FOUNDED 1862 ABS

CERTIFICATE NUMBER
08-HG361179-1-PDA

DATE
16 December 2013

ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

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

SIEMENS AG; I IA CE - D-92220 AMBERG

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

PRODUCT: **Motor Management and Control Device**

MODEL: **SIMOCODE PRO**
3UF7

This Product Design Assessment (PDA) Certificate 08-HG361179-1-PDA, dated 16/Dec/2013 remains valid until 15/Dec/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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

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

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

AMERICAN BUREAU OF SHIPPING

Wulf-Peter Senebald
Engineer

SIEMENS AG; I IA CE
WERNER-VON-SIEMENS-STR. 48
D-92220 AMBERG
Germany
Telephone: +49-(0)9621-80-0
Fax: +49-(0)9621-80-3141
Email: kulzer.gerhard@siemens.com
Web: www.siemens.com

1.) Siemens AG, I IA CE
2.) Siemens Energy and Automation, Inc.
Bellefontaine/ U.S.A.
3.) Siemens Eletroeletronica SA, Manaus/ Brazil
4.) Siemens NST Trutnov/ Czech Republic
5.) Siemens SAN. ve Tic. A.S, Kartal/Turkey
6.) Siemens Industry, Inc, Southaven/USA

PRODUCT:
Motor Management and Control Device

MODEL:
SIMOCODE PRO
3UF7

Intended Service:
Fixed mounted motor management system/ overload relay for installation in electrical switchboards and panels.

Description:
Motor management system, electronic overload relay and accessories.
Motor protection classes: 5 to 40.
Basic unit 3UF70, measuring modules 3UF71, operator panels 3UF72, digital modules 3UF73, analog modules 3UF74, ground fault modules 3UF75, temperature modules 3UF77, decoupling modules 3UF7150.
Accessories 3UF79, 3RP19, 3RB19, 3RT19.

Ratings:
Rated voltage Ue: 690V,
Control voltage Us: 110-240V AC/ DC or 24V DC,
Rated current Ie: 0.3-3A, 2.4-25A, 10-100A, 20-200A, 63-630A,
Degree of protection: IP20.

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

Comments:
For further data and details refer to manufacturer's specification.

Notes / Drawings / Documentation:
This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity:

SIEMENS AG; I IA CE

This Product Design Assessment (PDA) Certificate 08-HG361179-1-PDA, dated 16/Dec/2013 remains valid until 15/Dec/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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

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

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

STANDARDS

ABS Rules:
2013 Steel Vessel Rules, 1-1-4/7.7, 4-8-3/1.7/1.17/5.3.3, 4-9-7/13

National:
NA

International:
IEC 60947

Government Authority:
NA

EUMED:
NA

Others:
NA

SIEMENS

2678.08

EU-Konformitätserklärung / *EU Declaration of Conformity*

Produktbezeichnung:	Sirius Motormanagement- und Steuergeräte SIMOCODE pro Sirius Motor Management and Control Devices SIMOCODE pro
Product identification	*3UF70, 3UF71, 3UF72, 3UF730, 3UF731, 3UF74, 3UF75, 3UF76, 3UF77, 3UF79, 3UF18, 3UL2*
Hersteller: *Manufacturer*	Siemens AG, DF CP
Anschrift: *Address*	DE-92220 Amberg

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 Haltbarkeitsgarantie. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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

SIEMENS

2678.08

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 60947-4-1:2010+A1:2012

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

EN 60947-8:2003+A2:2012

EN 50581:2012

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

Siemens Aktiengesellschaft

Amberg 2016-21-04
Ort / *place* Datum der Ausstellung / *date of issue*

Peter Hartinger
Head of Verification and Certification

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

Markus Meier
Head of Project Management Electronics

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

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

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

SIEMENS

2699.10

EU-Konformitätserklärung / *EU Declaration of Conformity*

Produktbezeichnung:	Sirius Motormanagement- und Steuergeräte SIMOCODE pro
	Sirius Motor Management and Control Devices SIMOCODE pro
Product identification	*3UF70, 3UF710, 3UF711, 3UF7300, 3UF7600 / 3UF18*
Hersteller: *Manufacturer*	Siemens AG, DF CP
Anschrift: *Address*	DE-92220 Amberg

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

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

ATEX Richtlinie:

2014/34/EU Richtlinie des Europäischen Parlaments und des Rates vom 26. Februar 2014 zur Harmonisierung der Rechtsvorschriften der Mitgliedstaaten für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen; Amtsblatt der EU L96, 29/03/2014, S. 309–356

Maschinenrichtlinie:

2006/42/EG Richtlinie des Europäischen Parlaments und des Rates vom 17. Mai 2006 über Maschinen und zur Änderung der Richtlinie 95/16/EG

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:

ATEX Directive:

2014/34/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 equipment and protective systems intended for use in potentially explosive atmospheres; Official Journal of the EU L96, 29/03/2014, p. 309–356*

Machinery Directive:

2006/42/EC *Directive of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC*

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 Haltbarkeitsgarantie. Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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

SIEMENS

2699.10

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 50495:2010

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

EN 60947-8:2003+A2:2012

EN 50581:2012

Name, Anschrift bevollmächtigte Person für technische Unterlagen: Peter Hartinger, Siemens AG, DF CP
Name, address of authorised person for technical file: *92220 Amberg*

Name, Anschrift, Kennnummer der notifizierten Stelle: DEKRA EXAM GmbH, Kenn-Nr. 0158
name, address, identification number of the notified body

Nummer der EU-Baumusterprüfbescheinigung, Zulassung Qualitätssicherungssystem: BVS 06 ATEX F 001

number of the EU type-examination certificate, approval of quality assurance system

ATEX-Kennzeichnung: Ⓔx
ATEX marking

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

Siemens Aktiengesellschaft

Amberg 2016-05-20
Ort / *place* Datum der Ausstellung / *date of issue*

Peter Hartinger
Head of Verification and Certification

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

Markus Meier
Head of Project Management Electronics

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

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

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

3146a

PROFIBUS • PROFINET

Certificate

PROFIBUS Nutzerorganisation e.V. grants to

SIEMENS AG, DF CP R&D PM 5
Werner-von-Siemens-Str. 48, 92220 Amberg, Germany

the Certificate No: **Z10505** for the PROFINET IO Device:

Model Name:	**SIMOCODE pro V PN**
Revision:	**SW/FW: V 1.2.0; HW: 4**
Identnumber:	**0x002A; 0x0904**
GSD:	**GSDML-V2.3-SIEMENS-SIMOCODEproVPN-20140714.xml**
DAP:	**DAP1: SIMOCODE pro V PN, 0x00000010**

This certificate confirms that the product has successfully passed the certification tests with the following scope:

☑ PNIO_Version	V2.2
☑ Conformance Class	C Optional features: Advanced, IRT
☑ PNIO_Tester_Version	V2.2.4
☑ Tester	SIEMENS AG, Fürth, Germany PN195-2, IRT071-1

This certificate is granted according to the document:
"Framework for testing and certification of PROFIBUS and PROFINET products".
For all products that are placed in circulation by July 31, 2017 the certificate is valid for life.

(Official in Charge)

Board of PROFIBUS Nutzerorganisation e. V.

