

Reversing contactor assembly, AC-3, 18.5 kW 400 V, 0.7...1.25 US DC, 24 V DC 3-pole, Size S2 screw terminal electrical and mechanical interlock 2 NO integrated Varistor mounted



Figure similar

<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 <a href="#">3RT2035-1KB40</a></li> <li>• 2 of the supplied contactor <a href="#">3RT2035-1KB40</a></li> <li>• of the supplied RS assembly kit <a href="#">3RA2933-2AA1</a></li> </ul>

General technical data	
<b>Size of contactor</b>	S2
<b>Product extension</b>	<ul style="list-style-type: none"> <li>• Auxiliary switch Yes</li> <li>• Insulation voltage with degree of pollution 3 at AC rated value 690 V</li> </ul>
<b>Surge voltage resistance rated value</b>	6 kV
<ul style="list-style-type: none"> <li>• protection class IP on the front</li> </ul>	IP20
<b>Shock resistance at rectangular impulse</b>	<ul style="list-style-type: none"> <li>• at AC 7.7g / 5 ms, 4.5g / 10 ms</li> </ul>

<ul style="list-style-type: none"> <li>• at DC</li> </ul>	7.7g / 5 ms, 4.5g / 10 ms
<b>Shock resistance with sine pulse</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	12g / 5 ms, 7g / 10 ms
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	12g / 5 ms, 7g / 10 ms
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	10 000 000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
<b>Reference code acc. to DIN EN 81346-2</b>	Q

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-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>	
<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	690 V
<b>Operating current</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>	41 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>	55 A 4.5 A 55 A 25 A 55 A 55 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 2.5 A 55 A 25 A

<ul style="list-style-type: none"> <li>with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>at 24 V rated value</li> <li>at 110 V rated value</li> </ul> </li> </ul>	55 A 55 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> <li>at 690 V rated value</li> </ul> </li> <li>at AC-4 at 400 V rated value</li> </ul>	18.5 kW 18.5 kW 18.5 kW
<b>No-load switching frequency</b>	1 500 1/h
Operating frequency at AC-3 maximum	1 000 1/h

<b>Control circuit/ Control</b>	
<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage 1</b>	
<ul style="list-style-type: none"> <li>at DC rated value</li> </ul>	24 V
<b>Design of the surge suppressor</b>	with varistor
<b>Closing power of magnet coil at DC</b>	1 W
<b>Holding power of magnet coil at DC</b>	1 W

<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>Operating current of auxiliary contacts at AC-12 maximum</b>	10 A
<ul style="list-style-type: none"> <li>Operating current of auxiliary contacts at AC-15 at 230 V</li> <li>operating current of auxiliary contacts at AC-15 at 400 V</li> <li>operating current of auxiliary contacts at DC-13 at 24 V</li> <li>Operating current of auxiliary contacts at DC-13 at 60 V</li> <li>Operating current of auxiliary contacts at DC-13 at 110 V</li> <li>Operating current of auxiliary contacts at DC-13 at 220 V</li> </ul>	6 A 3 A 10 A 2 A 1 A 0.3 A
<b>contact reliability of auxiliary contacts</b>	< 1 error per 100 million operating cycles

<b>UL/CSA ratings</b>	
<b>Full-load current (FLA) for three-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>	40 A 41 A

<b>Yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> <li>• for three-phase AC motor <ul style="list-style-type: none"> <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> </li> </ul>	<p>3 hp</p> <p>7.5 hp</p> <p>15 hp</p> <p>30 hp</p> <p>40 hp</p>
<b>Contact rating of auxiliary contacts according to UL</b>	A600 / Q600

### Short-circuit protection

<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>	<p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A</p> <p>gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A</p> <p>fuse gG: 10 A</p>

### Installation/ mounting/ dimensions

<ul style="list-style-type: none"> <li>• <b>mounting position</b></li> </ul>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail
<b>Height</b>	141 mm
<b>Width</b>	120 mm
<b>Depth</b>	130 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> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> </ul> </li> </ul>	<p>10 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>0 mm</p> <p>10 mm</p>

