J..	54	65	3RT2038..	65	65	-	250	125	160	80	200	125
3RU2136-4J.. ⁴⁾	54	65	3RT2045..	65	65	-	250	125	160	80	200	125
3RU2136-4J.. ⁴⁾	54	65	3RT2046..	65	65	65	250	125	160	100	200	125
3RU2136-4K..	62	73	stand alone	73	73	73	250	160	224	125	250	160
3RU2136-4K..	62	73	3RT2037..	-	-	-	-	-	-	-	-	-
3RU2136-4K..	62	73	3RT2038..	73	73	-	250	160	160	80	200	125
3RU2136-4K.. ⁴⁾	62	73	3RT2045..	73	73	-	250	160	160	80	200	125
3RU2136-4K.. ⁴⁾	62	73	3RT2046..	73	73	73	250	160	160	100	200	125
3RU2136-4R..	70	80	stand alone	80	80	80	250	160	224	125	250	160
3RU2136-4R..	70	80	3RT2037..	-	-	-	-	-	-	-	-	-
3RU2136-4R..	70	80	3RT2038..	80	80	-	250	160	160	80	200	125
3RU2136-4R.. ⁴⁾	70	80	3RT2045..	80	80	-	250	160	160	80	200	125
3RU2136-4R.. ⁴⁾	70	80	3RT2046..	80	80	-	250	160	160	100	200	125
3RU2136-4R.. ⁴⁾	70	80	3RT2047..	80	80	80	250	160	160	100	200	160
3RU2146-4F..	28	40	stand alone	40	40	40	160	80	125	50	160	80
3RU2146-4F.. ⁴⁾	28	40	3RT2028..	-	-	-	-	-	-	-	-	-
3RU2146-4F.. ⁴⁾	28	40	3RT2035..	40	40	-	160	80	80	50	125	63
3RU2146-4F.. ⁴⁾	28	40	3RT2036..	40	40	-	160	80	80	50	125	63
3RU2146-4F.. ⁴⁾	28	40	3RT2037..	40	40	40	160	80	125	50	160	80
3RU2146-4F..	28	40	3RT2045..	40	40	40	160	80	125	50	160	80
3RU2146-4H..	36	50	stand alone	50	50	50	160	125	125	100	160	125
3RU2146-4H.. ⁴⁾	36	50	3RT2035..	-	-	-	-	-	-	-	-	-
3RU2146-4H.. ⁴⁾	36	50	3RT2036..	50	50	-	160	80	80	50	125	63
3RU2146-4H.. ⁴⁾	36	50	3RT2037..	50	50	-	160	125	125	63	160	100
3RU2146-4H..	36	50	3RT2045..	50	50	50	160	125	125	80	160	125
3RU2146-4J..	45	63	stand alone	63	63	63	200	125	160	100	200	125
3RU2146-4J.. ⁴⁾	45	63	3RT2036..	-	-	-	-	-	-	-	-	-
3RU2146-4J.. ⁴⁾	45	63	3RT2037..	63	63	-	200	125	160	63	200	100
3RU2146-4J..	45	63	3RT2045..	63	63	-	200	125	160	80	200	125

Thermal overload relay			Contactor class10				Fuse-links ¹⁾					
	Setting range [A]			AC-3 derating values for contactor [A]			gG [A]		aM [A]		British Standards BS88 ²⁾ [A]	
Article No.	lu	lo	Article No.	400V	500V	690V	Type of coordination ³⁾					
							1	2	1	2	1	2
3RU2146-4J..	45	63	3RT2046..	63	63	63	200	125	160	100	200	125
3RU2146-4K..	57	75	stand alone	75	75	75	250	160	224	125	250	160
3RU2146-4K.. ⁴⁾	57	75	3RT2037..	-	-	-	-	-	-	-	-	-
3RU2146-4K..	57	75	3RT2045..	75	75	-	250	160	160	80	200	125
3RU2146-4K..	57	75	3RT2046..	75	75	75	250	160	160	100	200	125
3RU2146-4L..	70	90	stand alone	90	90	90	250	160	224	125	250	160
3RU2146-4L..	70	90	3RT2045..	-	-	-	-	-	-	-	-	-
3RU2146-4L..	70	90	3RT2046..	90	90	-	250	160	160	100	200	125
3RU2146-4L..	70	90	3RT2047..	90	90	90	250	160	160	100	200	160
3RU2146-4M..	80	100	stand alone	100	100	100	250	200	224	160	250	200
3RU2146-4M..	80	100	3RT2046..	-	-	-	-	-	-	-	-	-
3RU2146-4M..	80	100	3RT2047..	100	100	-	250	200	160	100	200	160
3RU2146-4M.. ⁴⁾	80	100	3RT1054..	100	100	100	250 ⁵⁾	200 ⁵⁾	-	160 ⁵⁾	-	200 ⁵⁾

1) Please take account of the rated voltage

2) For BS88 fuses, fuse links are to be used according to table 2 (see page 38)

3) Assignment and short-circuit protective devices acc. to IEC 60947-4-1

4) The overload relay only for stand alone mounting available

5) Data for max. 50kA 690V valid

1.4 Short-circuit protection: 3RT, 3TF6 contactor + 3RB solid-state overload relay

Short-circuit protection with fuses for motor feeders with 3RB, contactor mounting and stand-alone assembly

Table 1- 4 Derating values for overload relay and contactor size S00 up to S12 and size 14

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5E / 10E			20E			30E		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
Size S00											
3RB3.1.-.R..	0.1 ... 0.4	Stand-alone assembly	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		3RT2015	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
3RB3.1.-.N..	0.32 ... 1.25	Stand-alone assembly	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
		3RT2015	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
3RB3.1.-.P..	1 ... 4	Stand-alone assembly	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2015	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2016	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2017	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
3RB3.1.-.S..	3 ... 12	Stand-alone assembly	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
		3RT2015	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016	9.0	7.7	6.7	9.0	7.7	6.7	9.0	7.7	6.7
		3RT2017	12.0	9.2	6.7	10.0	9.2	6.7	9.0	9.0	6.7
3RB3.1.-.T..	4 ... 16	Stand-alone assembly	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		3RT2017	12.0	9.2	6.7	10.0	9.2	6.7	9.0	9.0	6.7
		3RT2018	16.0	12.4	8.9	11.5	11.5	8.9	9.5	9.5	8.9
Size S0											
3RB3.2.-.R.	0.1 ... 0.4	Stand-alone assembly	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		3RT2024	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
3RB3.2.-.N..	0.32 ... 1.25	Stand-alone assembly	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
		3RT2024	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
3RB3.2.-.P..	1 ... 4	Stand-alone assembly	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		3RT2024	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
3RB3.2.-.S..	3 ... 12	Stand-alone assembly	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

Overload relay	Overload relay Setting range	Contactor		CLASS								
				5E / 10E			20E			30E		
				AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V	
		3RT2024	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0	
		3RT2025	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
3RB3.2.-.Q..	6 ... 25	Stand-alone assembly	25.0	25.0	25.0	25.0	25.0	25.0	23.0	23.0	23.0	
		3RT2025	17.0	17.0	13.0	16.0	16.0	13.0	14.0	14.0	13.0	
		3RT2026	25.0	18.0	13.0	16.0	16.0	13.0	14.0	14.0	13.0	
		3RT2027	25.0	25.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0	
		3RT2028	25.0	25.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0	
3RB3.2.-.V..	10 ... 40	Stand-alone assembly	40.0	40.0	40.0	28.0	28.0	28.0	23.0	23.0	23.0	
		3RT2027	32.0	32.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0	
		3RT2028	38.0	32.0	21.0	20.0	20.0	17.0	17.0	17.0	15.0	
Size S2												
3RB3.3.-.U..	12.5 ... 50	Stand-alone as- sembly	Through hole techno- logy	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
			Screw termi- nals	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		3RT2035		40.0	40.0	24.0	40.0	40.0	24.0	36.0	36.0	24.0
		3RT2036		50.0	50.0	24.0	45.0	45.0	24.0	38.0	38.0	24.0
		3RT2037		50.0	50.0	47.0	48.0	48.0	47.0	42.0	42.0	42.0
		3RT2038		50.0	50.0	50.0	49.0	49.0	49.0	43.0	43.0	43.0
3RB3.3.-.W..	20 ... 80	Stand-alone as- sembly	Through hole techno- logy	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			Screw termi- nals	80.0	80.0	80.0	60.0	60.0	60.0	50.0	50.0	50.0
		3RT2035		40.0	40.0	24.0	40.0	40.0	24.0	36.0	36.0	24.0
		3RT2036		50.0	50.0	24.0	45.0	45.0	24.0	39.0	39.0	24.0
		3RT2037		65.0	65.0	47.0	46.0	46.0	46.0	40.0	40.0	40.0
		3RT2038		80.0	80.0	58.0	48.0	48.0	48.0	42.0	42.0	42.0

Overload relay	Overload relay Setting range	Contactor		CLASS									
				5E / 10E			20E			30E			
				AC-3 derating values [A]									
Article No.	[A]	Article No.		400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V	
Size S3													
3RB3.4.-.U..	12.5 ... 50	Stand-alone as-sembly	Through hole techno-logy	50	50	50	50	50	50	50	50	50	50
			Screw termi-nals	50	50	50	50	50	50	50	50	50	50
		3RT2045		50	50	50	50	50	50	50	50	50	50
		3RT2046		50	50	50	50	50	50	50	50	50	50
		3RT2047		50	50	50	50	50	50	50	50	50	50
3RB3.4.-.X..	32 ... 115	Stand-alone as-sembly	Through hole techno-logy	115	115	115	100	100	100	100	100	100	100
			Screw termi-nals	115	115	115	100	100	100	100	100	100	100
		3RT2045		80	80	58	63	63	58	54	54	54	54
		3RT2046		95	95	78	65	65	65	56	56	56	56
		3RT2047		110	110	95	67	67	67	58	58	58	58
Size S6													
3RB2.5.-.F..	50 ... 200	Stand-alone as-sembly	Through hole techno-logy	200	200	200	200	200	200	200	200	200	200
			Screw termi-nals	200	200	200	200	200	200	200	200	200	200
		3RT1054		115	115	115	81.7	81.7	81.7	69	69	69	69
		3RT1055		150	150	150	107	107	107	90	90	90	90
		3RT1056		185	185	170	131	131	131	111	111	111	111

Overload relay	Overload relay Setting range	Contactor		CLASS									
				5E / 10E			20E			30E			
				AC-3 derating values [A]									
Article No.	[A]	Article No.		400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V	
Size S10													
3RB2.6.-.G..	55 ... 250	Stand-alone as-sembly	Screw termi-nals	250	250	250	250	250	250	250	250	250	250
				3RT1064		225	225	225	160	160	160	135	135
		3RT1264		225	225	225	225	225	225	173	173	173	
		3RT1065		250	250	250	188	188	188	159	159	159	
		3RT1265		250	250	250	250	250	250	204	204	204	
		3RT1066		250	250	250	213	213	213	180	180	180	
		3RT1266		250	250	250	250	250	250	231	231	231	
Size S12													
3RB2.6.-.M..	160 ... 630	Stand-alone as-sembly	Screw termi-nals	630	630	630	630	630	630	630	630	630	630
				3RT1064		225	225	225	160	160	160	–	–
		3RT1264		225	225	225	225	225	225	173	173	173	
		3RT1065		265	265	265	188	188	188	–	–	–	
		3RT1265		265	265	265	265	265	265	204	204	204	
		3RT1066		300	300	280	213	213	213	180	180	180	
		3RT1266		300	300	300	300	300	300	231	231	231	
		3RT1075		400	400	400	284	284	284	240	240	240	
		3RT1275		400	400	400	400	400	400	316	316	316	
		3RT1076		500	500	450	355	355	355	300	300	300	
		3RT1276		500	500	500	500	500	500	385	385	385	
		3TF68 ¹⁾		630	630	630	440	440	440	376	376	376	
		3TF69 ¹⁾		630	630	630	572	572	572	500	500	500	
Size 14													
3RB3.1.-.N..	0.32 ... 1.25 ²⁾	3TF69 ¹⁾		820	820	820	572	572	572	500	500	500	

1) Contactor cannot be mounted.