(Karsten Schneider)

(K.-P. Lindner)

PROFINET®

SIEMENS

Nummer: **3343**
Number:

B e s t ä t i g u n g
C o n f i r m a t i o n

Sicherungsloser Motorabzweig / Zuordnungsart 1 / 2 nach IEC 60947-4-1 bei AC 400 V
Fuseless Load Feeder / Coordination type 1 / 2 according IEC 60947-4-1 at AC 400 V

Produktbezeichnung / Typ:
Designation of the product / Type:

Sicherungslose Verbraucherabzweige	
Leistungsschalter	***3VA…***
Schütz	***3RT1…***
Überlastrelais	***3RB22/23/24/29… / 3UF7…***
fuseless load feeder	
circuit breaker	***3VA…***
contactor	***3RT1…***
overload relays	***3RB22/23/24/29… / 3UF7…***

Hiermit bestätigen wir, dass oben genannte sicherungslose Verbraucherabzweige, bestehend aus Leistungsschalter 3VA…, Schütz 3RT1… und elektronischen Überlastrelais 3RB22/23/24/29… / 3UF7..., wie in den beigefügten Tabellen aufgelistet und unter Einhaltung der entsprechenden Aufbaurichtlinien die Anforderung der Zuordnungsart 1 / 2 nach IEC 60947-4-1 bei AC 400V erfüllen.

We confirm that the fuseless load feeders, mentioned above consisting of circuit breakers 3VA…, contactor 3RT1… and electronic overload relays 3RB22/23/24/29… / 3UF7… corresponding to attached annex and in compliance with the installation guidelines fullfill the conditions for the coordination type 1 / 2 mentioned in the enclosures according to IEC 60947-4-1 AC 400 V.

Amberg, 05.04.2016

Siemens AG
DF CP
DE-92220 Amberg

SIEMENS

Product description

Confirmation No.: 3343

Type designation: *3VA..+ 3RT1.. + 3UF7.. or 3RB22../3RB23../3RB24../3RB29..*

Manufacturer: *Siemens AG, Low Voltage*
Siemensstraße 10, 93055 Regensburg

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

Production site: *OEZ s.r.o.*
Sedivska 339, 561 51 LETOHRAD
CZECH REPUBLIC

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

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

SIEMENS

Nomenclature breakdown

Confirmation No.: 3343

Overview series 3VA..

3VA2	**4**	**50**	**-5**	**MN**	**3**	**2**	**-..**
I	II	III	IV	V	VI	VII	VIII

I. Basic type

3VA1 -	SENTRON nG Circuit Breaker for general applications
3VA2 -	SENTRON nG Circuit Breaker for selective applications

II. Frame size

1 -	Up to 100 A
2 -	Up to 200 A
3 -	Up to 250 A
4 -	Up to 500 A

III. Rated current

10 -	100 A
12 -	125 A
16 -	160 A
20 -	200 A
25 -	250 A
32 -	320 A
40 -	400 A
50 -	500 A

IV. AIC-level

5 -	Class M
6 -	Class H
7 -	Class C

V. Trip unit: Characteristic curve, type

MG-	TM110M	FM	Starter protection	
MH-	TM120M	AM	Starter protection	
MU-	TM120M	AM	Starter protection	
MS -	ETU310M	I	Starter protection	
MN -	ETU350M	LSI	Motor protection	
MQ -	ETU860M	LSIG	Motor protection	+ display and metering function

VI. Poles

3 -	3Poles

VII. Connection technology

1 -	Without all (without any terminals)
2 -	Screw terminals at front side
3 -	Front connection at line side / Rear connection at load side
4 -	Rear connection at line side / Front connection at load side
5 -	Screw terminals at rear side
6 -	Front side cable connection
7 -	Without all (without any terminals) at line side / Front side cable connection at load side

VIII. Others

.. -	Manufacturer’s identification

SIEMENS

Nomenclature breakdown **Confirmation No.: 3343**

Overview series 3RT1..

3RT1	**0**	**54**	**-1**	**A**	**P3**	**6**	**-..**
I	II	III	IV	V	VI	VII	VIII

I. Basic type

3RT1 - SIRIUS motor contactor

II. Device version

0 - Standard contactor
2 - Vacuum contactor

III. Frame size and rated power at Ue 400V

54 -	S6	55 kW
55 -		75 kW
56 -		90 kW
64 -	S10	110 kW
65 -		132 kW
66 -		160 kW
75 -	S12	200 kW
76 -		250 kW

IV. Connection technology

1 -	Main contacts: Box terminal block	A1/A2: Screw terminal
2 -	Main contacts: Bar connections	A1/A2: Cage Clamp
3 -	Main contacts: Box terminal block	A1/A2: Cage Clamp
6 -	Main contacts: Bar connections	A1/A2: Screw terminal

V. Operating system configuration / operating range

A -	Standard operating system with integrated varistor
N -	Electronic operating system with PLC interface
P -	Electronic operating system with PLC interface and RLT-module
Q -	Electronic operating system with AS-i interface and RLT-module

VI. Operating voltage AC 50/60 Hz and DC

A0	Without operating system	
B3 - T3	Standard operating system	Up to 600 V
B3 - P3	Electronic operating system	Up to 277 V

VII. Auxiliary contact arrangements

	Left side mounted	Right side mounted	Top mounted
0 -	-	-	-
4 -	-	-	2 NO + 2 NC
5 -	1 NO + 1 NC	-	-
6 -	1 NO + 1 NC	1 NO + 1 NC	-
7 -	2 NO + 2 NC	2 NO + 2 NC	-

VIII. Suffix letters and/or numbers specified commercial variations

-.... - Any other commercial variation

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Nomenclature breakdown **Confirmation No.: 3343**

Overview series 3UF70..

3UF70	**0**	**0**	**-1**	**A**	**A**	**0**	**0**	**-0**
I	II	III	IV	V	VI	VII	VIII	IX

I. Basic Type

3UF70 - Basic unit

II. Device version

	Interface (declared at Digit III)	Version	
0 -	*0*	Low-cost basic unit	GG1
1 -		Standard basic unit	GG2
2 -		Smart basic unit	GG0
1 -	*1*	PROFINET basic unit	GG3
2 -		Smart-GG-PN ti-grey	GG0_PNB
1 -	*2*	Modbus-RTU basic unit	GG2_MBR

III. Interface hardware

0 - PROFIBUS-DP
1 - PROFINET
2 - Modbus-RTU

IV. Connection technology

1 - Screw terminal

V. Firmware

A - Standard

VI. Supply voltage

B - DC 24 V
U - UC 110… 240 V

VII. Input / Output

	Device version (declared at Digit II)	Input	Output
0 -	*0*	4	3
	1	4	3
	2	4	2

VIII. Housing colour

0 - Light grey
1 - Ti-grey

IX. Function status

0 - Function status 1

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Nomenclature breakdown **Confirmation No.: 3343**

Overview series 3UF71..

3UF71	**0**	**0**	**-1**	**A**	**A**	**0**	**0**	**-0**
I	II	III	IV	V	VI	VII	VIII	IX

I. Basic Type

3UF71 - Current measuring module for use with 3UF70..

II. Device version

0 - Current measuring module
1 - Current-/ voltage measuring module
5 - Decoupling module (DCM)

III. Current range

0 - Depending on system interface (decoupling module)
3 - 20… 200 A
4 - 63… 630 A

IV. Connection technology

1 - Screw terminal

V. Design

A - Straight through transformer
B - Bus bar transformer

VI. Firmware

A - Standard

VII. Input / Output

0 - 0 inputs / 0 outputs

VIII. Housing colour

0 - Light grey

IX. Function status

0 - Function status 1

SIEMENS

Nomenclature breakdown

Confirmation No.: 3343

Overview series 3RB22../3RB23../3RB24..

3RB22	**8**	**3**	**-4A**	**A**	**A**	**1**
I	II	III	IV	V	VI	VII

I. Basic Type

3RB22 -	Electronic Overload relay with monostable relay output
3RB23 -	Electronic Overload relay with bistable relay output
3RB24 -	Electronic Overload with IO Link and monostable relay output

II. Size

8 -	For all sizes

III. Reset type

3 -	Manual or automatic or remote reset

IV. Class settings

-4A -	Adjustable 5, 10, 20, 30

V. Terminals

A -	Screw terminals
C -	Cage Clamp

VI. Mounting

1 -	Separate mounting

Overview series 3RB29..

