SIEMENS

Data sheet 3RA2415-8XF31-1AF0

> Contactor assembly for star-delta (wye-delta) start AC-3, 5.5 kW/400 V, 110 V AC 50/60 Hz, 3-pole, Size S00 screw terminals electrical and mechanical interlock 3 NO integrated



product brand name product designation product type designation manufacturer's article number • 1 of the supplied contactor

- 2 of the supplied contactor • 3 of the supplied contactor
- of the supplied RS assembly kit
- of the supplied function module for wye-delta

SIRIUS

Contactor assembly for star-delta (wye-delta) start

3RA24

3RT2015-1AF01

3RT2015-1AF01

3RT2015-1AF01

3RA2913-2BB1

3RA2816-0EW20

General technical data

size of contactor product extension auxiliary switch shock resistance at rectangular impulse

at AC

at DC

shock resistance with sine pulse

• at AC

• at DC

mechanical service life (operating cycles)

· of contactor typical

• of the contactor with added auxiliary switch block typical

reference code according to IEC 81346-2

Substance Prohibitance (Date)

S00 No

6,7g / 5 ms, 4,2g / 10 ms 6,7g / 5 ms, 4,2g / 10 ms

10,5g / 5 ms, 6,6g / 10 ms 10,5g / 5 ms, 6,6g / 10 ms

10 000 000

10 000 000

10/01/2009

Ambient conditions

installation altitude at height above sea level maximum ambient temperature • during operation

• during storage

-25 ... +60 °C

Main circuit

number of poles for main current circuit number of NO contacts for main contacts number of NC contacts for main contacts operating voltage

• at AC-3 rated value maximum

operational current

• at AC-3 — at 400 V rated value

operating power

• at AC-3

- at 400 V rated value

2 000 m

-55 ... +80 °C

690 V

3

3

0

12 A

5.5 kW

 at 500 V rated value 	7.0 1/10
at 600 V rated value	7.2 kW
 — at 690 V rated value operating frequency 	9.2 kW
at AC-3 maximum	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
at 50 Hz rated value	110 V
at 60 Hz rated value	110 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	70.14
• at 50 Hz	56 VA
• at 60 Hz	51 VA
inductive power factor with closing power of the coil • at 50 Hz	0.8
● at 50 Hz	0.75
apparent holding power of magnet coil at AC	0.10
• at 50 Hz	10.4 VA
• at 60 Hz	8.6 VA
inductive power factor with the holding power of the	
coil	
• at 50 Hz	0.25
• at 60 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
 instantaneous contact contact reliability of auxiliary contacts 	3 < 1 error per 100 million operating cycles
UL/CSA ratings	Terror per 100 million operating cycles
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	7,000 / 1,000
design of the fuse link	
 for short-circuit protection of the main circuit 	
 — with type of coordination 1 required 	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
 — with type of assignment 2 required 	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A
 for short-circuit protection of the auxiliary switch 	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A fuse gG: 10 A
 for short-circuit protection of the auxiliary switch required 	
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gG: 10 A
 for short-circuit protection of the auxiliary switch required 	fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gG: 10 A
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm
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for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 0 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 6 mm 6 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 0 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 6 mm 6 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side for grounded parts	fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 6 mm 6 mm 6 mm
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for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side for grounded parts — backwards — backwards — upwards — at the side — downwards • for live parts	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side for grounded parts — backwards — backwards — at the side o for grounded parts — downwards — at the side o downwards — at the side o downwards o at the side o downwards o for live parts o forwards o for live parts o forwards o forwards o for live parts o forwards	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards — at the side for grounded parts — backwards — backwards — upwards — at the side — downwards • for live parts	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 68 mm 135 mm 145 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm 6 mm

- downwards 6 mm - at the side 6 mm

type of electrical connection

• for main current circuit • for auxiliary and control circuit

at contactor for auxiliary contacts

of magnet coil

type of connectable conductor cross-sections for main contacts

solid solid or stranded

• finely stranded with core end processing

type of connectable conductor cross-sections

• for auxiliary contacts

- solid or stranded

- finely stranded with core end processing

• at AWG cables for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (0,5 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14)

screw-type terminals

screw-type terminals

Screw-type terminals

Screw-type terminals

Safety related data

B10 value with high demand rate according to SN 31920 proportion of dangerous failures

• with low demand rate according to SN 31920 • with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529

1 000 000

40 %

75 % 100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Communication/ Protocol

product function bus communication protocol is supported AS-Interface protocol product function control circuit interface with IO link No No No

Certificates/ approvals **General Product Approval**

Declaration of Conformity

Test Certificates

Confirmation







Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

Railway



Confirmation

Vibration and Shock

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2415-8XF31-1AF0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2415-8XF31-1AF0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XF31-1AF0

 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

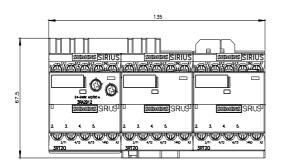
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2415-8XF31-1AF0&lang=en

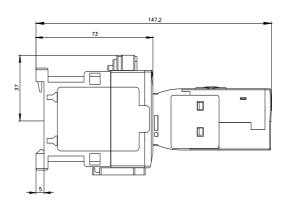
Characteristic: Tripping characteristics, I2t, Let-through current

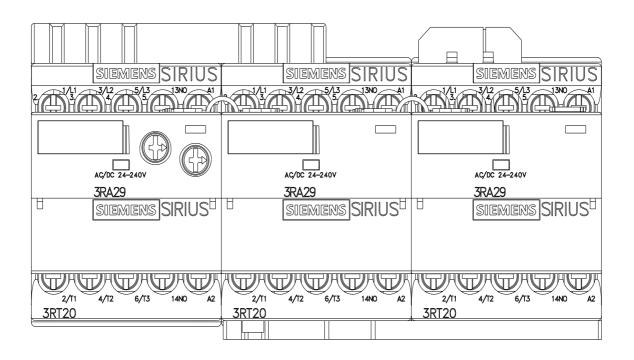
https://support.industry.siemens.com/cs/ww/en/ps/3RA2415-8XF31-1AF0/char

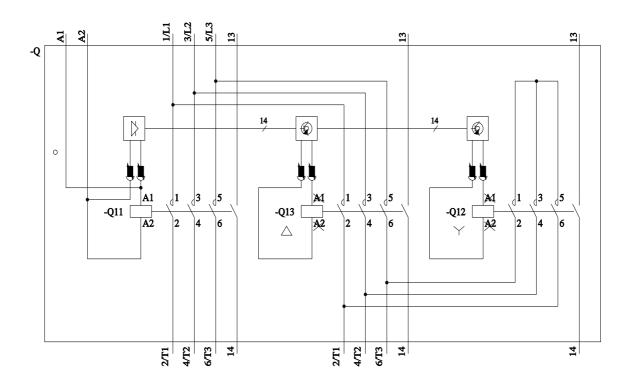
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2415-8XF31-1AF0&objecttype=14&gridview=view1









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