2) With 3UF1868-3GA00 current transformer.

Size S6 - S12

For the 3RB20/21 solid-state overload relays with sizes S6, S10 und S12, the upper set value of setting range must be reduced for ambient temperatures > 50 °C by a certain factor.

Article No.	Setting range	Derating factor for the upper set value for stand-alone installation at ambient temperature	
		+50°C	+60°C
3RB2056/3RB2153	50-200A	100%	100%
3RB20 66-1G 3RB20 66-2G 3RB21 63-4G	55-250A	100%	100%
3RB20 66-1M 3RB20 66-2M 3RB21 63-4M	160-630A	100%	90%
Article No.	Setting range	Derating factor for the upper set value for mounting onto contactor at ambient temperature	
		+50°C	+60°C
3RB2056/3RB2153	50-200A	100%	70%
3RB20 66-1G 3RB20 66-2G 3RB21 63-4G	55-250A	100%	70%
3RB20 66-1M 3RB20 66-2M 3RB21 63-4M	160-630A	100%	70%

Fuse links for protection according to IEC 60947-4-1

Short-circuit protection up to 690 V / 100 kA

Type of coordination 1 and 2

Table 1- 5 Fuse links for overload relay and contactor size S00 up to S12 and size 14

Overload relay	Overload relay Setting range	Contactor	Fuse links ¹⁾					
			Acc. to IEC 60947-4-1 ³⁾					
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]		British Standards BS88 ³⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]	
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND			
			Type of coordination ²⁾					
Article No.	[A]	Article No.	1	2	1	2	1	2
Size S00								
3RB3.1-.R..	0.1 ... 0.4	Stand-alone assembly	35	4	20	4	35	4
		3RT2015	35	4	20	4	35	4
3RB3.1-.N..	0.32 ... 1.25	Stand-alone assembly	35	6	20	6	35	6
		3RT2015	35	6	20	6	35	6
3RB3.1-.P..	1 ... 4	Stand-alone assembly	35	20	20	16	35	20
		3RT2015	35	20	20	16	35	20
		3RT2016	35	20	20	16	35	20
		3RT2017	35	20	20	16	35	20
3RB3.1-.S..	3 ... 12	Stand-alone assembly	50	50	20	16	35	20
		3RT2015	35	20	20	16	35	20
		3RT2016	35	20	20	16	35	20
		3RT2017	50	25	20	16	35	20
3RB3.1-.T..	4 ... 16	Stand-alone assembly	50	50	25	20	50	25
		3RT2017	50	25	20	16	35	20
		3RT2018	50	25	25	20	50	25
Size S0								
3RB3.2-.R..	0.1 ... 0.4	Stand-alone assembly	35	4	32	4	63	4
		3RT2024	35	4	32	4	63	4
3RB3.2-.N..	0.32 ... 1.25	Stand-alone assembly	35	6	32	6	63	6
		3RT2024	35	6	32	6	63	6
3RB3.2-.P..	1 ... 4	Stand-alone assembly	35	20	32	20	63	25
		3RT2024	35	20	32	20	63	25
3RB3.2-.S..	3 ... 12	Stand-alone assembly	63	50	32	20	63	25
		3RT2024	63	25	32	20	63	25
		3RT2025	63	25	32	20	63	25
3RB3.2-.Q..	6 ... 25	Stand-alone assembly	125	63	50	25	63	50
		3RT2025	63	25	32	20	63	25
		3RT2026	100	35	50	20	63	35

Overload relay	Overload relay Setting range	Contactor		Fuse links ¹⁾					
				Acc. to IEC 60947-4-1 ³⁾					
				Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]		British Standards BS88 ³⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]	
				NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND			
				Type of coordination ²⁾					
Article No.	[A]	Article No.		1	2	1	2	1	2
		3RT2027		125	50	50	25	63	50
		3RT2028		125	50	50	25	63	50
3RB3.2- .V..	10 ... 40	Stand-alone assembly		125	80	50	25	125	50
		3RT2027		125	50	50	25	125	50
		3RT2028		125	50	50	25	125	50
Size S2									
3RB3.3.- U..	12.5 ... 50	Stand-alone assembly	Through hole technology	250	200	160	80	200	125
			Screw terminals	250	200	160	80	200	125
		3RT2035		160	80	80	50	125	63
		3RT2036		160	80	80	50	125	63
		3RT2037		250	125	160	63	200	100
		3RT2038		250	160	160	80	200	125
		3RB3.3.- W..	20 ... 80	Stand-alone assembly	Through hole technology	250	250	160	80
Screw terminals	250				250	160	80	200	125
3RT2035				160	80	80	50	125	63
3RT2036				160	80	80	50	125	63
3RT2037				250	125	160	63	200	100
3RT2038				250	160	160	80	200	125
Size S3									
3RB3.4.- U..	12.5 ... 50	Stand-alone assembly	Through hole technology	200	200	160	100	200	160
			Screw terminals	200	200	160	100	200	160
		3RT2045		200	160	160	80	200	125
		3RT2046		200	160	160	100	200	125
		3RT2047		200	200	160	100	200	160
3RB3.4.- X..	32 ... 115	Stand-alone assembly	Through hole technology	315	315	160	100	200	160

Overload relay	Overload relay Setting range	Contactor		Fuse links ¹⁾					
				Acc. to IEC 60947-4-1 ³⁾					
				Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]		British Standards BS88 ³⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]	
				NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND			
				Type of coordination ²⁾					
Article No.	[A]	Article No.		1	2	1	2	1	2
			Screw terminals	315	315	160	100	200	160
		3RT2045		250	160	160	80	200	125
		3RT2046		250	160	160	100	200	125
		3RT2047		250	200	160	100	200	160
Size S6									
3RB2.5-.. F..	50 ... 200	Stand-alone assembly	Through hole technology	355	315	–	200	–	315
			Screw terminals	355	315	–	200	–	315
		3RT1054		315	315	–	160	–	250
		3RT1055		315	315	–	200	–	315
		3RT1056		315	315	–	200	–	315
Size S10									
3RB2.6-.. G..	55 ... 250	Stand-alone assembly	Screw terminals	500	500	–	400	–	450
			3RT1064		400	400	–	250	–
		3RT1264		500	500	–	400	–	450
		3RT1065		400	400	–	315	–	400
		3RT1265		500	500	–	400	–	450
		3RT1066		400	400	–	315	–	400
		3RT1266		500	500	–	400	–	450
Size S12									
3RB2.6-.. M..	160 ... 630	Stand-alone assembly	Screw terminals	800	630	–	630	–	630
			3RT1064		400	400	–	250	–
		3RT1264		500	500	–	400	–	450
		3RT1065		400	400	–	315	–	400
		3RT1265		500	500	–	400	–	450
		3RT1066		400	400	–	315	–	400
		3RT1266		500	500	–	400	–	450
3RT1075		500	500	–	400	–	450		

Overload relay	Overload relay Setting range	Contactor	Fuse links ¹⁾					
			Acc. to IEC 60947-4-1 ³⁾					
			Operating class gG (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]		British Standards BS88 ³⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]	
			NH type 3NA DIAZED type 5SB NEOZED type 5SE		NH type 3ND			
			Type of coordination ²⁾					
Article No.	[A]	Article No.	1	2	1	2	1	2
		3RT1275	800	500	–	630	–	800
		3RT1076	500	500	–	500	–	500
		3RT1276	800	500	–	630	–	800
		3TF68 ⁴⁾	500	500 ⁶⁾	–	630	–	500
		3TF69 ⁴⁾	630 ⁶⁾	500	–	630	–	630
Size 14								
3RB3.1.- .N..	0.32 ... 1.25 ⁵⁾	3TF69 ⁴⁾	630 ⁶⁾	500	-	630	–	630

1) Take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-1

3) For BS88 fuses, fuse links are to be used according to table 2 (see page 38)

4) Contactor cannot be mounted.

5) With 3UF1868-3GA00 current transformer.

6) Please ensure that the maximum AC-3 operational current has sufficient safety clearance from the rated current of the fuses.