3RB29	**5**	**6**	**-2**	**T**	**H**	**2**
I	II	III	IV	V	VI	VII

I. Basic Type

3RB29 -	Current measuring module for use with 3RB22, 3RB23 or 3RB24

II. Size

5 -	S6
6 -	S10 / S12

III. Type of accessory

6 -	Current detection module

IV. Type

2 -	For high feature (3RB22../3RB23../3RB24..)

V. Setting Range

T -	20… 200 A
W -	63… 630 A

VI. Construction of Current transformer

G -	Straight-through current transformer
H -	Current transformer with bus bars

VII. Condition of installation

2 -	For mounting onto contactor and stand-alone intstallation

SIEMENS

Technical data **Confirmation No.: 3343**

Table: load feeders

Test: 9.3.4 Performance under short-circuit conditions

The tables below show all possible combinations.
Every operating voltage of the contactor is possible.
According to manufacturer's operating manual connection bars or cables can be used for the connection of circuit breaker and contactor.
The installation of the listed combinations has to be done according to manufacturer's instructions.
Listed contactors cover contactors of the same size and same short circuit rating, but higher rated current.
The tables show only the current measuring modules series 3UF7 and 3RB29. Additional the according basic unit series 3UF7 or 3RB22/23/24 is required.
Instead of a current measuring module series 3UF710 a current/voltage measuring module series 3UF711 also can be used.

Class 10:
U_e = 400 V, Iq = 150kA, direct starter, Coordination type 1 = type 2 with 3VA..:

Ie AC3		Circuit Breaker [2]		Contactor	Overload relay	Setting range	Max	Iq	"r"
IE1/2 [A]	IE3 [A]	MLFB/Order No.	In [A]	MFLB/Order No.	MFLB/Order No.	[A]	I_i/I_n [1]	[kA]	[kA]
115	115	3VA22 16-7MS32	160	3RT10 54-6AP36	3UF7103-1.. 3RB29 56-2T..	20 -200	9,5	150	5
150	140	3VA22 16-7MS32	160	3RT10 55-6AP36			10	150	10
185	175	3VA22 20-7MS32	200	3RT10 56-6AP36			10	150	10
225	225	3VA23 25-7MS32	250	3RT10 64-6AP36	3UF7104-1.. 3RB29 66-2W..	63 - 630	9	150	10
225	225	3VA23 25-7MS32	250	3RT12 64-6AP36			9	150	10
265	265	3VA24 40-7MS32	400	3RT10 65-6AP36			7	150	10
265	265	3VA24 40-7MS32	400	3RT12 65-6AP36			7	150	10
300	300	3VA24 40-7MS32	400	3RT10 66-6AP36			8	150	10
300	300	3VA24 40-7MS32	400	3RT12 66-6AP36			8	150	10
400	400	3VA24 50-7MS32	500	3RT10 75-6AP36	3UF7104-1.. 3RB29 66-2W..	63 - 630	8,5	150	18
400	400	3VA24 50-7MS32	500	3RT12 75-6AP36			8,5	150	18
500	440	3VA24 50-7MS32	500	3RT10 76-6AP36			10	150	18
500	440	3VA24 50-7MS32	500	3RT12 76-6AP36			10	150	18

1) I_i = Instantaneous Pickup of 3VA
2) Motor switching operations with circuit breaker are not allowed.

SIEMENS

Technical data

Confirmation No.: 3343

Class 20:
U_e = 400 V, Iq = 150kA, direct starter, Coordination type 1 = type 2 with 3VA..:

Ie AC3 IE1/2 [A]	Ie AC3 IE3 [A]	Circuit Breaker [2] MLFB/Order No.	In [A]	Contactor MFLB/Order No.	Overload relay MFLB/Order No.	Setting range [A]	Max I_i/I_n [1]	Iq [kA]	"r" [kA]
63	63	3VA2163-7MS32	63	3RT10 54-6AP36	3UF7103-1.. / 3UF7113-1.. / 3RB2956-2T..	20 - 200	12	150	5
80	80	3VA2110-7MS32	100	3RT10 54-6AP36			10	150	5
90	90	3VA2216-7MS32	160	3RT10 55-6AP36			10	150	5
120	120	3VA2216-7MS32	160	3RT10 56-6AP36			10	150	5
140	140	3VA2216-7MS32	160	3RT10 64-6AP36	3UF7104-1.. / 3UF7114-1.. / 3RB2966-2W..	63 - 630	11	150	10
150	150	3VA2220-7MS32	200	3RT10 64-6AP36			9	150	10
180	180	3VA2325-7MS32	250	3RT12 64-6AP36			9,5	150	10
180	180	3VA2325-7MS32	250	3RT10 65-6AP36			10	150	10
225	225	3VA2325-7MS32	250	3RT12 64-6AP36			9	150	10
210	210	3VA2325-7MS32	250	3RT10 66-6AP36			12,5	150	10
250	250	3VA2325-7MS32	250	3RT10 75-6AP36			13	150	10
250	250	3VA2325-7MS32	250	3RT12 65-6AP36			11,5	150	10
300	300	3VA2440-7MS32	400	3RT12 66-6AP36			8	150	10
350	350	3VA2440-7MS32	400	3RT10 76-6AP36			12	150	18
370	370	3VA2450-7MN32 [3]	500	3RT12 75-6AP36			9	150	18
440	440	3VA2450-7MN32 [3]	500	3RT12 76-6AP36			9	150	18

1) I_i = Instantaneous Pickup of 3VA
2) Motor switching operations with circuit breaker are not allowed.
3) Only with Ir setting to maximum.

SIEMENS

Technical data

Confirmation No.: 3343

Class 30:
U_e = 400 V, Iq = 150kA, direct starter, Coordination type 1 = type 2 with 3VA..:

Ie AC3 IE1/2 [A]	Ie AC3 IE3 [A]	Circuit Breaker [2] MLFB/Order No.	In [A]	Contactor MFLB/Order No.	Overload relay MFLB/Order No.	Setting range [A]	Max I_i/I_n [1]	Iq [kA]	"r" [kA]
69	69	3VA2110-7MS32	100	3RT10 54-6AP36	3UF7103-1.. / 3UF7113-1.. / 3RB2956-2T..	20 - 200	11	150	5
80	80	3VA2110-7MS32	100	3RT10 55-6AP36			9	150	5
90	90	3VA2216-7MS32	160	3RT10 55-6AP36			10	150	5
111	111	3VA2216-7MS32	160	3RT10 56-6AP36			9	150	5
150	150	3VA2220-7MS32	200	3RT10 65-6AP36	3UF7104-1.. / 3UF7114-1.. / 3RB2966-2W..	63 - 630	7	150	10
180	180	3VA2325-7MS32	250	3RT10 66-6AP36			10	150	10
190	190	3VA2325-7MS32	250	3RT12 65-6AP36			10	150	10
220	220	3VA2325-7MS32	250	3RT10 75-6AP36			10	150	10
225	225	3VA2325-7MS32	250	3RT12 66-6AP36			10	150	10
250	250	3VA2325-7MS32	250	3RT10 76-6AP36			10	150	10
300	300	3VA2440-7MS32	400	3RT10 76-6AP36			11	150	10
300	300	3VA2440-7MS32	400	3RT10 76-6AP36			11	150	10
316	316	3VA2440-7MS32	400	3RT12 75-6AP36			10,5	150	10
370	370	3VA2450-7MQ32 [3]	500	3RT12 76-6AP36			10	150	18

1) I_i = Instantaneous Pickup of 3VA
2) Motor switching operations with circuit breaker are not allowed.
3) Only with Ir setting to maximum.

