



Reversing contactor assembly, AC-3, 45 kW 400 V, 230 V AC/50/60 Hz 3-pole, Size S3 screw terminal electrical and mechanical interlock 2 NO integrated

<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>	
• 1 of the supplied contactor	3RT2046-1AL20
• 2 of the supplied contactor	3RT2046-1AL2
• of the supplied RS assembly kit	3RA2943-2AA1
<b>General technical data</b>	
<b>size of contactor</b>	S3
product extension auxiliary switch	Yes
<b>shock resistance at rectangular impulse</b>	
• at AC	6.7 g / 5 ms, 4.0 g / 10 ms
<b>shock resistance with sine pulse</b>	
• at AC	10.6 g / 5 ms, 6.3 g / 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 acc. to IEC 81346-2</b>	Q
Substance Prohibance (Date)	01.03.2017 00:00:00
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
• ambient temperature during operation	60 °C
• ambient temperature during storage	-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	1 000 V
operational current at AC-3	
• at 400 V rated value	95 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	45 kW
— at 690 V rated value	75 kW
operating frequency at AC-3 maximum	850 1/h
<b>Control circuit/ Control</b>	

<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage 1 at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>	230 V 230 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	0.8 ... 1.1 0.85 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	348 V·A 296 V·A
<b>inductive power factor with closing power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	0.62 0.55
<b>apparent holding power of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	25 V·A 18 V·A
<b>inductive power factor with the holding power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>	0.35 0.41
<b>Auxiliary circuit</b>	
<b>number of NC contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• per direction of rotation</li> </ul>	0
<b>number of NO contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• per direction of rotation</li> <li>• instantaneous contact</li> </ul>	1 2
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b> <ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>	96 A 77 A
<b>yielded mechanical performance [hp] for 3-phase AC motor</b> <ul style="list-style-type: none"> <li>• at 200/208 V rated value</li> <li>• at 220/230 V rated value</li> <li>• at 460/480 V rated value</li> <li>• at 575/600 V rated value</li> </ul>	30 hp 30 hp 75 hp 75 hp
<b>contact rating of auxiliary contacts according to UL</b>	A600 / Q600
<b>Short-circuit protection</b>	
<b>design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 355 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse gG: 10 A
<b>Installation/ mounting/ dimensions</b>	
<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>	160 mm
<b>width</b>	150 mm
<b>depth</b>	152 mm
<b>required spacing</b> <ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	10 mm 0 mm 10 mm 10 mm 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	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts               <ul style="list-style-type: none"> <li>— solid or stranded 2x (2.5 ... 16 mm<sup>2</sup>), 2x (10 ... 50 mm<sup>2</sup>), 1x (10 ... 70 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (2.5 ... 35 mm<sup>2</sup>), 1x (2.5 ... 50 mm<sup>2</sup>)</li> <li>— finely stranded without core end processing 2x (10 ... 35 mm<sup>2</sup>), 1x (10 ... 50 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG cables for main contacts 2x (10 ... 1/0), 1x (10 ... 2/0)</li> </ul>	
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts               <ul style="list-style-type: none"> <li>— solid or stranded 2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)</li> </ul>	

#### Safety related data

<b>proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920 40 %</li> <li>• with high demand rate acc. to SN 31920 73 %</li> </ul>	
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>protection class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. 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

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test  
Certificates/Test  
Report](#)



#### Marine / Shipping

other



[Confirmation](#)

#### 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?mifb=3RA2346-8XB30-1AL2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2346-8XB30-1AL2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2346-8XB30-1AL2>