1.5 Short-circuit protection: 3RT, 3TF6 contactor + 3RB22, 3RB23, 3RB24 electronic overload relay and 3UF7

Short-circuit protection with fuses for motor feeders with 3UF70 and 3RB22/23/24 contactor mounting and stand-alone installation

Table 1- 6 Derating values CLASS 5 / 10, 15 and 20

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5 / 10			15 (3UF7 only)			20		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
Size S00											
3UF7100-1AA00-0/ 3UF7110-	0.3 ... 3.0	Stand-alone assembly	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5 / 10			15 (3UF7 only)			20		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
1AA00-0/ 3RB2906-2BG1		3RT2016	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2017	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2018	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly	25	25	25	25	25	25	25	25	25
		3RT2015	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016	9.0	7.7	6.7	9.0	7.7	6.7	9.0	7.7	6.7
		3RT2017	12.0	9.2	6.7	10.7	9.2	6.7	10.0	9.2	6.7
		3RT2018	16.0	12.4	8.9	13.0	12.4	8.9	11.5	11.5	8.9
Size S0											
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly	25	25	25	25	25	25	25	25	25
		3RT2023	9.0	7.6	6.7	9.0	7.6	6.7	9.0	7.6	6.7
		3RT2024	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
		3RT2025	17.0	17.0	13.0	17.0	17.0	13.0	16.0	16.0	13.0
		3RT2026	25.0	18.0	13.0	18.0	18.0	13.0	16.0	16.0	13.0
		3RT2027	25.0	25.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
		3RT2028	25.0	25.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100
		3RT2024	12.0	12.0	–	12.0	12.0	–	12.0	12.0	–
		3RT2025	17.0	17.0	13.0	17.0	17.0	13.0	16.0	16.0	13.0
		3RT2026	25.0	18.0	13.0	18.0	18.0	13.0	16.0	16.0	13.0
		3RT2027	32.0	32.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0
		3RT2028	38.0	32.0	21.0	23.0	20.0	20.0	20.0	20.0	17.0

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5 / 10			15 (3UF7 only)			20		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
Size S2											
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100
		3RT2035	40.0	40.0	24.0	40.0	40.0	24.0	40.0	40.0	24.0
		3RT2036	50.0	50.0	24.0	49.0	49.0	24.0	45.0	45.0	24.0
		3RT2037	65.0	65.0	47.0	50.0	50.0	47.0	46.0	46.0	46.0
		3RT2038	80.0	80.0	58.0	57.0	57.0	57.0	48.0	48.0	48.0
Size S3											
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100
		3RT2045	80	80	58	70	70	58	63	63	58
		3RT2046	95	95	78	74	74	78	65	65	65
		3RT2047	110	110	98	76	76	98	67	67	67
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200	200	200	200	200	200	200
		3RT1054	115	115	115	93.2	93.2	93.2	81.7	81.7	81.7
Size S6											
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200	200	200	200	200	200	200
		3RT1054	115	115	115	93.2	93.2	93.2	81.7	81.7	81.7
		3RT1055	150	150	150	122	122	122	107	107	107
		3RT1056	185	185	170	150	150	150	131	131	131
Size S10/S12											
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly	630	630	630	630	630	630	630	630	630
		3RT1064	225	225	225	182	182	182	160	160	160
		3RT1264	225	225	225	225	225	225	225	225	225
		3RT1065	265	265	265	215	215	215	188	188	188
		3RT1265	265	265	265	265	265	265	265	265	265
		3RT1066	300	300	280	243	243	243	213	213	213
		3RT1266	300	300	300	300	300	300	300	300	300
		3RT1075	400	400	400	324	324	324	284	284	284
		3RT1275	400	400	400	400	400	400	400	400	400
		3RT1076	500	500	450	405	405	405	355	355	355
		3RT1276	500	500	500	500	500	500	500	500	500
		3TF68 ¹⁾	630	630	630	502	502	502	440	440	440
		3TF69 ¹⁾	630	630	630	630	630	630	572	572	572

Overload relay	Overload relay Setting range	Contactor	CLASS								
			5 / 10			15 (3UF7 only)			20		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
Size 14											
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 ²)	3TF69 ¹⁾	820	820	820	662	662	662	572	572	572

⁴⁾ Contactor cannot be mounted.

⁵⁾ With 3UF1868-3GA00 current transformer.

Table 1- 7 Derating values CLASS 25, 30 and 35

Overload relay	Overload relay Setting range	Contactor	CLASS								
			25 (3UF7 only)			30			35 (3UF7 only)		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
Size S00											
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	Stand-alone assembly	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2016	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2017	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		3RT2018	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly	25	25	25	25	25	25	25	25	25
		3RT2015	7.0	6.0	4.9	7.0	6.0	4.9	7.0	6.0	4.9
		3RT2016	9.0	7.7	6.7	9.0	7.7	6.7	8.5	7.7	6.7
		3RT2017	9.5	9.2	6.7	9.0	9.0	6.7	8.5	8.5	6.7
		3RT2018	10.3	10.3	8.9	9.5	9.5	8.9	8.8	8.8	8.8
Size S0											
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly	25	25	25	25	25	25	25	25	25
		3RT2023	9.0	7.6	6.7	9.0	7.6	6.7	9.0	7.6	6.7
		3RT2024	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
		3RT2025	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2026	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2027	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
		3RT2028	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100
		3RT2024	12.0	12.0	9	12.0	12.0	9	12.0	12.0	9
		3RT2025	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2026	14.8	14.8	13.0	14.0	14.0	13.0	13.4	13.4	13.0
		3RT2027	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
		3RT2028	18.0	18.0	15.0	17.0	17.0	15.0	16.0	16.0	15.0
Size S2											
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100
		3RT2035	38.0	38.0	24.0	36.0	36.0	24.0	35.0	35.0	24.0
		3RT2036	41.0	41.0	24.0	39.0	39.0	24.0	38.0	38.0	24.0
		3RT2037	42.0	42.0	42.0	40.0	40.0	40.0	39.0	39.0	39.0
		3RT2038	43.0	43.0	43.0	42.0	42.0	42.0	40.0	40.0	40.0
Size S3											
3UF7102-1AA00-0/	10 ... 100	Stand-alone assembly	100	100	100	100	100	100	100	100	100

Overload relay	Overload relay Setting range	Contactor	CLASS								
			25 (3UF7 only)			30			35 (3UF7 only)		
			AC-3 derating values [A]								
Article No.	[A]	Article No.	400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V
3UF7112-1AA00-0/ 3RB2906-2JG1		3RT2045	57	57	57	54	54	54	52	52	52
		3RT2046	59	59	59	56	56	56	54	54	54
		3RT2047	61	61	61	58	58	58	55	55	55
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200	200	200	200	200	200	200
		3RT1054	74.8	74.8	74.8	69	69	69	64.0	64.0	64.0
Size S6											
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200	200	200	200	200	200	200
		3RT1054	74.8	74.8	74.8	69	69	69	64.0	64.0	64.0
		3RT1055	98	98	98	90	90	90	82	82	82
		3RT1056	120	120	120	111	111	111	102	102	102
Size S10/S12											
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly	630	630	630	630	630	630	630	630	630
		3RT1064	146	146	146	135	135	135	126	126	126
		3RT1264	194	194	194	173	173	173	152	152	152
		3RT1065	172	172	172	159	159	159	146	146	146
		3RT1265	228	228	228	204	204	204	180	180	180
		3RT1066	195	195	195	180	180	180	165	165	165
		3RT1266	258	258	258	231	231	231	204	204	204
		3RT1075	260	260	260	240	240	240	220	220	220
		3RT1275	344	344	344	316	316	316	270	270	270
		3RT1076	325	325	325	300	300	300	275	275	275
		3RT1276	430	430	430	385	385	385	340	340	340
		3TF68 ¹⁾	408	408	408	376	376	376	344	344	344
3TF69 ¹⁾	531	531	531	500	500	500	469	469	469		
Size 14											
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 ²⁾	3TF69 ¹⁾	531	531	531	500	500	500	469	469	469

¹⁾ Contactor cannot be mounted.
²⁾ With 3UF1868-3GA00 current transformer.

¹⁾ Contactor cannot be mounted.

²⁾ With 3UF1868-3GA00 current transformer.

Table 1- 8 Derating values CLASS 40

Overload relay	Overload relay Setting range	Contactor	CLASS		
			40 (3UF7 only)		
			AC-3 derating values [A]		
Article No.	[A]	Article No.	400 V	500 V	690 V
Size S00					
3UF7100-1AA00-0/ 3UF7110-1AA00-0	0.3 ... 3.0	Stand-alone assembly	3.0	3.0	3.0
		3RT2015	3.0	3.0	3.0
		3RT2016	3.0	3.0	3.0
		3RT2017	3.0	3.0	3.0
		3RT2018	3.0	3.0	3.0
3UF7101-1AA00-0/ 3UF7111-1AA00-0	2.4 ... 25	Stand-alone assembly	25	25	25
		3RT2015	7.0	6.0	4.9
		3RT2016	8.0	7.7	6.7
		3RT2017	8.0	8.0	6.7
		3RT2018	8.3	8.3	8.3
Size S0					
3UF7101-1AA00-0/ 3UF7111-1AA00-0	2.4 ... 25	Stand-alone assembly	25	25	25
		3RT2023	9.0	7.6	6.7
		3RT2024	12.0	12.0	9.0
		3RT2025	13.0	13.0	13.0
		3RT2026	13.0	13.0	13.0
		3RT2027	15.0	15.0	15.0
		3RT2028	15.0	15.0	15.0
3UF7102-1AA00-0/ 3UF7112-1AA00-0	10 ... 100	Stand-alone assembly	100	100	100
		3RT2024	12.0	12.0	9
		3RT2025	13.0	13.0	13.0
		3RT2026	13.0	13.0	13.0
		3RT2027	15.0	15.0	15.0
		3RT2028	15.0	15.0	15.0
Size S2					
3UF7102-1AA00-0/ 3UF7112-1AA00-0	10 ... 100	Stand-alone assembly	100	100	100
		3RT2035	33.0	33.0	24.0
		3RT2036	35.0	35.0	24.0
		3RT2037	37.0	37.0	37.0
		3RT2038	38.0	38.0	38.0
Size S3					
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	100	100	100
		3RT2045	50	50	50
		3RT2046	52	52	52
		3RT2047	53	53	53

Overload relay	Overload relay Setting range	Contactor	CLASS		
			40 (3UF7 only)		
			AC-3 derating values [A]		
Article No.	[A]	Article No.	400 V	500 V	690 V
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200
		3RT1054	57	57	57
Size S6					
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	200	200	200
		3RT1054	57	57	57
		3RT1055	74	74	74
		3RT1056	93	93	93
Size S10/S12					
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly	630	630	630
		3RT1064	111	111	111
		3RT1264	131	131	131
		3RT1065	133	133	133
		3RT1265	156	156	156
		3RT1066	150	150	150
		3RT1266	177	177	177
		3RT1075	200	200	200
		3RT1275	233	233	233
		3RT1076	250	250	250
		3RT1276	316	316	316
		3TF68 ¹⁾	317	317	317
		3TF69 ¹⁾	438	438	438
Size 14					
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 ²⁾	3TF69 ¹⁾	438	438	438

¹⁾ Contactor cannot be mounted.

²⁾ With 3UF1868-3GA00 current transformer.