SIEMENS

Technical data

Confirmation No.: 3343

Class 40:
U_e = 400 V, Iq = 150kA, direct starter, Coordination type 1 = type 2 with 3VA..:

Ie AC3 IE1/2 [A]	Ie AC3 IE3 [A]	Circuit Breaker [2] MLFB/Order No.	In [A]	Contactor MFLB/Order No.	Overload relay MFLB/Order No.	Setting range [A]	Max I_i/I_n [1]	Iq [kA]	"r" [kA]
65	65	3VA2110-7MS32	100	3RT10 55-6AP36	3UF7103-1.. / 3UF7113-1.. / 3RB2956-2T..	20 - 200	8,5	150	5
74	74	3VA2110-7MS32	100	3RT10 55-6AP36			7,5	150	5
93	93	3VA2216-7MS32	160	3RT10 56-6AP36			8	150	5
105	105	3VA2216-7MS32	160	3RT10 64-6AP36			7	150	5
150	150	3VA2325-7MS32	250	3RT10 66-6AP36	3UF7104-1.. / 3UF7114-1.. / 3RB2966-2W..	63 - 630	11	150	10
190	190	3VA2325-7MS32	250	3RT10 75-6AP36			10	150	10
210	210	3VA2325-7MS32	250	3RT12 76-6AP36			9	150	10
250	250	3VA2440-7MS32	400	3RT10 76-6AP36			11	150	10
316	316	3VA2440-7MS32	400	3RT12 76-6AP36			9	150	18
316	316	3VA2440-7MS32	400	3RT10 76-6AP36			9	150	18

1) I_i = Instantaneous Pickup of 3VA
2) Motor switching operations with circuit breaker are not allowed.

SIEMENS

Prüf-Nr./Q-Nr.: *Certificate No.:* **3382**

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

Ort: *Place:* **Amberg** Tag: *Date:* **2017-04-06**

Anlagen: *Enclosures:* **Product Description 3382**

Typprüfbescheinigung / *Type Test Certificate*

Erzeugnis / *Product:* **Motormanagement System SIMOCODE pro**

Typ: *Type:* **3UF7**

Tech. Daten: *Specification:* **$U_{e\ max}$ = 690V, 50/60 Hz**
I_e = 0.3A – 630A

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

Art der Prüfung / *Type of test:* **Type Test**

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

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

Angewandte Prüfbestimmungen / *Test specifications applied:*
IEC 60068-2-6 (2007-12)
IEC 60068-2-27 (2008-02)
IEC 60068-2-47 (2005-04)
SN 31205 (2016-03)

Durchgeführte Prüfungen / *Tests conducted:*
3m6, vibration, sweep and shock

Prüfergebnis / *Test results:*
All requirements of the test specification are met.

Bemerkungen / *Remarks:* **Issued: 2017-04-06**

i.V.
DF CP R&D VC Mr. Hartinger

i.V.
DF CP R&D PME Mr. Meier

SIEMENS

Product description

Certificate No.: 3382

Type designation: *3UF7...*

Manufacturer: *Siemens AG, DF CP R&D-MD*
Werner–von–Siemens-Str. 48, 92220 Amberg

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

SIEMENS

Nomenclature breakdown **Certificate No.: 3382**

3UF70	0	0	-1	A	B	0 ..
I	II	III	IV	V	VI	VII VIII

I. Basic Type
3UF70 - Basic unit

II. Functions
0 - standard version
1 - extended version
2 - Basic Unit SIMOCODE pro S

III. Manufacturers identification
0 - ProfiBus-DP
1 - ProfiNet
2 - Modbus RTU
3 - EtherNet/IP

IV. Terminals
-1 - Screw terminal

*

V. Software
A - Standard

VI. Rated control voltage
B - 24 V d.c.
U - 110 to 240 V a.c. / d.c.

VII. Input and Output for Functions 0 and 1
0 - 4 inputs and **3** outputs

VII. Input and Output for Functions 2
0 - 4 inputs and **2** outputs

VIII. Manufacturers identification
.. - ..

SIEMENS

Nomenclature breakdown **Certificate No.: 3382**

Series: 3UF7

3UF71	0	0		-1	A	A	..
I	II	III		IV	V	VI	VII

I. Basic Type
- 3UF71 - Current measuring unit

II. Functionality
- 0 - Current measuring module
- 1 - Current and voltage measuring module

III. Current range for 3UF710.. and 3UF711.-....0-0
- 0 - 0.3 to 3 A
- 1 - 2.4 to 25 A
- 2 - 10 to 100 A
- 3 - 20 to 200 A
- 4 - 63 to 630 A

III. Current range for 3UF711.-....1-0
- 0 - 0.3 to 4 A
- 1 - 3 to 40 A
- 2 - 10 to 115 A
- 3 - 20 to 200 A
- 4 - 63 to 630 A

IV. Manufacturers Identification
- -1 - Standard

V. Construction of Current transformer
- A - straight-through current transformer
- B - current transformer with bus bars

VI. Firmware
- A - Standard

VII. Manufacturers Identification
- .. - Standard

SIEMENS

Nomenclature breakdown **Certificate No.: 3382**

Series: 3UF7

3UF76	0	0	-	1	A	B	0	1	-	0
I	II	III		IV	V	VI	VII	VIII		IX

I. Basic Type
3UF76 - Multifunction module, for use with 3UL23

II. Version
0 – Smart module

III. Interface module
0 – Systeminterface SIMOCONNECT

IV. Terminals
1 – Screw terminals

V. Firmware
A – Standard

VI. Input Voltage
B – 24V dc
U – 110-240V ac/dc

VII. Input / Output
0 – 4 Inputs / 2 outputs

VIII. Housing
1 – Titangrey

IX. Function version
0 – Functions version 1

SIEMENS

Technical data **Certificate No.: 3382**

See type test certificate according to product standard.

Type Approval Certificate Extension

This is to certify that Certificate No. 07/20046 (E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Siemens AG
PLACE OF PRODUCTION	DF CP Werner-von-Siemens-Str. 48 92224 Amberg Germany
DESCRIPTION	Sirius 3UF7 – Motor Management and Control Devices SIMOCODE pro
TYPES	3UF70 basic units 3UF71 current and current-/voltage measuring modules 3UF72 operator panels Expansion modules: 3UF73 digital modules 3UF74 analog modules 3UF75 ground fault modules 3UF77 temperature modules 3UF7150 decoupling modules 3UF7600 multifunctional module for use with 3UL23 Accessories: 3UF79, 3RP19, 3RB19, 3RT19

Certificate No.	07/20046 (E2)
Issue Date	15 June 2015
Expiry Date	07 November 2017
Sheet	1 of 2

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register

APPLICATION	Marine applications for use in environmental categories ENV1, ENV2 and ENV3 (general power distribution zone) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002.
ADDITIONAL TEST	Low temperature (-25°C/16hrs)
SPECIFIED STANDARD	IEC 60947-4-1: 09-2009, IEC 60947-5-1: 07-2009 and IEC 60947-8: 10-2011

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. HTS/ETS 31878-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 07/20046 (E1) to which this extension should be attached.

Certificate No.	07/20046 (E2)
Issue Date	15 June 2015
Expiry Date	07 November 2017
Sheet	2 of 2

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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Is a subsidiary of Lloyd's Register Group

SIEMENS

A0204.01

Confirmation

Bestätigung

Product identification:
Produktbezeichnung

Fused load feeders consisting of, *Sicherungbehaftete 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

Sicherungsbehaftete 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 sicherungsbehaftete 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.