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

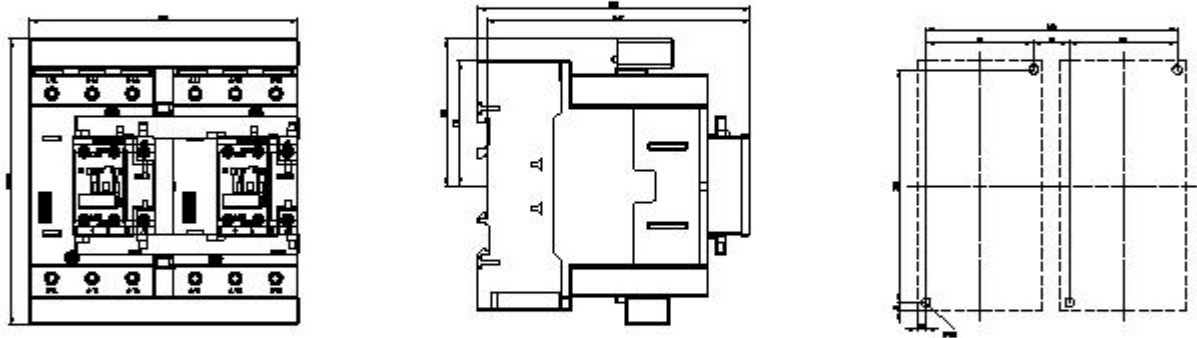
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2346-8XB30-1AL2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2346-8XB30-1AL2&lang=en)

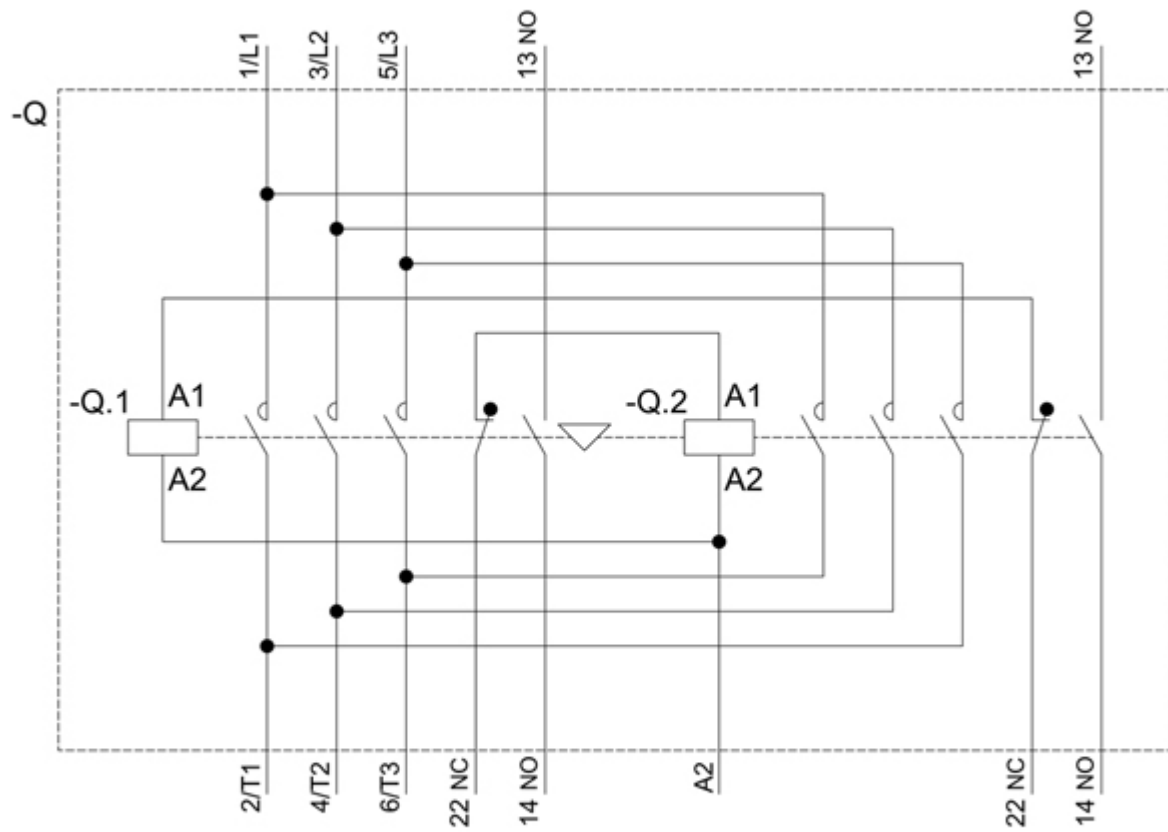
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2346-8XB30-1AL2/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2346-8XB30-1AL2&objecttype=14&gridview=view1>





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