Fuse links for protection according to IEC 60947-4-1
Short-circuit protection up to 690 V / 100 kA, type of coordination 1 and 2

Table 1- 9 Fuse links for overload relay and contactor size S00, S0 and S2

Overload relay	Overload relay Setting range	Contactor	Fuse links ¹⁾					
			Acc. to IEC 60947-4-1					
			Operating class gG ³⁾ (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) ≥ S6 690V/50kA) [A]	British Standards BS88 ⁴⁾ (415 V / 80 kA) ≥ S6 415V/50kA) [A]			
					Type of coordination ²⁾			
Article No.	[A]	Article No.	1	2	1	2	1	2
Size S00								
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0	Stand-alone assembly	35	35	20	16	35	20
		3RT2015	35	20	20	16	35	20
		3RT2016	35	20	20	16	35	20
		3RT2017	35	20	20	16	35	20
		3RT2018	35	20	20	16	35	20
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	3RT2015	35	20	20	16	35	20
		3RT2016	35	20	20	16	35	20
		3RT2017	50	25	20	16	35	20
		3RT2018	50	25	25	20	50	25
Size S0								
3UF7101-1AA00-0/ 3UF7111-1AA00-0/ 3RB2906-2DG1	2.4 ... 25	Stand-alone assembly	160	160	50	25	125	50
		3RT2023	63	25	32	20	63	25
		3RT2024	63	25	32	20	63	25
		3RT2025	63	25	32	20	63	25
		3RT2026	100	35	50	20	100	35
		3RT2027	125	50	50	25	125	50
		3RT2028	125	50	50	25	125	50
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	3RT2024	63	25	32	20	63	25
		3RT2025	63	25	32	20	63	25
		3RT2026	100	35	50	20	100	35
		3RT2027	125	50	50	25	125	50
		3RT2028	125	50	50	25	125	50

Overload relay	Overload relay Setting range	Contactor	Fuse links ¹⁾					
			Acc. to IEC 60947-4-1					
			Operating class gG ³⁾ (690 V / 100 kA) [A]	Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]	British Standards BS88 ⁴⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]			
					Type of coordination ²⁾			
Article No.	[A]	Article No.	1	2	1	2	1	2
Size S2								
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	3RT2035	160	80	80	50	125	63
		3RT2036	160	80	80	50	125	63
		3RT2037	250	125	160	63	200	100
		3RT2038	250	125	160	80	200	125
Size S3								
3UF7102-1AA00-0/ 3UF7112-1AA00-0/ 3RB2906-2JG1	10 ... 100	Stand-alone assembly	315	315	160	100	200	160
		3RT2045	250	160	160	80	200	125
		3RT2046	250	160	160	100	200	125
		3RT2047	250	200	160	100	200	160
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	3RT1054	355	315	-	160	-	250
Size S6								
3UF7103-1.A00-0/ 3UF7113-1.A00-0/ 3RB2956-2T.2	20 ... 200	Stand-alone assembly	400	400	–	200	–	315
		3RT1054	355	315	–	160	–	250
		3RT1055	355	315	–	200	–	315
		3RT1056	355	315	–	200	–	315
Size S10/S12								
3UF7104-1BA00-0/ 3UF7113-1AA00-0/ 3RB2966-2WH2	63 ... 630	Stand-alone assembly	800	800	–	630	–	630
		3RT1064	500	400	–	250	–	400
		3RT1264	500	500	–	400	–	450
		3RT1065	500	400	–	315	–	400
		3RT1265	500	500	–	400	–	450
		3RT1066	500	400	–	315	–	400
		3RT1266	500	500	–	400	–	450
		3RT1075	630	500	–	400	–	450
		3RT1275	800	800	–	630	–	800
		3RT1076	630	500	–	500	–	500
		3RT1276	800	800	–	630	–	800
		3TF68 ⁵⁾	800	500	–	630	–	500
		3TF69 ⁵⁾	800	630	–	630	–	630

Overload relay	Overload relay Setting range	Contactor	Fuse links ¹⁾					
			Acc. to IEC 60947-4-1					
			Operating class gG ³⁾ (690 V / 100 kA) [A]		Operating class aM (690 V / 100 kA) (≥ S6 690V/50kA) [A]		British Standards BS88 ⁴⁾ (415 V / 80 kA) (≥ S6 415V/50kA) [A]	
Type of coordination ²⁾								
Article No.	[A]	Article No.	1	2	1	2	1	2
Size 14								
3UF7100-1AA00-0/ 3UF7110-1AA00-0/ 3RB2906-2BG1	0.3 ... 3.0 ⁶⁾	3TF69 ⁵⁾	630	500	–	630	–	630

¹⁾ Take account of the rated voltage

²⁾ Assignment and short-circuit protective devices acc. to IEC 60947-4-1

³⁾ NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

⁴⁾ For BS88 fuses, fuse links are to be used according to table 2 (see page 38)

⁵⁾ Contactor cannot be mounted.

⁶⁾ With 3UF1868-3GA00 current transformer.

1.6 Short-circuit protection: 3RT2 contactor + 3RR2 monitoring relay, type of coordination 1 and 2

Short-circuit protection with fuses for motor feeders with 3RR2, contactor mounting and stand-alone assembly

Fuse links for protection according to IEC 60947-4-1
Short-circuit protection up to 690 V / 100 kA, operating class gG
Type of coordination 1 and 2

Table 1- 10 Fuse links for monitoring relay and contactor size S00, S0, and S2

Monitoring relay	Overload relay Setting range	Contactor	Fuse links ¹⁾ [A]	
			Acc. to IEC 60947-4-1 ³⁾	
			Type of coordination ²⁾	
Article No.	[A]	Article No.	1	2
Size S00				
3RR2.41	1.6 ... 16	Stand-alone assembly	50	50
		3RT2015	35	20
		3RT2016	35	20
		3RT2017	50	25
		3RT2018	50	25
Size S0				
3RR2.42	4 ... 40	Stand-alone assembly	125	80
		3RT2024	63	25
		3RT2025	63	25
		3RT2026	100	35
		3RT2027	125	50
		3RT2028	125	50
Size S2				
3RR2.43	8 ... 80	Stand-alone assembly	250	250
		3RT2035	160	80
		3RT2036	160	80
		3RT2037	250	125
		3RT2038	250	160

1) Take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-1

3) NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

1.7 Short-circuit protection: 3RW30 Soft starter + 3RT2 contactor + 3RU2 thermal overload relay

Short-circuit protection with fuses for motor feeders with 3RW30 soft starter, 3RT2 contactor and 3RU21 thermal overload relay up to 400 V / 65 kA, type of coordination 1

Table 1- 11 Fuse links for protection according to IEC 60947-4-2 operating class gG, (NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Overload relay		Contactor	Soft starter	Fuse links ¹⁾ [A]
Article No.		Article No.	Article No.	Type of coordination ²⁾
Setting range [A]				1
Size S00				
3RU2116-1C..	1.8 ... 2.5	3RT2015	3RW3013	20
3RU2116-1D..	2.2 ... 3.2	3RT2015	3RW3013	20
3RU2116-1E..	2.8 ... 4.0	3RT2015	3RW3013	20
3RU2116-1F..	3.5 ... 5.0	3RT2015	3RW3014	20
3RU2116-1G..	4.5 ... 6.3	3RT2015	3RW3014	20
3RU2116-1H..	5.5 ... 8.0	3RT2016	3RW3016	20
3RU2116-1J..	7.0 ... 10	3RT2016	3RW3016	20
3RU2116-1K..	9.0 ... 12.5	3RT2017	3RW3017	25
3RU2116-4A..	11 ... 16	3RT2018	3RW3018	35
Size S0				
3RU2126-4B..	14 ... 20	3RT2026	3RW3026	63
3RU2126-4C..	17 ... 22	3RT2026	3RW3026	63
3RU2126-4D..	20 ... 25	3RT2026	3RW3026	63
3RU2126-4N..	23 ... 28	3RT2027	3RW3027	80
3RU2126-4E..	27 ... 32	3RT2027	3RW3027	80
3RU2126-4P..	30 ... 36	3RT2028	3RW3028	80
3RU2126-4F..	34 ... 40	3RT2028	3RW3028	80
Size S2				
3RU2136-4F..	28 ... 40	3RT2035	3RW3036	100
3RU2136-4G..	36 ... 45	3RT2036	3RW3036	100
3RU2136-4H..	40 ... 50	3RT2036	3RW3036	100
3RU2136-4Q..	47 ... 57	3RT2037	3RW3037	125
3RU2136-4J..	54 ... 65	3RT2037	3RW3037	125
3RU2136-4K..	62 ... 73	3RT2038	3RW3038	125
3RU2136-4R..	70 ... 80	3RT2038	3RW3038	125
Size S3				
3RU2146-4F..	28 ... 40	3RT2045	3RW3046	160
3RU2146-4H..	36 ... 50	3RT2045	3RW3046	160
3RU2146-4J..	45 ... 63	3RT2045	3RW3046	160
3RU2146-4K..	57 ... 75	3RT2045	3RW3046	160

Overload relay		Contactor	Soft starter	Fuse links ¹⁾ [A]
				Type of coordination ²⁾
Article No.	Setting range [A]	Article No.	Article No.	1
3RU2146-4L..	70 ... 90	3RT2046	3RW3047	160
3RU2146-4M..	80 ... 100	3RT2047	3RW3047	160

1) Please take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-2

1.8 Short-circuit protection: 3RF34 Solid-state contactor, type of coordination 1 and 2

Short-circuit protection with fuses for 3RF34 solid-state contactor

Fuse links for protection according to IEC 60947-4-2

Short-circuit protection up to 600 V / 50 kA, type of coordination 1 and 2

Table 1- 12 Fuse links for solid-state-contactor

Solid-state contactor		Fuse links ¹⁾ [A]	
		Acc. to IEC 60947-4-2 ³⁾	
Article No.	I _e @ 40 °C [A]	500 V 3NW / 600 V 3NA 50 kA	
		Type of coordination ²⁾	
		1	2
3RF3405-1BB54	5.2	25	On request
3RF3410-1BB54	9.2	40	
3RF3412-1BB54	12.5	40	
3RF3416-1BB54	16	40	
Reversing contactors			
3RF3403-1BD54	3.8	25	On request
3RF3405-1BD54	5.4	40	
3RF3410-1BD54	7.4	40	

1) Please take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-2

3) NH type 3NA, DIAZED type 5SB, NEOZED type 5SE, operating class gG

1.9 Short-circuit protection: Motor feeders with 3RW3 + 3RT2 + 3RB30/3RB31

Short-circuit protection with fuses for motor feeders with 3RW30 soft starter and 3RB30 / 3RB31 electronic overload relay up to 480 V / 65 kA, type of coordination 1

Table 1- 13 Fuse links for protection according to IEC 60947-4-2 operating class gG, (NH DIAZED, NEOZED; type 3NA, 5SB, 5SE)

Overload relay		Contactor	Soft starter	Current carrying capacity [A]			Fuse links ¹⁾ [A]
				I _e at 400 V and			Type of coordi- nation ²⁾
Article No.	Setting range [A]	Article No.	Article No.	40 °C	50 °C	60 °C	1
Size S00							
3RB3016-1P..	1 ... 4	3RT2015	3RW3013	3.6	3.3	3.0	20
		3RT2016	3RW3013	3.6	3.3	3.0	20
3RB3016-1S..	3 ... 12	3RT2015	3RW3014	6.5	6.0	5.5	20
		3RT2016	3RW3014	6.5	6.0	5.5	20
		3RT2017	3RW3016	9.0	8.0	7.0	20
3RB3016-1T..	4 ... 16	3RT2017	3RW3017	12.5	12.0	11.0	25
		3RT2018	3RW3018	17.6	17.0	14.0	35
Size S0							
3RB3026-1Q..	6 ... 25	3RT2025	3RW3026	17.0	17.0	17.0	63
		3RT2026	3RW3026	25.3	23.0	21.0	63
		3RT2027	3RW3027	32.2	29.0	26.0	80
3RB3026-1V..	10 ... 40	3RT2025	3RW3026	17.0	17.0	17.0	63
		3RT2026	3RW3026	25.3	23.0	21.0	63
		3RT2027	3RW3027	32.2	29.0	26.0	80
		3RT2028	3RW3028	38.0	34.0	31.0	80