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

Short-circuit protection up to 690 V / 100 kA (contactors ≥ 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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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.	Iu	Io	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 assembly	Through hole technology	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
			Screw terminals	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 assembly	Through hole technology	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			Screw terminals	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
			Screw termi-nals	50	50	50	50	50	50	50	50	50
		3RT2045		50	50	50	50	50	50	50	50	50
		3RT2046		50	50	50	50	50	50	50	50	50
		3RT2047		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
			Screw termi-nals	115	115	115	100	100	100	100	100	100
		3RT2045		80	80	58	63	63	58	54	54	54
		3RT2046		95	95	78	65	65	65	56	56	56
		3RT2047		110	110	95	67	67	67	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
			Screw termi-nals	200	200	200	200	200	200	200	200	200
		3RT1054		115	115	115	81.7	81.7	81.7	69	69	69
		3RT1055		150	150	150	107	107	107	90	90	90
		3RT1056		185	185	170	131	131	131	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 assembly	Screw terminals	250	250	250	250	250	250	250	250	250
		3RT1064		225	225	225	160	160	160	135	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 assembly	Screw terminals	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	200	125
			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	–	400
		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	–	400
		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.

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]
				Type of coordination[2]
Article No.	Setting range [A]	Article No.	Article No.	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 coordination[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		

SIEMENS

A0242

Confirmation

Bestätigung

Product identification:
Produktbezeichnung

Fuseless Load Feeders
Sicherungslose Verbraucherabzweige
3VA1.. + 3RT2.4 + 3UF70/71.. or 3RB22../3RB23../3RB24../3RB29..

Manufacturer:
Hersteller

Siemens AG, DF CP

Address:
Anschrift

DE-92220 Amberg

Fuseless Load Feeders Size S3 coordination type 1 and 2 according IEC 60947-4-1 at 400V

Sicherungslose Verbraucherabzweige Bgr. S3, Zuordnungsart 1 und 2 nach IEC 60947-4-1 bei 400V

We confirm that the fuseless Load Feeders Size S3, mentioned above consisting of circuit breakers 3VA1, contactors 3RT2.4 and overload relays 3UF70/71 or 3RB22/3RB23/3RB24/3RB29 corresponding to attached annex and in compliance with the installation guidelines fulfill the conditions for the coordination type 1 and 2 at 400V mentioned in the enclosures according to IEC 60947-4-1, Edition 3.1 (07-2012).

Hiermit bestätigen wir, dass oben genannte sicherungslose Verbraucherabzweige Bgr. S3, bestehend aus Leistungsschalter 3VA1, Schütze 3RT2.4 und Überlastrelais 3UF70/71 oder 3RB22/3RB23/3RB24/3RB29, wie in den beigefügten Tabellen aufgelistet und unter Einhaltung der entsprechenden Aufbaurichtlinien die Anforderung der Zuordnungsart 1 und 2 bei 400V nach IEC 60947-4-1, Edition 3.1 (07-2012) erfüllen.

Siemens Aktiengesellschaft
DF CP R&D
92220 Amberg

2017-03-29 Amberg
date of issue place

SIEMENS

Product description

Confirmation No.: A0242

Type designation: *3VA1.. + 3RT2.4 + 3UF70/71.. or 3RB22../3RB23../3RB24../3RB29..*

Manufacturer: *Siemens AG, Low Voltage*
Siemensstraße 10, 93055 Regensburg

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

Production site: *OEZ s.r.o.*
Sedivska 339, 561 51 LETOHRAD
CZECH REPUBLIC

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

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

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Nomenclature breakdown

Confirmation No.: A0242

Overview series 3VA..

3VA1	**1**	**80**	**-5**	**MH**	**3**	**6**	**-….**
I	II	III	IV	V	VI	VII	VIII

I. Basic type

3VA1 - SENTRON nG Circuit Breaker for general applications

II. Frame size

1 - Up to 80 A

III. Rated current

32 - 32 A
40 - 40 A
50 - 50 A
63 - 63 A
80 - 80 A

IV. AIC-level

5 - Class M 55kA
6 - Class H 70kA

V. Trip unit: Characteristic curve, type

MH- TM120M AM Starter protection

VI. Poles

3 - 3 Poles

VII. Connection technology

6 - Front side cable connection

VIII. Others

…. - Manufacturer’s identification

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Nomenclature breakdown

Confirmation No.: A0242

Overview series 3RT20..

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

I. Basic type

3RT20 - Motor contactor, 3NO main contacts

II. Frame size and rated power at Ue 400V

45 -	S3	37 kW
46 -	S3	45 kW
47 -	S3	55 kW

III. Connection technology

1 -	Main contacts:	Screw terminal
	A1/A2:	Screw terminal
2 -	Main contacts:	Screw terminal w/o box terminal
	A1/A2:	Spring terminal
3 -	Main contacts:	Screw terminal
	A1/A2:	Spring terminal
6 -	Main contacts:	Screw terminal w/o box terminal
	A1/A2:	Screw terminal

IV. Operating system

A - AC operating system
B, H, M - DC operating system
F, J, V - DC operating system with integrated diode
G - DC operating system with integrated bridge rectifier for AC control voltage
P - AC operating system with integrated suppressor diode
S, U - DC operating system with integrated suppressor diode
C, D, E, I, L,
N, O, Q, R, T,
W, X, Y, Z - Identifies factory assembled EMC protective device

V. Operating voltage

A4 to U0- 24 V through 600 Vac or 12 V through 250 Vdc

VI. Auxiliary contact arrangements

0 - No auxiliary contact
1 - 1 normally open
2 - 1 normally closed
4 - 2 normally open and 2 normally closed
5 - 1 normally open and 1 normally closed
6 - 2 normally open and 2 normally closed
8 - any other, individual auxiliary contact arrangements

VII. Suffix letters and/or numbers specified commercial variations

- .... - any other commercial variation

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Nomenclature breakdown

Confirmation No.: A0242

Overview series 3UF70..

3UF70	**1**	**0**	**-1**	**A**	**B**	**0**	**.-.**
I	II	III	IV	V	VI	VII	VIII

I. Basic Type

3UF70 - Basic unit

II. Functions

0 - Standard version
1 - Extended version
2 - Basic Unit SIMOCODE pro S

III. Interface hardware

0 - PROFIBUS-DP
1 - PROFINET
2 - Modbus-RTU
3 - EtherNet/IP

IV. Connection technology

1 - Screw terminal

V. Firmware

A - Standard

VI. Supply voltage

B - DC 24 V
U - UC 110 … 240 V

VII. Input / Output

	Device version (declared at Digit II)	Input	Output
0 -	*0*	4	3
	1	4	3
	2	4	2

VIII. Manufacturers identification

.-. - …

Accessories:

3UF7930-0AA00-0	Connection cable flat;length 0,025 m
3UF7931-0AA00-0	Connection cable flat;length 0,10 m
3UF7935-0AA00-0	Connection cable flat;length 0,30 m
3UF7932-0AA00-0	Connection cable flat;length 0,50 m
3UF7932-0BA00-0	Connection cable round;length 0,50 m
3UF7937-0BA00-0	Connection cable round;length 1,00 m
3UF7933-0BA00-0	Connection cable round;length 2,50 m

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Nomenclature breakdown

Confirmation No.: A0242

Overview series 3UF71..

3UF71	**0**	**2**	**-1**	**A**	**A**	**0**	**.-.**
I	II	III	IV	V	VI	VII	VIII

I. Basic Type

3UF71 - Current measuring module for use with 3UF70..

II. Device version

0 - Current measuring module
1 - Current- / voltage measuring module

III. Current range

2 - 10 … 115 A if VIII = 1-.
2.-. 10 … 100 A if VIII = 0-.

IV. Connection technology

1 - Screw terminal

V. Design

A - Straight through current transformer

VI. Firmware

A - Standard

VII. Input / Output

0 - 0 inputs / 0 outputs

VIII. Manufacturers identification

.-. - …

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Nomenclature breakdown

Confirmation No.: A0242

Overview series 3RB22../3RB23../3RB24..

