

Contactor assembly for star-delta (wye-delta) start AC-3, 22/30 kW/400 V, 230 V AC 50/60 Hz, 3-pole, size S2 screw terminals electrical and mechanical interlock 3 NO + 3 NC 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 circuits

SIRIUS  
 Contactor assembly for star-delta (wye-delta) start  
 3RA24

[3RT2035-1AL20](#)  
[3RT2035-1AL20](#)  
[3RT2026-1AL20](#)  
[3RA2933-2C](#)  
[3RA2816-0EW20](#)

### General technical data

<b>size of contactor</b>	S2
product extension auxiliary switch	No
<b>shock resistance at rectangular impulse</b>	
• at AC	11.8g / 5 ms, 7.4g / 10 ms
<b>shock resistance with sine pulse</b>	
• at AC	18.5g / 5 ms, 11.6g / 10 ms
<b>mechanical service life (switching cycles)</b>	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
<b>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibitance (Date)</b>	10/01/2014

### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C

### Main circuit

<b>number of poles for main current circuit</b>	3
<b>number of NO contacts for main contacts</b>	3
<b>number of NC contacts for main contacts</b>	0
<b>operating voltage</b>	
• at AC-3 rated value maximum	690 V
<b>operational current</b>	
• at AC-3	
— at 400 V rated value	65 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	22 kW
<b>operating frequency</b>	
• at AC-3 maximum	1 000 1/h

Control circuit/ Control	
<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage 1 at AC</b>	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b>	
• at 50 Hz	422 VA
• at 60 Hz	378 VA
<b>inductive power factor with closing power of the coil</b>	
• at 50 Hz	0.69
• at 60 Hz	0.65
<b>apparent holding power of magnet coil at AC</b>	
• at 50 Hz	36.4 VA
• at 60 Hz	35 VA
<b>inductive power factor with the holding power of the coil</b>	
• at 50 Hz	0.36
• at 60 Hz	0.39
Auxiliary circuit	
<b>number of NC contacts for auxiliary contacts</b>	
• instantaneous contact	3
<b>number of NO contacts for auxiliary contacts</b>	
• instantaneous contact	3
<b>contact reliability of auxiliary contacts</b>	< 1 error per 100 million operating cycles
UL/CSA ratings	
<b>contact rating of auxiliary contacts according to UL</b>	A600 / Q600
Short-circuit protection	
<b>design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A
• for short-circuit protection of the auxiliary switch required	fuse gG: 10 A
Installation/ mounting/ dimensions	
<b>mounting position</b>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>fastening method</b>	screw fixing
<b>height</b>	142 mm
<b>width</b>	177.5 mm
<b>depth</b>	223 mm
<b>required spacing</b>	
• with side-by-side mounting	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
• for grounded parts	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

## Connections/ Terminals

### type of electrical connection

- for main current circuit
- for auxiliary and control circuit
- at contactor for auxiliary contacts
- of magnet coil

screw-type terminals  
screw-type terminals  
Screw-type terminals  
Screw-type terminals

### type of connectable conductor cross-sections

- for main contacts
  - solid
  - solid or stranded
  - finely stranded with core end processing
- at AWG cables for main contacts

2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)  
2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)  
2x (1 ... 25 mm<sup>2</sup>), 1x (1 ... 35 mm<sup>2</sup>)  
2x (18 ... 2), 1x (18 ... 1)

### 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 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)  
2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)  
2x (20 ... 16), 2x (18 ... 14)

## Safety related data

B10 value with high demand rate according to SN 31920

1 000 000

### proportion of dangerous failures

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

40 %  
73 %

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

100 FIT

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

20 y

protection class IP on the front according to IEC 60529

IP20

touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

## Communication/ Protocol

product function bus communication

No

protocol is supported AS-Interface protocol

No

product function control circuit interface with IO link

No

## Certificates/ approvals

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

[Confirmation](#)



EG-Konf.



[Type Test Certificates/Test Report](#)



other

Dangerous Good

[Confirmation](#)

[Transport Information](#)

## Further information

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=3RA2434-8XF32-1AL2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2434-8XF32-1AL2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2434-8XF32-1AL2>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2434-8XF32-1AL2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2434-8XF32-1AL2&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2434-8XF32-1AL2/char>

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

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