¹⁾ Please take account of the rated voltage

²⁾ Assignment and short-circuit protective devices acc. to IEC 60947-4-2

Overload relay		Contactor	Soft starter	Current carrying capacity [A]			Fuse links ¹⁾ [A]
				I _e at 400 V and			Type of coordination ²⁾
Article No.	Setting range [A]	Article No.	Article No.	40 °C	50 °C	60 °C	1
Size S2							
3RB3036-1U..	12.5 ... 50	3RT2035	3RW3036	45.0	42.0	39.0	100
		3RT2036	3RW3036	45.0	42.0	39.0	100
3RB3036-1W..	20 ... 80	3RT2035	3RW3036	45.0	42.0	39.0	100
		3RT2036	3RW3036	45.0	42.0	39.0	100
		3RT2037	3RW3037	65.0	58.0	53.0	125
		3RT2038	3RW3038	72.0	62.1	60.0	125
Size S3							
3RB3046-1U..	12.5 ... 50	3RT2045	3RW3046	50	50	50	160
3RB3046-1X..	32 ... 115	3RT2045	3RW3046	80	73	66	160
		3RT2046	3RW3047	106	98	90	160
		3RT2047	3RW3047	106	98	90	160

1) Please take account of the rated voltage

2) Assignment and short-circuit protective devices acc. to IEC 60947-4-2

1.10 BS88 Fuse Links

Table 2 BS 88 Fuse links

Rated current [A]	Fuse link	Rated current [A]	Fuse link
4	NIT4	100	TIS63M100
6	NIT6	125	TCP100M125
10	NIT10	160	TCP100M160
16	NIT16	200	TCP100M200
20	NIT20	250	TFP200M250
25	NIT20M25	315	TFP200M315
32	NIT20M32	400	TMF400
35	TIA32M35	450	TMF400M450
40	TIA32M40	500	TTM500
50	TIA32M50	630	TTM630
63	TIA32M63	800	TLM800
80	TIA63M80		

Confirmation

确认书

Product identification: DF CP Products, DF CP 产品
产品

3RA, 3RB, 3RE, 3RF, 3RG, 3RH, 3RK, 3RM, 3RN, 3RP, 3RQ,
3RR, 3RS, 3RT, 3RU, 3RV, 3RW, 3RX, 3SB, 3SE, 3SF, 3SK, 3SU1,
3SX, 3TB, 3TC, 3TD, 3TE, 3TF, 3TG, 3TH, 3TK, 3TS, 3TX, 3TY, 3UA,
3UC, 3UF, 3UG, 3US, 3UL, 3UW, 3UX, 3VS, 3VU, 3ZY, 4A, 4AM, 4E,
4FD, 6BK, 6GK, 7PU, 7PV, 8WD, LZS, LZX, 7MH, 4FK, 4FL

Manufacturer: Siemens AG, DF CP
厂商

Address: DE-92220 Amberg
地址

Chinese Quality Check Mark

质量检验合格证明

Hereby we confirm that all the Products from DF CP are compliant with the Chinese Quality Law. Main demand of this law is that the product quality shall be inspected and acceptable and that the product complies with the standard and requirements for safeguarding the health.

我们特此证明DF CP的所有产品符合《中国产品质量法》。该法主要要求是产品质量经过检验合格，产品符合标准和保障人身健康的要求。

Siemens Aktiengesellschaft
DF CP R&D
92220 Amberg

2016-09-26

date of issue

Amberg

place

Fritz Royer
Head of Project Management Mechatronics

Markus Meier
Head of Project Management Electronics

This confirmation does not imply any guarantee of quality or durability. The safety instructions of the accompanying product documentation shall be observed.
Diese Bestätigung enthält keine Beschaffenheits- oder Haltbarkeitsgarantie. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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Certificate of Compliance

Certificate: 1951421 (012730_C_000)

Master Contract: 165071

Project: 70037581

Date Issued: 2015-08-12

Issued to: Siemens AG
DF CP R&D V 3
Werner-von-Siemens-Strasse 48
Amberg, 92224
GERMANY
Attention: Michael Schroeck

The products listed below are eligible to bear the CSA Mark shown



Issued by: J.-C. Chow
J.-C. Chow

PRODUCTS

CLASS - C321106 - INDUSTRIAL CONTROL EQUIPMENT-Motor Controllers - Miscellaneous

CLASS - C321137 - INDUSTRIAL CONTROL EQUIPMENT - Sub-Assemblies-Components

Part A (Class 3211-06)

Solid-state motor controllers, reduced-voltage starting, Types 3RW30 and 3RW40, with ratings as follows:

Type 3RW30, 3-phase Horsepower at 40°C surrounding air temperature:

Types	200/208V	230/240V	460/480V	max FLA
3RW3013	0.5 hp	0.75 hp	2 hp	3.6 A
3RW3014	1 hp	1.5 hp	3 hp	6.5 A
3RW3016	2 hp	2 hp	5 hp	9.0 A
3RW3017	3 hp	3 hp	7.5 hp	12.5 A
3RW3018	5 hp	5 hp	10 hp	17.6 A
3RW3026	7.5 hp	7.5 hp	15 hp	25.3 A
3RW3027	10 hp	10 hp	20 hp	32.2 A
3RW3028	10 hp	10 hp	25 hp	38 A
3RW3036	10 hp	15 hp	30 hp	45 A
3RW3037	20 hp	20 hp	40 hp	63 A
3RW3038	20 hp	25 hp	50 hp	72 A
3RW3046	25 hp	30 hp	60 hp	80 A
3RW3047	30 hp	40 hp	75 hp	106 A



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Type 3RW30, 3-phase Horsepower at 50°C surrounding air temperature:

Types	200/208V	230/240V	460/480V	max FLA
3RW3013	0.5 hp	0.5 hp	1.5 hp	3 A
3RW3014	1 hp	1 hp	3 hp	6 A
3RW3016	2 hp	2 hp	5 hp	8 A
3RW3017	3 hp	3 hp	7.5 hp	12 A
3RW3018	3 hp	3 hp	10 hp	17 A
3RW3026	5 hp	5 hp	15 hp	23 A
3RW3027	7.5 hp	7.5 hp	20 hp	29 A
3RW3028	10 hp	10 hp	25 hp	34 A
3RW3036	10 hp	15 hp	30 hp	42 A
3RW3037	15 hp	20 hp	40 hp	58 A
3RW3038	20 hp	20 hp	40 hp	62.1 A
3RW3046	20 hp	25 hp	50 hp	73 A
3RW3047	30 hp	30 hp	75 hp	98 A

Type 3RW40, 3-phase Horsepower at 40°C surrounding air temperature:

Types	200/208V	230/240V	460/480V	575/600V	max FLA
3RW4024	3 hp	3 hp	7.5 hp	10 hp	12.5 A
3RW4026	7.5 hp	7.5 hp	15 hp	20 hp	25.3 A
3RW4027	10 hp	10 hp	20 hp	30 hp	32.2 A
3RW4028	10 hp	10 hp	25 hp	30 hp	38 A
3RW4036	10 hp	15 hp	30 hp	40 hp	45 A
3RW4037	20 hp	20 hp	40 hp	60 hp	63 A
3RW4038	20 hp	25 hp	50 hp	60 hp	72 A
3RW4046	25 hp	30 hp	60 hp	75 hp	80 A
3RW4047	30 hp	40 hp	75 hp	100 hp	106 A

Type 3RW40, 3-phase Horsepower at 50°C surrounding air temperature:

Types	200/208V	230/240V	460/480V	575/600V	max FLA
3RW4024	3 hp	3 hp	7.5 hp	10 hp	11 A
3RW4026	5 hp	5 hp	15 hp	20 hp	23 A
3RW4027	7.5 hp	7.5 hp	20 hp	25 hp	29 A
3RW4028	10 hp	10 hp	25 hp	30 hp	34 A
3RW4036	10 hp	15 hp	30 hp	40 hp	42 A
3RW4037	15 hp	20 hp	40 hp	50 hp	58 A
3RW4038	20 hp	20 hp	40 hp	60 hp	62.1 A
3RW4046	20 hp	25 hp	50 hp	60 hp	73 A
3RW4047	30 hp	30 hp	75 hp	75 hp	98 A

Type 3RW30, Short-circuit rating with Max Fuse:

Types	Short Circuit	Fuse Class K5, RK5, RK1	Fuse Class J
3RW3013	5 kA, 480V	-	15 A
3RW3014	5 kA, 480V	-	25 A
3RW3016	5 kA, 480V	-	36 A
3RW3017	5 kA, 480V	-	50 A
3RW3018	5 kA, 480V	-	60 A



Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

3RW3026	5 kA, 480V	100 A	100 A
3RW3027	5 kA, 480V	125 A	125 A
3RW3028	5 kA, 480V	125 A	125 A
3RW3036	10 kA, 480V	175 A	175 A
3RW3037	10 kA, 480V	250 A	250 A
3RW3038	10 kA, 480V	250 A	250 A
3RW3046	10 kA, 480V	-	300 A
3RW3047	10 kA, 480V	-	350 A

Type 3RW30, Short-circuit rating with Max Combination Motor Controller 3RV201/202^(Note 3):

Types	Short Circuit	3RV201/202
3RW3013	5 kA, 480V	8 A
3RW3014	5 kA, 480V	8 A
3RW3016	5 kA, 480V	8 A
3RW3017	5 kA, 480V	12.5 A
3RW3018	5 kA, 480V	16 A
3RW302	5 kA, 480V	32 A

Type 3RW30, Short-circuit rating as Type F Combination Motor Controller with Max Type E CMC 3RV203 or MMC 3RV2.3:

Types	Short Circuit	3RV203	3RV2.3
3RW3036	5 kA, 480V	52 A	52 A
3RW3037	10 kA, 480V	73 A	80 A
3RW3038	10 kA, 480V	73 A	80 A

Type 3RW30, Short-circuit rating with Max Circuit Breaker 3RV27/28, 3RV1742^(Note 7), 3VL1/HCGX3B^(Note 8), 5SJ43...-7HG42^(Note 9):