3RB22	**8**	**3**	**-4A**	**A**	**A**	**1**
I	II	III	IV	V	VI	VII

I. Basic Type

3RB22 -	Electronic Overload relay with monostable relay output
3RB23 -	Electronic Overload relay with bistable relay output
3RB24 -	Electronic Overload with IO Link and monostable relay output

II. Size

8 -	For all sizes

III. Reset type

3 -	Manual or automatic or remote reset

IV. Class settings

-4A -	Adjustable 5, 10, 20, 30

V. Terminals

A -	Screw terminals
C -	Spring terminals

VI. Mounting

1 -	Separate mounting

Overview series 3RB29..

3RB29	**0**	**6**	**-2**	**J**	**G**	**1**
I	II	III	IV	V	VI	VII

I. Basic Type

3RB29 -	Current measuring module for use with 3RB22, 3RB23 or 3RB24

II. Size

0 -	S00/S0 and S2/S3

III. Type of accessory

6 -	Current detection module

IV. Type

2 -	For high feature (3RB22../3RB23../3RB24..)

V. Setting Range

J -	10 … 100 A

VI. Construction of Current transformer

G -	Straight-through current transformer

VII. Condition of installation

1 -	Separate mounting

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Technical data **Confirmation No.: A0242**

Table: load feeders

Test: 9.3.4 Performance under short-circuit conditions

The tables below show possible combinations.
According to manufacturer's operating manual only cables can be used for the connection of circuit breaker and contactor.
The installation of the listed combinations has to be done according to manufacturer's instructions.
Listed contactors cover contactors of the same size and same short circuit rating, but higher rated current.
The tables show only the current measuring modules series 3UF71 and 3RB29. Additional the according basic unit series 3UF70 or 3RB22/23/24 is required.
Instead of a current measuring module series 3UF710 a current/voltage measuring module series 3UF711 also can be used.

Class 10E:
U_e = 400 V, Iq = 100 kA, direct and reversing starter, Coordination type 1 = type 2 :

Standard three-phase motor 4-pole at 400 V AC [1]		Motor starter protector [2] (without overload protection)			Contactor		Overload relay (electronic)			Max. permitted setting range overload release
Standard Output P	Motor Current I		Instantaneous Pickup (adjustable) Ii / In [3]	Max.-setting for Ii / In [3]		Size		Setting range	Size	Max. current load feeder in AC3-operation of combination (IE3)
[kW]	[A]	MLFB / Article No.	[A]		MLFB / Article No.		MLFB / Article No.	[A]	[mm]	[A]
11	22	3VA1132-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	26
15	29	3VA1140-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	33
18,5	36	3VA1150-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	41
22	40	3VA1150-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	41
22	40	3VA1163-5MH36-0AA0	7...16	16	3RT2046-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	45
30	55	3VA1180-5MH36-0AA0	7...16	15	3RT2047-1AP00	S3	3UF71x2-1AA00-0 / 3RB2906-2JG1	10 - 100	55	60

SIEMENS

Technical data

Confirmation No.: A0242

Class 10E:
U_e = 400 V, Iq = 100 kA, direct and reversing starter, Coordination type 1 = type 2 :

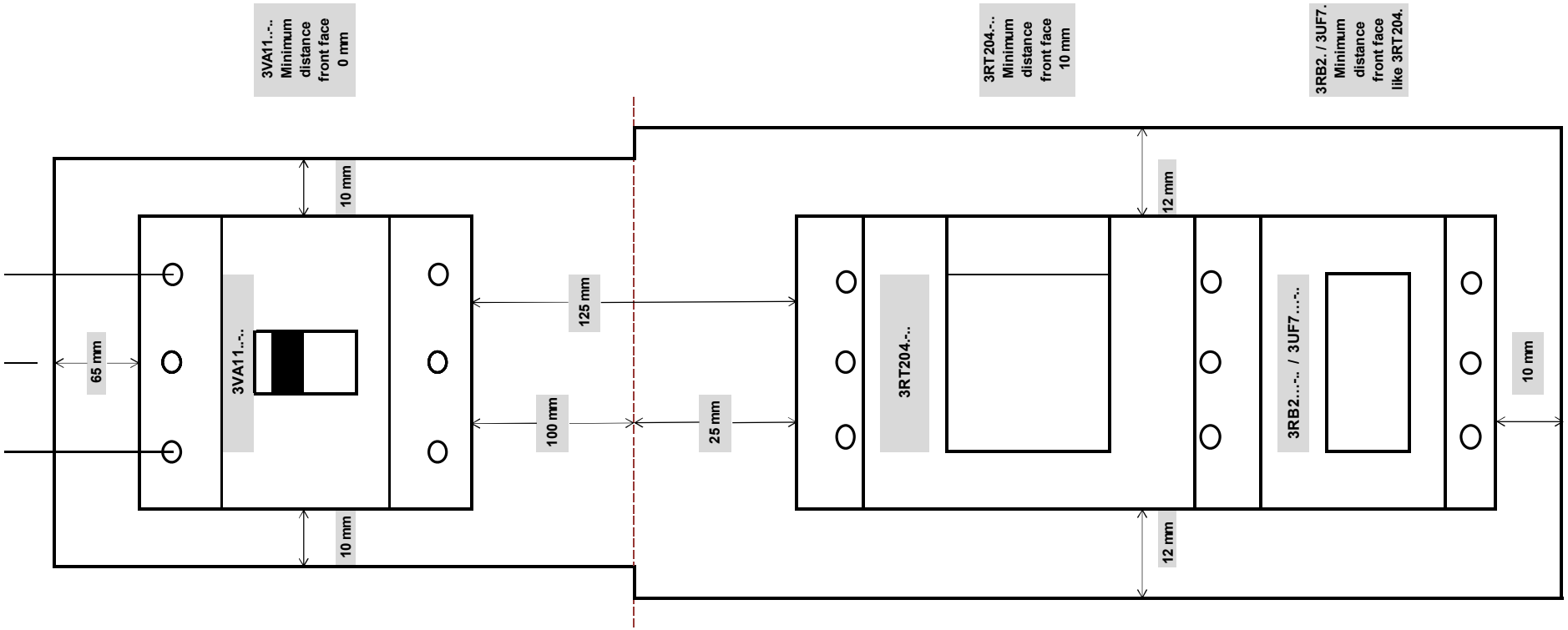
Standard three-phase motor 4-pole at 400 V AC [1]		Motor starter protector [2] (without overload protection)			Contactor		Overload relay (electronic)			Max. permitted setting range overload release
Standard Output P	Motor Current I		Instantaneous Pickup (adjustable) Ii / In [3]	Max.-setting for Ii / In [3]		Size		Setting range	Size	Max. current load feeder in AC3-operation of combination (IE3)
[kW]	[A]	MLFB / Article No.	[A]		MLFB / Article No.		MLFB / Article No.	[A]	[mm]	[A]
11	22	3VA1132-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	26
15	29	3VA1140-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	33
18,5	36	3VA1150-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	41
22	40	3VA1150-5MH36-0AA0	7...16	16	3RT2045-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	41
22	40	3VA1163-5MH36-0AA0	7...16	16	3RT2046-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	45
30	55	3VA1180-5MH36-0AA0	7...16	15	3RT2047-1AP00	S3	3UF7112-1AA01-0	10 - 115	55	60

1) Guide value for 4-pole standard motors at 400 V AC, 50 Hz. Selection depends on the concrete startup and rated data of the protected motor.
2) Motor switching operations with circuit breaker are not allowed.
3) I_i = Instantaneous Pickup of 3VA.

SIEMENS

Technical data **Confirmation No.: A0242**

Installation guidelines for fuseless load feeder combinations



General notes: Separate mounting of 3RB2.. / 3UF7.. also allowed.
In this case minimum distance between contactor and overload relay: 10 cm distance and a cable length of 15 cm has to be kept.
Minimum distance to front face still equal.

Type Approval Certificate

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

This certificate supersedes certificate number 07/20046 (E2) issued on 15 June 2015 which is hereby cancelled.

