



Reversing contactor assembly AC-3, 5.5 kW/400 V 110 V AC 50 Hz/120 V 60 Hz, 3-pole Size S0, Spring-type terminal electrical and mechanical interlock

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Reversing contactor assembly
<b>product type designation</b>	3RA23
<b>manufacturer's article number</b>	
<ul style="list-style-type: none"> <li>• 1 of the supplied contactor</li> <li>• 2 of the supplied contactor</li> <li>• of the supplied RH assembly kit</li> </ul>	<a href="#">3RT2024-2AK60</a> <a href="#">3RT2024-2AK60</a> <a href="#">3RA2923-2AA2</a>
<b>General technical data</b>	
<b>size of contactor</b>	S0
product extension auxiliary switch	Yes
<b>shock resistance at rectangular impulse</b>	
<ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>	7,5g / 5 ms, 4,7g / 10 ms 10g / 5 ms, 7,5g / 10 ms
<b>shock resistance with sine pulse</b>	
<ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>	11,8g / 5 ms, 7,4g / 10 ms 15g / 5 ms, 10g / 10 ms
<b>mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000 10 000 000
<b>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibitance (Date)</b>	10/01/2009
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	-25 ... +60 °C -55 ... +80 °C
<b>Main circuit</b>	
<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
operating voltage at AC-3 rated value maximum	690 V
operational current at AC-3	
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	12 A 12 A 9 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	5.5 kW

— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
● at AC-4 at 400 V rated value	5.5 kW
operating frequency 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	110 V
● at 60 Hz rated value	120 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	0.8 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b>	
● at 50 Hz	65 VA
<b>inductive power factor with closing power of the coil</b>	
● at 50 Hz	0.82
<b>apparent holding power of magnet coil at AC</b>	
● at 50 Hz	8.5 VA
<b>inductive power factor with the holding power of the coil</b>	
● at 50 Hz	0.25

### Auxiliary circuit

number of NO contacts for auxiliary contacts	
● per direction of rotation	1
● instantaneous contact	2
<b>contact reliability of auxiliary contacts</b>	< 1 error per 100 million operating cycles

### UL/CSA ratings

<b>full-load current (FLA) for 3-phase AC motor</b>	
● at 480 V rated value	11 A
● at 600 V rated value	11 A
yielded mechanical performance [hp] for 3-phase AC motor	
● at 220/230 V rated value	3 hp
● at 460/480 V rated value	7.5 hp
● at 575/600 V rated value	10 hp
<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: 63 A
— with type of assignment 2 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 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 and snap-on mounting onto 35 mm standard mounting rail
<b>height</b>	114 mm
<b>width</b>	90 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
● with side-by-side mounting	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
● for grounded parts	
— forwards	6 mm
— backwards	0 mm

— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm

### Connections/ Terminals

<b>type of electrical connection</b>	
• for main current circuit	spring-loaded terminals
• for auxiliary and control circuit	spring-loaded terminals
• at contactor for auxiliary contacts	Spring-type terminals
• of magnet coil	Spring-type terminals
<b>type of connectable conductor cross-sections</b>	
• for main contacts	
— solid	2x (1 ... 10 mm <sup>2</sup> )
— solid or stranded	2x (1 ... 10 mm <sup>2</sup> )
— finely stranded with core end processing	2x (1 ... 6 mm <sup>2</sup> )
— finely stranded without core end processing	2x (1 ... 6 mm <sup>2</sup> )
• at AWG cables for main contacts	1x (18 ... 8)
<b>type of connectable conductor cross-sections</b>	
• for auxiliary contacts	
— solid or stranded	2x (0.5 ... 2.5 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> )
— finely stranded without core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> )
• at AWG cables for auxiliary contacts	2x (20 ... 14)

### Safety related data

B10 value with high demand rate according to SN 31920	1 000 000
<b>proportion of dangerous failures</b>	
• with low demand rate according to SN 31920	40 %
• with high demand rate according to SN 31920	75 %
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
<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front

### Communication/ Protocol

<b>product function bus communication</b>	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No

### Certificates/ approvals

<b>General Product Approval</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>
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[Confirmation](#)



[Special Test Certificate](#)

### Marine / Shipping



[Confirmation](#)[Vibration and Shock](#)

#### 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=3RA2324-8XB30-2AK6>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2324-8XB30-2AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AK6>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2324-8XB30-2AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2324-8XB30-2AK6&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2324-8XB30-2AK6&objecttype=14&gridview=view1>

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