Types	Short Circuit	3RV27/28	3RV1742	3VL1/HCGX3B	5SJ43...-7HG42
3RW3013	5 kA, 480V	8 A	-	-	-
3RW3014	5 kA, 480V	8 A	-	-	-
3RW3016	5 kA, 480V	8 A	-	-	-
3RW3017	5 kA, 480V	12.5 A	-	-	-
3RW3018	5 kA, 480V	15 A	-	-	-
3RW302	5 kA, 480V	22 A	-	-	40 A
3RW303	10 kA, 600V	-	70 A	150 A	-

Type 3RW40, Short-circuit rating with Max Fuse:

Types	Short Circuit	Fuse Class K5, RK5, RK1	Fuse Class J
3RW4024	5 kA, 600V	50 A	50 A
3RW4026	5 kA, 600V	100 A	100 A
3RW4027	5 kA, 600V	125 A	125 A
3RW4028	5 kA, 600V	125 A	125 A
3RW4036	10 kA, 600V	175 A	175 A
3RW4037	10 kA, 600V	250 A	250 A
3RW4038	10 kA, 600V	250 A	250 A
3RW4046	10 kA, 600V	-	300 A
3RW4047	10 kA, 600V	-	300 A



Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

Type 3RW40, Short-circuit rating with Max Combination Motor Controller 3RV201/202^(Note 3):

Types	Short Circuit	3RV201/202
3RW402	5 kA, 480V	32 A
3RW402	5 kA, 600V	12.5 A

Type 3RW40, Short-circuit rating as Type F Combination Motor Controller with Max Type E CMC 3RV203 or MMC 3RV2.3:

Types	Short Circuit	3RV203	3RV2.3
3RW4036	5 kA, 600V	52 A	52 A
3RW4037	10 kA, 600V	73 A	80 A
3RW4038	10 kA, 600V	73 A	80 A

Type 3RW40, Short-circuit rating with Max Circuit Breaker 3RV27/28, 3RV1742^(Note 7), 3VL1/HCGX3B^(Note 8):

Types	Short Circuit	3RV27/28	3RV1742	3VL1/HCGX3B
3RW402	5 kA, 480V	22 A	-	-
3RW402	5 kA, 600V	12.5 A	-	-
3RW403	10 kA, 600V	-	42 A	42 A

Type 3RW30, High-fault currents short-circuit rating with Max Fuse:

Types	Short Circuit	Fuse Class K5, RK5, RK1	Fuse Class J
3RW3013	42 kA, 480V	-	15 A
3RW3014	42 kA, 480V	-	25 A
3RW3016	42 kA, 480V	-	25 A
3RW3017	42 kA, 480V	-	25 A
3RW3018	42 kA, 480V	-	25 A
3RW3026	42 kA, 480V	60 A	100 A
	100 kA, 480V	100 A Class RK1 only	100 A
3RW3027	42 kA, 480V	60 A	125 A
	100 kA, 480V	100 A Class RK1 only	110 A
3RW3028	42 kA, 480V	60 A	125 A
	100 kA, 480V	100 A Class RK1 only	110 A
3RW3036	30 kA, 480V	100 A	175 A
	100 kA, 480V	175 A Class RK1 only	175 A
3RW3037	30 kA, 480V	100 A	200 A
	100 kA, 480V	200 A Class RK1 only	200 A
3RW3038	30 kA, 480V	100 A	200 A
	100 kA, 480V	200 A Class RK1 only	200 A
3RW3046	42 kA, 480V	110 A	200 A
	100 kA, 480V	200 A Class RK1 only	200 A
3RW3047	42 kA, 480V	110 A	200 A
	100 kA, 480V	200 A Class RK1 only	200 A

Type 3RW30, High-fault currents short-circuit rating with Max Combination Motor Controller 3RV201/202:

Type	Short Circuit	3RV201/202
3RW302	65 kA, 480V	25 A
	42 kA, 480V	32 A



Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

Type 3RW30, High-fault currents short-circuit rating as Type F Combination Motor Controller with Max Type E CMC 3RV203 or MMC 3RV2.3:

Types	Short Circuit	3RV203	3RV2.3
3RW3036	10 kA, 480V	52 A	52 A
3RW3037	10 kA, 480V	52 A	52 A

Type 3RW30, High-fault currents short-circuit rating with Max Circuit Breaker 3RV27/28:

Type	Short Circuit	3RV27/28
3RW302	65 kA, 480V	15 A
	50 kA, 480V	22 A
	10 kA, 480V	40 A

Type 3RW40, High-fault currents short-circuit rating with Max Fuse:

Types	Short Circuit	Fuse Class K5, RK5, RK1	Fuse Class J
3RW4024	42 kA, 600V	50 A	50 A
	100 kA, 600V	50 A Class RK1 only	50 A
3RW4026	42 kA, 600V	60 A	100 A
	100 kA, 600V	100 A Class RK1 only	100 A
3RW4027	42 kA, 600V	60 A	125 A
	100 kA, 600V	100 A Class RK1 only	110 A
3RW4028	42 kA, 600V	60 A	125 A
	100 kA, 600V	100 A Class RK1 only	110 A
3RW4036	30 kA, 600V	100 A	175 A
	100 kA, 600V	175 A Class RK1 only	175 A
3RW4037	30 kA, 600V	100 A	200 A
	100 kA, 600V	200 A Class RK1 only	200 A
3RW4038	30 kA, 600V	100 A	200 A
	100 kA, 600V	200 A Class RK1 only	200 A
3RW4046	42 kA, 600V	110 A	200 A
	100 kA, 600V	200 A Class RK1 only	200 A
3RW4047	42 kA, 600V	110 A	200 A
	100 kA, 600V	200 A Class RK1 only	200 A

Type 3RW40, High-fault currents short-circuit rating with Max Combination Motor Controller 3RV201/202:

Type	Short Circuit	3RV201/202
3RW402	65 kA, 480V	25 A
	42 kA, 480V	32 A

Type 3RW40, High-fault currents short-circuit rating as Type F Combination Motor Controller with Max Type E CMC 3RV203 or MMC 3RV2.3:

Types	Short Circuit	3RV203	3RV2.3
3RW4036	10 kA, 600V	52 A	52 A
3RW4037	10 kA, 600V	52 A	52 A



Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

Type 3RW40, High-fault currents short-circuit rating with Max Circuit Breaker 3RV27/28:

Type	Short Circuit	3RV27/28
3RW402	65 kA, 480V	15 A
	50 kA, 480V	22 A
	10 kA, 600V	12.5 A

Type 3RW30, Short-circuit rating for Group installation only in combination with Max Manual Motor Controller 3RV2.1/2.2^(Note 4) or 3RV2.23^(Note 6):

Type	Short Circuit	3RV2.1/2	3RV2.23
3RW302	65 kA, 480V	25 A	-
	42 kA, 480V	32 A	-
	30 kA, 480V	-	25 A
	12 kA, 480V	36 A	-

Type 3RW40, Short-circuit rating for Group installation only in combination with Max Manual Motor Controller 3RV2.1/2.2^(Notes 4, 5) or 3RV2.23^(Note 6):

Type	Short Circuit	3RV2.1/2	3RV2.23
3RW402	65 kA, 480V	25 A	-
	42 kA, 480V	32 A	-
	12 kA, 480V	36 A	-
	30 kA, 600V	12.5 A	24 A

Control Voltage: 24 Vac/dc or 110 V up to 230 Vac/dc

Auxiliary Contacts: B300/R300

Accessories: Fans, Type 3RW4928-8VB00 or 3RW4947-8VB00

Part-B (Class 3211-37)

Accessories:

Link module to connect 3RV2 to 3RW30 or 3RW40 with screw terminals size S0/00: Type 3RA2921-1B

Link module to connect 3RV2 to 3RW301 with spring terminals size S00: Type 3RA2911-2G

Link module to connect 3RV2 to 3RW302 or 3RW402 with spring terminals size S0: Type 3RA2921-2G

Notes:

1. The type designation may be completed with suffixes.
2. Certified as component for use only in Certified equipment where the acceptability of combination is to be determined by CSA.
3. The short-circuit ratings with 3RV2 combination motor controller may be used with or without link module Types 3RA2921-1B, 3RA2911-2G, 3RA2921-2G.
4. The 480V short-circuit rating for group installation only in combination with manual motor controller 3RV2.1/2 is to be installed with Branch Circuit Protective Device: Fuse Class RK1, RK5, J, G, T or CC, or Siemens Circuit breaker Certified type with a marked short-circuit rating equal or larger than the available short-circuit current rating.
5. The 600V short-circuit rating for group installation only in combination with manual motor controller 3RV2.1/2 is to be installed with Branch Circuit Protective Device Max Fuse 80 A Class J.



Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

6. The 600V short-circuit rating for group installation only in combination with manual motor controller 3RV2.23 is to be installed with Branch Circuit Protective Device Max Fuse 150 A Class J.
7. CSA Certified circuit breakers by Siemens, Type 3RV1742.
8. CSA Certified circuit breakers by Siemens, Type 3VL1/HCGX3B.
9. Approved (for Canada) circuit breakers (rated 480Y/277V) by Siemens, Type 5SJ43...-7HG42 or -7XX42.

Nomenclature Breakdown, 3RW30

3RW30	26	-	1	B	B	0	4
I	II		III	IV	V	VI	VII

I Basic Type:
 3RW30 Solid-state motor controller, low functionality

II Size

13	size S00, rated for 480 V and 50°C / 1.5 hp
14	size S00, rated for 480 V and 50°C / 3 hp
16	size S00, rated for 480 V and 50°C / 5 hp
17	size S00, rated for 480 V and 50°C / 7.5 hp
18	size S00, rated for 480 V and 50°C / 10 hp
26	size S0, rated for 480 V and 50°C / 15 hp
27	size S0, rated for 480 V and 50°C / 20 hp
28	size S0, rated for 480 V and 50°C / 25 hp
36	size S2, rated for 480 V and 50°C / 30 hp
37	size S2, rated for 480 V and 50°C / 40 hp
38	size S2, rated for 480 V and 50°C / 40 hp
46	size S3, rated for 480 V and 50°C / 50 hp
47	size S3, rated for 480 V and 50°C / 75 hp

III Type of Terminals

1	Screw terminal for control circuit
2	Spring terminal for control circuit, or Spring terminal for control and main circuit for size S00 and S0 only