This certificate is issued to:

PRODUCER

Siemens AG
GWA
Werner-von-Siemens-Str. 48
92224 Amberg
Germany

DESCRIPTION

Sirius 3UF7 – Motor Management and Control Devices SIMOCODE pro

TYPES

3UF70	1	1	-	1A	.	00	..
I	II	III		IV	V	VI	VII

I. Basic Type:
3UF70 - Basic unit

II. Functions
0 - Standard Version
1 - Extended version
2 - Basic Unit SIMOCODE pro S

Certificate No. 07/20046 (E3)

Issue Date 15 February 2017

Expiry Date 07 November 2017

Sheet 1 of 4

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

TYPES continued

III. Communication Interface
0 - Profibus-DP
1 - Profinet
2 - MOD-Bus
3 - EtherNet / IP

IV. Terminal-Version/Firmware
-1A - Screw-type terminals/ Standard-Firmware

V. Rated control voltage
B -24 V dc
U -110 to 240 V ac/dc

VI. Input and Output
0 - 4 inputs and 2 outputs

VII. Manufacturers identification
.. - Manufacturers identification

Accessories for 3UF7011:

3UF72.0-1AA00-0:	Operator Module for 3UF7
3UF793.-0.A00-0:	Connecting cable
3UF710.-1AA00-0:	Current Measuring Module
3UF7902-0AA00-0:	Initialization module
3UF793.-0CA00-0:	Connecting cable
3UF7910-0AA00-0:	Address module
3UF7920-0AA00-0:	Door adapter
3UF7950-0AA00-0:	Cover for connector
3UF7922-0AA00-0:	Adapter for operator panel
3RP1903:	Push-in lugs, for screw fixing

Certificate No. 07/20046 (E3)

Issue Date 15 February 2017

Expiry Date 07 November 2017

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Sheet 2 of 4

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register

TYPES continued

3UF71	0	0	-	1	A	A	..00
I	II	III		IV	V	VI	VII

I. Basic Type:
3UF71 – Current measuring unit

II. Functionality
0 - Current measuring module
1 - Current range I, Current and voltage measuring module V2
2 - Current range II, Current and voltage measuring module V 2 with pump dry-run protection

III. Current range
Current range I
0 - 0.3 to 3 A
1 - 2.4 to 25 A
2 - 10 to 100 A
3 - 20 to 200 A
4 - 63 to 630 A
Current range II
0 - 0.3 to 4 A
1 - 3 to 40 A
2 - 10 to 115 A
3 - 20 to 200 A
4 - 63 to 630 A

IV. Manufacturers identification
-1 - Standard

V. Construction of Current Transformer
A - straight through current transformer
B - current transformer with bus bar

Certificate No. 07/20046 (E3)

Issue Date 15 February 2017

Expiry Date 07 November 2017

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register

TYPES continued	VI. Firmware A - Standard VII. Manufacturers identification 00 - Current range I 01 - Current range II
APPLICATION	Marine applications for use in environmental categories ENV1, ENV2 and ENV3 (general power distribution zone) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002.
ADDITIONAL TESTS	Low temperature (-25°C/16hrs)
STANDARD	IEC 60947-4-1: 09-2009 IEC 60947-5-1: 07-2009 IEC 60947-8: 10-2011
RATINGS	Power supply: 24 Vdc 110-240 Vac/dc Current range: 0.3 - 630A

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

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

The Design Appraisal Document No. HTS/ETS 34824-17 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	07/20046 (E3)
Issue Date	15 February 2017
Expiry Date	07 November 2017
Sheet	4 of 4

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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DNV·GL

Certificate No:
E-13408
File No:
824.31
Job Id:
262.1-004292-4

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Monitoring Relay

with type designation(s)
SIMOCODE pro 3UF7

Issued to
Siemens AG, I IA CE
Amberg / Cham, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards
IEC 60947

Application :

For installations inside switchboard/enclosures onboard ships and offshore units.

This Certificate is valid until **2016-12-31**.
Issued at **Høvik** on **2014-10-30**

DNV GL local station: **Essen CMC Southern Germany**

Approval Engineer: **Nicolay Horn**

for **DNV GL**
Digitally Signed By: Laumann, Marit
Location: DNV Høvik, Norway
Signing Date: 2014-11-20

Marit Laumann
Head of Section

Certificate No: **E-13408**
File No: **824.31**
Job Id: **262.1-004292-4**

Product description

Motor management and control devices SIMOCODE pro 3UF7 according to size and power range as listed below. Max. voltage = 690 V. Insulation voltage 690 V or 1000 V*. Frequency = 50 / 60 Hz.
* See Application / limitation

Technical data:

Insulation of main circuit (Ui):	600 / 690 / 1000 V AC*
Rated impulse voltage (Uimp):	6 kV / 8 kV
Frequency:	50 - 60 Hz
Maximum operation voltage (Ue):	600 / 690 V AC*
Operational current (Ie):	Min. 0.3 A, Max 630 A
Prospective short circuit current ("r"):	1 kA / 18 kA
Conditional short circuit current (Iq):	50 kA / 100 kA
Ingress protection:	IP20 /IP 54 **
Ambient temperature range:	÷ 25 °C to + 60 °C

* See Application / limitation. ** Operator panel and Door adapter.

Basic Units 3UF70

3UF7000	SIMOCODE pro C, Basic Unit 1
3UF7010	SIMOCODE pro V, Basic Unit 2
37F7011	SIMOCODE pro V Basic Unit 3
3UF7020	SIMOCODE pro S, Basic Unit

Current and Current-/Voltage Measuring Modules 3UF71

3UF71.0	0,3 … 3 A
3UF71.1	2,4 … 25 A
3UF71.2	10 … 100 A
3UF71.3	20 … 200 A
3UF71.4	63 … 630 A

Operator Panels 3UF72

3UF7200	Operator panel
3UF7210	Operator panel with display

Expansion Modules:

3UF73	Digital Modules
3UF74	Analog Modules
3UF75	Ground Fault Modules
3UF76	Multifunctional Modues
3UF77	Temperature Modules
3UF7150	Decoupling Modules

Accessories:

3UF79	Connecting cables, Memory modules, Door adapters, Initoalization Module
3RP19, 3RB19	Mounting support
3RT19	Terminal Blocks, Covers

Application/Limitation

For installation inside switchboards/ enclosures onboard ships and offshore units.

The Siemens motor management controller is regarded as a component only. When the unit is used for control / protection purposes for motors no product certificate is required. If the unit is used for other control purposes a product certificate acc. to Pt.4 Ch.8 Sec.1 and Pt.4 Ch.9 Sec.1 A 202 can be required. Correct configuration and set up for each delivery to be tested during commissioning after installation.

For parts with Uimp = 6 kV the max. rated voltage is normally 600 V when used in an IT (ship) net. Applications up to 690 V (IT-net) are permitted if protective separation is not required. All parts are applicable for use in applications with directly earthed systems with rated voltage of 400/690 V Installation to be in accordance with the manufacturer's instructions. Not to be installed on or close to the bridge and on open deck.

Type Approval documentation

Technical info:
«Schaut nach dem Motor. Und hat den Prozess im Blick » brochure from Siemens
"Industrielle Schalttechnik" Katalogue News IC N – April 2012
Equipment under Test SIMOCODE pro 3UF7, issued August 2007.