IV Phases controlled

B	2-phase controlled
---	--------------------

V Bypass-System and additional function

B	With bypass-contact
---	---------------------

VI Operating Voltage

0	24 V ac/dc
1	110 up to 230 Vac/dc

VII Rated Voltage

4	200 up to 480 Vac
---	-------------------

Certificate: 1951421
Project: 70037581

Master Contract: 165071
Date Issued: 2015-08-12

Nomenclature Breakdown, 3RW40

3RW40	24	-	1	B	B	0	4
I	II		III	IV	V	VI	VII

- I Basic Type:**
 3RW40 Solid-state motor controller with integrated electronic overload relay, low functionality
- II Size:**
 24 size S0, rated for 480 V and 50°C / 7.5 hp
 26 size S0, rated for 480 V and 50°C / 15 hp
 27 size S0, rated for 480 V and 50°C / 20 hp
 28 size S0, rated for 480 V and 50°C / 25 hp
 36 size S2, rated for 480 V and 50°C / 30 hp
 37 size S2, rated for 480 V and 50°C / 40 hp
 38 size S2, rated for 480 V and 50°C / 40 hp
 46 size S3, rated for 480 V and 50°C / 50 hp
 47 size S3, rated for 480 V and 50°C / 75 hp
- III Type of Terminals:**
 1 Screw terminal for control circuit
 2 Spring terminal for control circuit, or
 Spring terminal for control and main circuit for size S0 only
- IV Bypass-System and additional function:**
 B 2-phase controlled
 T 2-phase controlled with thermistor motor protection
- V Phases controlled:**
 B With bypass-contact
- VI Operating Voltage:**
 0 24 Vac/dc
 1 110 up to 230 Vac/dc
- VII Rated Voltage:**
 4 200 up to 480 Vac
 5 460 up to 600 Vac

APPLICABLE REQUIREMENTS

CSA-C22.2 No. 14-13 - Industrial Control Equipment

CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

Issued to: SIEMENS AG
I IA CE CP R&D-VI 4
WERNER-VON-SIEMENS-STRASSE 48
92220 AMBERG, GERMANY

**This is to certify that
representative samples of**

Motor Controllers, Mechanically Operated and Solid-state
Solid-state motor controller, Type 3RW40 followed by 24,
26, 27, 28, 36, 37, 38, 46 or 47 followed by -1 or -2 followed
by B or T followed by B followed by 0 or 1, followed by
4 or 5.
(See following pages for additional model information.)

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 508, "Industrial Control Equipment" and
CSA-C22.2 No. 14, "Industrial Control Equipment."

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

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being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US
and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and
"US" identifiers:  the word "LISTED"; a control number (may be alphanumeric) assigned by UL;
and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.



William R. Carney, Director, North American Certification Programs
UL LLC

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CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

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

Additional Model Information:

Accessories, fan kit, type 3RW4928-8VB00, 3RW4947-8VB00.

Link modules, Types 3RA2911-2G, 3RA2921-2G, and 3RA2921-1B

Solid-state motor controller, Type 3RW30 followed by 13, 14, 16, 17, 18, 26, 27, 28, 36, 37, 38, 46 or 47 followed by -1 or -2 followed by B followed by B followed by 0 or 1, followed by 4. Types 3RW301, 3RW302, and 3RW402 may be used together with 3RA2911-2G, 3RA2921-2G, or 3RA2921-1B link module to be connected with 3RV20.

General:

These devices are solid - state motor controller for use in industrial applications. These devices allow smooth, step-less starting. The 3RW40 devices are provided with an integrated solid-state overload relay (class settings: 10, 15, 20) and have the option of soft stopping and an integral current limiting control during starting.

Ratings:

3RW40:

3 ph Horsepower at 40°C surrounding air temperature

Type	200/208 V	230/240 V	460/480 V	575/600 V	max FLA
3RW4024	3 hp	3 hp	7.5 hp	10 hp	12.5 A
3RW4026	7.5 hp	7.5 hp	15 hp	20 hp	25.3 A
3RW4027	10 hp	10 hp	20 hp	30 hp	32.2 A
3RW4028	10 hp	10 hp	25 hp	30 hp	38 A
3RW4036	10 hp	15 hp	30 hp	40 hp	45 A
3RW4037	20 hp	20 hp	40 hp	60 hp	63 A
3RW4038	20 hp	25 hp	50 hp	60 hp	72 A
3RW4046	25 hp	30 hp	60 hp	75 hp	80 A
3RW4047	30 hp	40 hp	75 hp	100 hp	106 A



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CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
 Report Reference E143112 - 20071021
 Issue Date 2013-August-13

3 ph Horsepower at 50°C surrounding air temperature

Type	200/208 V	230/240 V	460/480 V	575/600 V	max FLA
3RW4024	3 hp	3 hp	7.5 hp	10 hp	11 A
3RW4026	5 hp	5 hp	15 hp	20 hp	23 A
3RW4027	7.5 hp	7.5 hp	20 hp	25 hp	29 A
3RW4028	10 hp	10 hp	25 hp	30 hp	34 A
3RW4036	10 hp	15 hp	30 hp	40 hp	42 A
3RW4037	15 hp	20 hp	40 hp	50 hp	58 A
3RW4038	20 hp	20 hp	40 hp	60 hp	62.1 A
3RW4046	20 hp	25 hp	50 hp	60 hp	73 A
3RW4047	30 hp	30 hp	75 hp	75 hp	98 A

Control voltage: 24 V ac/dc or 110 V up to 230 V ac/dc
 Auxiliary Contacts: B300/R300

3RW30:

3 ph Horsepower at 40°C surrounding air temperature

Type	200/208 V	230/240 V	460/480 V		max FLA
3RW3013	0.5 hp	0.75 hp	2 hp		3.6 A
3RW3014	1 hp	1.5 hp	3 hp		6.5 A
3RW3016	2 hp	2 hp	5 hp		9.0 A
3RW3017	3 hp	3 hp	7.5 hp		12.5 A
3RW3018	5 hp	5 hp	10 hp		17.6 A
3RW3026	7.5 hp	7.5 hp	15 hp		25.3 A
3RW3027	10 hp	10 hp	20 hp		32.2 A
3RW3028	10 hp	10 hp	25 hp		38 A
3RW3036	10 hp	15 hp	30 hp		45 A
3RW3037	20 hp	20 hp	40 hp		63 A
3RW3038	20 hp	25 hp	50 hp		72 A
3RW3046	25 hp	30 hp	60 hp		80 A
3RW3047	30 hp	40 hp	75 hp		106 A

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Report Reference E143112 - 20071021
Issue Date 2013-August-13

3 ph Horsepower at 50°C surrounding air temperature

Type	200/208 V	230/240 V	460/480 V		max FLA
3RW3013	0.5 hp	0.5 hp	1.5 hp		3 A
3RW3014	1 hp	1 hp	3 hp		6 A
3RW3016	2 hp	2 hp	5 hp		8 A
3RW3017	3 hp	3 hp	7.5 hp		12 A
3RW3018	3 hp	3 hp	10 hp		17 A
3RW3026	5 hp	5 hp	15 hp		23 A
3RW3027	7.5 hp	7.5 hp	20 hp		29 A
3RW3028	10 hp	10 hp	25 hp		34 A
3RW3036	10 hp	15 hp	30 hp		42 A
3RW3037	15 hp	20 hp	40 hp		58 A
3RW3038	20 hp	20 hp	40 hp		62.1 A
3RW3046	20 hp	25 hp	50 hp		73 A
3RW3047	30 hp	30 hp	75 hp		98 A

Control voltage: 24 V ac/dc or 110 V up to 230 V ac/dc
Auxiliary Contact: B300/R300



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Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

Standard Short Circuit Ratings with Fuses (3RW40):

Type No.	Max. Fuse Class K5, RK5, RK1	Max. Fuse Class J	Short Circuit	Voltage
3RW4024	50 A	50 A	5 kA	600 V
3RW4026	100 A	100 A	5 kA	600 V
3RW4027	125 A	125 A	5 kA	600 V
3RW4028	125 A	125 A	5 kA	600 V
3RW4036	175 A	175 A	10 kA	600 V
3RW4037	250 A	250 A	10 kA	600 V
3RW4038	250 A	250 A	10 kA	600 V
3RW4046	450 A ¹⁾	300 A	10 kA	600 V
3RW4047	450 A ¹⁾	300 A	10 kA	600 V

1) Special purpose fuse Type 3NE1333-2 manufactured by Siemens covered in File E167357.

High Capacity Short Circuit Ratings with Fuses (3RW40):

Type No.	Max. Fuse Class K5, RK5, RK1	Max. Fuse Class J	Short Circuit	Voltage
3RW4024	50 A	50 A	42 kA	600 V
3RW4024	50 A ¹⁾	50 A	100 kA	600 V
3RW4026	60 A	100 A	42 kA	600 V
3RW4026	100 A ¹⁾	100 A	100 kA	600 V
3RW4027	60 A	125 A	42 kA	600 V
3RW4027	100 A ¹⁾	110 A	100 kA	600 V
3RW4028	60 A	125 A	42 kA	600 V
3RW4028	100 A ¹⁾	110 A	100 kA	600 V
3RW4036	100 A	175 A	30 kA	600 V
3RW4036	175 A ¹⁾	175 A	100 kA	600 V
3RW4037	100 A	200 A	30 kA	600 V
3RW4037	200 A ¹⁾	200 A	100 kA	600 V
3RW4038	100 A	200 A	30 kA	600 V
3RW4038	200 A ¹⁾	200 A	100 kA	600 V
3RW4046	110 A	200 A	42 kA	600 V
3RW4046	200 A ¹⁾	200 A	100 kA	600 V
3RW4047	110 A	200 A	42 kA	600 V
3RW4047	200 A ¹⁾	200 A	100 kA	600 V

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Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

1) RK1-Fuse only
Standard Short Circuit Ratings with Circuit Breakers and Combination Motor Controllers(3RW40):

Type No.	Circuit Breaker 3RV27, 3RV28	Comb. Mot. Ctrl. ³⁾ 3RV201, 3RV202	Man. Mot. Ctrl. 3RV2.1, 3RV2.2	Short Circuit	Voltage
3RW402	22 A	32 A	36 A ¹⁾	5 kA	480 V
3RW402	12.5 A	12.5 A	25 A ¹⁾	5 kA	600 V
3RW403	42 A ²⁾	-	-	10 kA	600 V
	42 A ³⁾	-	-	10 kA	600 V

²⁾ Siemens Listed Circuit Breaker Type 3RV17...

³⁾ Siemens Listed Circuit Breaker Type 3VL1/HCGX3B150

High Capacity Circuit Ratings with Circuit Breakers and Combination Motor Controllers(3RW40):

Type No.	Circuit Breaker 3RV27, 3RV28	Comb. Mot. Ctrl. ¹⁾ 3RV201, 3RV202	Short Circuit	Voltage
3RW402	15 A	25 A	65 kA	480 V
3RW402	-	32 A	42 kA	480 V
*				
3RW402	22 A	-	50 kA	480 V
3RW402	-		30 kA	600 V
*				
3RW402	12.5 A	-	10 kA	600 V

1) These ratings apply for the solid state motor controller used with or without link modules type 3RA2921-1B, 3RA2911-2G or 3RA2921-2G.
The 3RV20 are also evaluated together with solid-state-motor controllers 3RW402 as Combination Motor Controllers Type F.