Test Reports:
Siemens test report nos. 12022PMS issued 2012-05-28, 13-E005299-BM-A01 dated 2013-04-24, 13-E005299-BM-D01 dated 2013-04-25, 13-E005299-BM-G01 dated 2013-07-24 & 13-E005299-BM-G01 dated 29013-07-24, 10038TEs02 issued 2011-06-28, 11018TES issued 2012-08-23, . 11-E004643-BM-A1 dated 2011-04-11 & 11-E004643-BM-AB1 dated 2011-03-28. 12-E004855-BM-A01 & 12-E004855-BM-D01 dated 2011-11-15, 05022TEI issued 2005-03-17 and 07033TEs, issued July 2007, no. A&D ATS 6 / 05-M0601353-B1, issued November 2004, nos. 07-E002814-BM-B01, 07-E002810-BM-B01 & 07-E002809-BM-B01, issued May 2007, 07-E002809-BM-A01, issued July 2007. A&D ATS 6 / 05-M0601905-A1, issued March 2005, A&D ATS 6 / 05-M0601663-A1, issued December 2004, A&D ATS 6 / 05-M0601662-A1, issued December 2004.

TÛV tewst reportsnos. 69567-0038-1 ed. 2 & 69567-0038-2 ed. 3 dated 2010-11-02. 69567-00368-3 ed. 3 dated 2010-10-25.

Lovag test reports nos. 04020TEL & 04063TEL issued 2004-11-16, 04084TEL issued 2004-12-22, 06087TEL issued 2006-11-24.

Witness testing at Siemens.

Tests carried out

Type tests in accordance with IEC/EN60947-1 (2002-12), 60947-4-1(2004-06), 60947-5-1 (2003-11) and 60947-8 (2006-11), dry heat, damp heat, salt mist, vibration, high voltage, EMC, inclination, flame retardancy.

Marking of product

Manucfacturers label containing data and manufacturer's type number.

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:
- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE

DNV·GL

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.	**44 748 - 07 HH**
Company	**Siemens AG** **I IA CE** **Werner-von-Siemens-Str. 48** **92229 Amberg, GERMANY**
Product Description	**Motor Protection, Management and Control Device**
Type	**SIMOCODE pro 3UF7...**
Environmental Category	**C, EMC2**
Technical Data / Range of Application	**Motor overload protection device class 5 to 40** **Basic unit 3 UF70..: proC, proS, proV, proV PROFINET** **Rated control Voltage Us: 110 ... 240V AC/DC 50/60Hz or 24 V DC** **Degree of protection IP20** **Current and Current/Voltage Measuring Modules 3UF71..** **Current setting range: 0,3 - 3A; 2,4 - 25A; 10 - 100A; 20 - 200A; 63 - 630A** **Rated operational Voltage Ue: 690V** **Operator Panels 3 UF72..** **Fail-safe digital Modules: DM-F local 3UF7320** **DM-F PROFIsafe 3UF7330** **Extension Modules: Digitale Modules 3UF73** **Analog Modules 3UF74** **Ground Fault Modules 3UF75** **Multifunction Modules 3UF7600 for use with 3UL23** **Earth Fault Modules 3UF7510** **Temperature Modules 3UF77** **Decoupling Modules 3UF7150** **Accessories: 3UF79, 3RP19, 3RB19 and 3RT19**
Test Standard	**GL Guidelines for the Performance of Type Approvals Part 2, Edition 2012** **IEC 60947-4-1 (2005), IEC60947-5-1 (2003), IEC 60947-8 (2006)**
Documents	**Test summary Siemens Reg. No.: 13-1 ku 01-31\04, 13-1 ku 01-31/04 UF7, 11-1 ku 01-31/16 3UF7**
Remarks	**This certificate is issued on the basis of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007**

Valid until **2019-06-12**

Page **1** of **1**

File No. **I.L.04**

Hamburg, 2014-06-13

Type Approval Symbol GL

i.A. Arne Schaarmann

i.V. Harald Amberger

DNV GL

www.dnvgl.com

DNV·GL

Certificate No:
TAE00001KA

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Monitoring Relay

with type designation(s)
SIMOCODE pro 3UF7

Issued to
Siemens AG GWA
Amberg, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

This Certificate is valid until **2021-12-27**.
Issued at **Hamburg** on **2016-12-28**

DNV GL local station: **Augsburg**

Approval Engineer: **Harald Amberger**

for **DNV GL**
Digitally Signed By: Hartmann, Thomas
Location: DNV GL Hamburg, Germany
Signing Date: 2016-12-28 , on behalf of

Duy Nam Le
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

SIMOCODE 3UF7 Motor Management and Control Devices for low-voltage motors with constant speeds	
Ratings main circuit	
Rated insulation voltage U_i	690V; 1000V[1]
Rated operational voltage U_e	690V
Rated impulse withstand voltage U_{imp}	6kV; 8kV[1]
Rated frequency	50/60Hz
Current setting I_e	0,3A up to 630A
Inverse-time delayed electronic overload protection	CLASS 5 to 40
Ratings Basic- and Extension Moduls	
Rated insulation voltage U_i	300V
Rated impulse withstand voltage U_{imp}	4kV
Rated control supply voltage U_s	110 … 240V AC/DC; 50/60Hz; 24V DC

Basic units 3UF70	
3UF7000	SIMOCODE pro PROFIBUS
3UF7020	SIMOCODE pro S
3UF7010	SIMOCODE pro V
3UF7011	SIMOCODE pro V PROFINET
3UF7012	SIMOCODE pro V Modbus RTU
3UF7013	SIMOCODE pro V EtherNet / IP

Current measuring modules or current/voltage measuring modules		
	Current setting range I I_e	Current setting range II I_e[2]
3UF71.0	0,3 … 3A	0,3 … 4A
3UF71.1	2,4 … 25A	3,0 … 40A
3UF71.2	10 … 100A	10 … 115A
3UF71.3	20 … 200A	20 … 200A
3UF71.4	63 … 630A	63 … 630A

Modules, Operator panels	
3UF7150	Decoupling modules
3UF7200	Operator panel
3UF7210	Operator panel with display
3UF7300	Digital modules, Relay output: Monostable
3UF7310	Digital modules, Relay output: Bistable
3UF7320	DM-F Local fail-safe digital modules
3UF7330	DM-F PROFIsafe fail-safe digital modules
3UF7400	Analog Modules
3UF7510	Ground-fault modules
3UF7600	Multifunction modules
3UF7700	Temperature modules

Further ratings acc. manufacturer documentation.

[1] 3UF71.3 and 3UF71.4
[2] With pump dry-run protection

Accessories	
3UF793…	Connection cable
3UF794…	PC / PG, USB adapter cables
3UF7900…	Memory module
3UF7950…	Interface covers
3UF7960…	Connection Terminal for Profibus
3UF7910…	Addressing plug
3UF7920…	Door adapter
3RP1903…	Push-in lugs

Ratings and mounting locations according manufacturer documentation.

Application/Limitation

Location Classes:
Temperature: B, Humidity: B, Vibration: A, Enclosure: IP20, Operator panel and Door adapter IP54
EMC: A

For installation inside switchboards/ enclosures onboard ships and offshore units.
With Uimp=6kV; Overvoltage category II applies for applications in IT systems > 600 V.

Correct configuration and set up for each delivery to be tested during commissioning after installation.
Installation to be in accordance with the manufacturer's instructions.

Type Approval documentation

Type test certificate 2681k dated 2013-09-03
List of test reports no: 13-1 ku 01-31/04 3UF7 dated 2014-02-25
List of EMC test reports no: 13-1 ku 01-31/04 3UF7 dated 2014-02-25
EMV-Messprotokoll 16-E006686 dated 2016-06-02

Tests carried out

IEC 60947-4-1:2005, IEC 60947-5-1:2003, IEC 60947-8:2006, cold, dry heat, damp heat, vibration, flame retardancy, EMC

Marking of product

Manufacturers label containing data and manufacturers type number.

Name and place of manufacturer

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

Siemens s.r.o., odštěpný závod
Nízkonapěť ová spínací technika
Volanovská 516
541 01 Trutnov
Czech Republic

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable).
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out).
- Review of type approval documentation.
- Review of possible change in design, materials and performance.
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at least every second year.

END OF CERTIFICATE