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CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

Group Installation:

Maximum Short-circuit rating in Group Installation (only in combination with Manual Motor Controller 3RV2)

Type No.	Comb. Mot. Ctrl. 3RV2.1, 3RV2.2	Comb. Mot. Ctrl. 3RV2.23	Short Circuit	Voltage
3RW402	25 A ¹⁾		65 kA	480 V
3RW402	32 A ¹⁾		42 kA	480 V
3RW402	36 A ¹⁾		12 kA	480 V
3RW402	12.5 ²⁾	25 A ³⁾	30 kA	600 V

1) Branch Circuit Protective Device: The appropriate BCPD need to be determined in accordance with the National Electrical Code, Article 430-53 and the application.

The following devices are permitted:

Fuses: Classes RK1, RK5, J, G, T, CC or

Circuit breakers: Listed Siemens type, with a marked short-circuit rating equal or larger than the available short-circuit current rating

These devices were tested for group installation use at the above levels without any upstream branch circuit device.

2) Branch Circuit Protective Device for 600V-Ratings: Max. Class J 80A

3) Branch Circuit Protective Device for 600V-Ratings: Max. Class J 150A

For solid-state motor controller, Type 3RW402:

Applicable in an enclosure with minimum overall dimensions of 370 by 190 by 190 mm.

For solid-state motor controller, Type 3RW403:

Applicable in an enclosure with minimum overall dimensions of 450 by 210 by 225 mm.

For solid-state motor controller, Type 3RW404:

Applicable in an enclosure with minimum overall dimensions of 450 by 220 by 235 mm.



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Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

Standard Short Circuit Ratings 3RW30:

Type No.	Max. Fuse	Max. Fuse	Short	Voltage
	Class K5, RK5, RK1	Class J	Circuit	
3RW3013	-	15 A	5 kA	480 V
3RW3014	-	25 A	5 kA	480 V
3RW3016	-	36 A	5 kA	480 V
3RW3017	-	50 A	5 kA	480 V
3RW3018	-	60 A	5 kA	480 V
3RW3026	100 A	100 A	5 kA	480 V
3RW3027	125 A	125 A	5 kA	480 V
3RW3028	125 A	125 A	5 kA	480 V
3RW3036	175 A	175 A	10 kA	480 V
3RW3037	250 A	250 A	10 kA	480 V
3RW3038	250 A	250 A	10 kA	480 V
3RW3046	-	300 A	10 kA	480 V
3RW3047	-	350 A	10 kA	480 V

High Capacity Short Circuit Ratings 3RW30:

Type No.	Max. Fuse	Max. Fuse	Short	Voltage
	Class K5, RK5, RK1	Class J	Circuit	
3RW3013	-	15 A	42 kA	480 V
3RW3014	-	25 A	42 kA	480 V
3RW3016	-	25 A	42 kA	480 V
3RW3017	-	25 A	42 kA	480 V
3RW3018	-	25 A	42 kA	480 V
3RW3026	60 A	100 A	42 kA	480 V
3RW3026	100 A ¹	100 A	100 kA	480 V
3RW3027	60 A	125 A	42 kA	480 V
3RW3027	100 A ¹	110 A	100 kA	480 V
3RW3028	60 A	125 A	42 kA	480 V
3RW3028	100 A ¹	110 A	100 kA	480 V
3RW3036	100 A	175 A	30 kA	480 V
3RW3036	175 A ¹	175 A	100 kA	480 V
3RW3037	100 A	200 A	30 kA	480 V
3RW3037	200 A ¹	200 A	100 kA	480 V
3RW3038	100 A	200 A	30 kA	480 V

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CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

High Capacity Short Circuit Ratings 3RW30 (Cont.):

Type No.	Max. Fuse	Max. Fuse	Short	Voltage
	Class K5, RK5, RK1	Class J	Circuit	
3RW3038	200 A ¹	200 A	100 kA	480 V
3RW3046	110 A	200 A	42 kA	480 V
3RW3046	200 A ¹	200 A	100 kA	480 V
3RW3047	110 A	200 A	42 kA	480 V
3RW3047	200 A ¹	200 A	100 kA	480 V

1) RK1-Fuse only

Standard Short Circuit Ratings with Circuit Breakers and Combination Motor Controllers(3RW30):

Type No.	Circuit Breaker 3RV27, 3RV28	Comb. Mot. Ctrl. ³⁾ 3RV201, 3RV202	Man. Mot. Ctrl.	Short Circuit	Voltage
3RW3013, 3RW3014, 3RW3016	8 A	8 A		5 kA	480 V
3RW3017	12.5 A	12.5 A		5 kA	480 V
3RW3018	15 A	16 A		5 kA	480 V
3RW302	22 A	32 A	36 A	5 kA	480 V
	40 A ²⁾	-	-	5 kA	480 V
3RW303	max. 70 A ³⁾	-	-	10 kA	600 V
3RW303	max. 150 A ⁴⁾			10 kA	600 V

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CERTIFICATE OF COMPLIANCE

Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

High Capacity Circuit Ratings with Circuit Breakers and Combination Motor Controllers(3RW30):

Type No.	Circuit Breaker 3RV27, 3RV28	Comb. Mot. Ctrl. ¹⁾ 3RV201, 3RV202	Short Circuit	Voltage
3RW302	15 A	25 A	65 kA	480 V
3RW302	-	32 A	42 kA	480 V
3RW302	22 A	-	50 kA	480 V
	40 A ²⁾	-	10 kA	480 V

1) These ratings apply for the solid state motor controller used with or without link modules type 3RA2921-1B, 3RA2911-2G or 3RA2921-2G

The 3RV20 are also evaluated together with solid-state-motor controllers 3RW301 or 3RW302 as Combination Motor Controllers Type F

2) Siemens Listed Circuit Breaker Type 5SJ43...-7HG42 or -7XX42

3) Siemens Listed Circuit Breaker Type 3RV17...

4) Siemens Listed Circuit Breaker Type 3VL1

Group Installation:

Maximum Short-circuit rating in Group Installation (only in combination with Manual Motor Controller 3RV2)

Type No.	Man. Mot. Ctrl. 3RV2.1, 3RV2.2	Man. Mot. Ctrl. 3RV2.23	Short Circuit	Voltage
3RW302	25 A ¹⁾	-	65 kA	480 V
3RW302	32 A ¹⁾	-	42 kA	480 V
3RW302	36 A ¹⁾	-	12 kA	480 V
3RW302	-	25 A ²⁾	30 kA	480 V

1) Branch Circuit Protective Device: The appropriate BCPD need to be determined in accordance with the National Electrical Code, Article 430-53 and the application.

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Certificate Number 20130813 – E143112
Report Reference E143112 - 20071021
Issue Date 2013-August-13

The following devices are permitted:

Fuses: Classes RK1, RK5, J, G, T, CC or

Circuit breakers: Listed Siemens type, with a marked short-circuit rating equal or larger than the available short-circuit current rating

These devices were tested for group installation use at the above levels without any upstream branch circuit device.

2) Branch Circuit Protective Device: Max. Class J 150A.

For solid-state motor controller, Type 3RW301:

Applicable in an enclosure with minimum overall dimensions of 200 by 120 by 200 mm.

For solid-state motor controller, Type 3RW302:

Applicable in an enclosure with minimum overall dimensions of 370 by 175 by 195 mm.

For solid-state motor controller, Type 3RW303:

Applicable in an enclosure with minimum overall dimensions of 450 by 220 by 235 mm.

For solid-state motor controller, Type 3RW304:

Applicable in an enclosure with minimum overall dimensions of 450 by 220 by 235 mm.



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Report Reference E143112 - 20071021
Issue Date 2013-August-13

Nomenclature Breakdown:

3RW40 24 -1 B B 0 2
I II III IV V VI VII

I - Basic type

3RW40 - Solid-state motor controller with integrated electronic overload relay, low functionality

II - Size

- 24 - size S0, rated for 480 V and 50°C / 7.5 hp
- 26 - size S0, rated for 480 V and 50°C / 15 hp
- 27 - size S0, rated for 480 V and 50°C / 20 hp
- 28 - size S0, rated for 480 V and 50°C / 25 hp
- 36 - size S2, rated for 480 V and 50°C / 30 hp
- 37 - size S2, rated for 480 V and 50°C / 40 hp
- 38 - size S2, rated for 480 V and 50°C / 40 hp
- 46 - size S3, rated for 480 V and 50°C / 50 hp
- 47 - size S3, rated for 480 V and 50°C / 75 hp

III - Type of Terminals

- 1 - Screw terminal for control circuit
- 2 - Spring terminal for control circuit or
Spring terminal for control and main circuit for size S0 only

IV - Phases controlled

- B - 2-phase controlled
- T - 2-phase controlled with thermistor motor protection

V - Bypass-System and additional function

- B - With bypass-contact

VI - Operating Voltage

- 0 - 24 V ac/dc
- 1 - 110 up to 230 V ac/dc

VII - Rated Voltage

- 4 - 200 up to 480 V ac
- 5 - 400 up to 600 V ac

Accessories

3RW4928-8VB00 or 3RW4947-8VB00 Fan



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Report Reference E143112 - 20071021
Issue Date 2013-August-13

Nomenclature Breakdown continued:

3RW30 13 -1 B B 0 4
I II III IV V VI VII

I Basic type

3RW30 - Solid-state motor controller, low functionality

II Size

- 13 - size S00, rated for 480 V and 50°C / 1.5 hp
- 14 - size S00, rated for 480 V and 50°C / 3 hp
- 16 - size S00, rated for 480 V and 50°C / 5 hp
- 17 - size S00, rated for 480 V and 50°C / 7.5 hp
- 18 - size S00, rated for 480 V and 50°C / 10 hp
- 26 - size S0, rated for 480 V and 50°C / 15 hp
- 27 - size S0, rated for 480 V and 50°C / 20 hp
- 28 - size S0, rated for 480 V and 50°C / 25 hp
- 36 - size S2, rated for 480 V and 50°C / 30 hp
- 37 - size S2, rated for 480 V and 50°C / 40 hp
- 38 - size S2, rated for 480 V and 50°C / 40 hp
- 46 - size S3, rated for 480 V and 50°C / 50 hp
- 47 - size S3, rated for 480 V and 50°C / 75 hp

III Type of Terminals

- 1 - Screw terminal for control circuit
- 2 - Spring terminal for control circuit or Spring terminal for control and main circuit for size S00 and S0 only

IV Phases controlled

- B - 2-phase controlled

V Bypass-System and additional function

- B - With bypass-contact

VI Operating Voltage

- 0 - 24 V ac/dc
- 1 - 110 up to 230 V ac/dc

VII Rated Voltage

- 4 - 200 up to 480 V ac

Accessories

- 3RA2911-2G: Link modules to connect 3RV2 to 3RW301
- 3RA2921-2G: Link modules to connect 3RV2 to 3RW302 or 3RW402
- 3RA2921-1B: Link modules to connect 3RV2 to 3RW30 or 3RW40



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