— downwards	10 mm
— at the side	10 mm

### Connections/ Terminals

<ul style="list-style-type: none"> <li>• Type of electrical connection for main current circuit</li> </ul>	screw-type terminals
<ul style="list-style-type: none"> <li>• Type of electrical connection for auxiliary and control current circuit</li> </ul>	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</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for main contacts</li> </ul>	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)
<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>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for auxiliary contacts</li> </ul>	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






<b>B10 value</b> <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	1 000 000
<b>Proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	40 % 73 %
<b>Failure rate [FIT]</b> <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>	100 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y

### Communication/ Protocol

product function bus communication	Yes
<b>Protocol is supported</b> <ul style="list-style-type: none"> <li>• AS-Interface protocol</li> </ul>	No
Product function Control circuit interface with IO link	No

### Certificates/ approvals

General Product Approval			Declaration of Conformity	Marine / Ship- ping
 CSA	 UL		 EG-Konf.	<a href="#">Miscellaneous</a>  ABS

Marine / Shipping					other
 BUREAU VERITAS	 LRS	 RINA	 RMRS	 TYPE APPROVED PRODUCT DNV-GL DNVGL.COM/AF	<a href="#">Confirmation</a>

## 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=3RA2335-8XB30-1KB4>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2335-8XB30-1KB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2335-8XB30-1KB4>

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

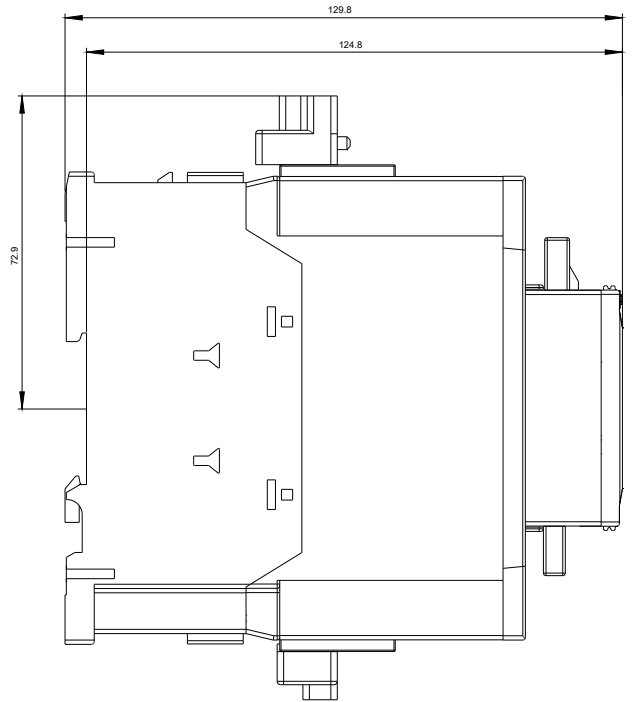
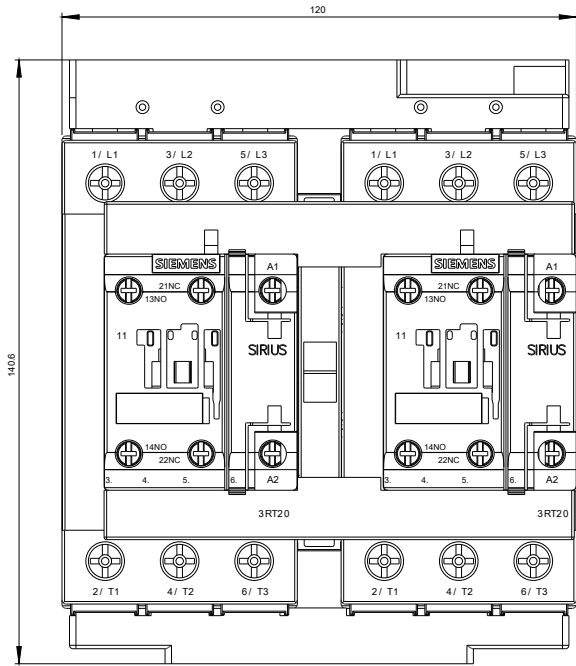
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2335-8XB30-1KB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2335-8XB30-1KB4&lang=en)

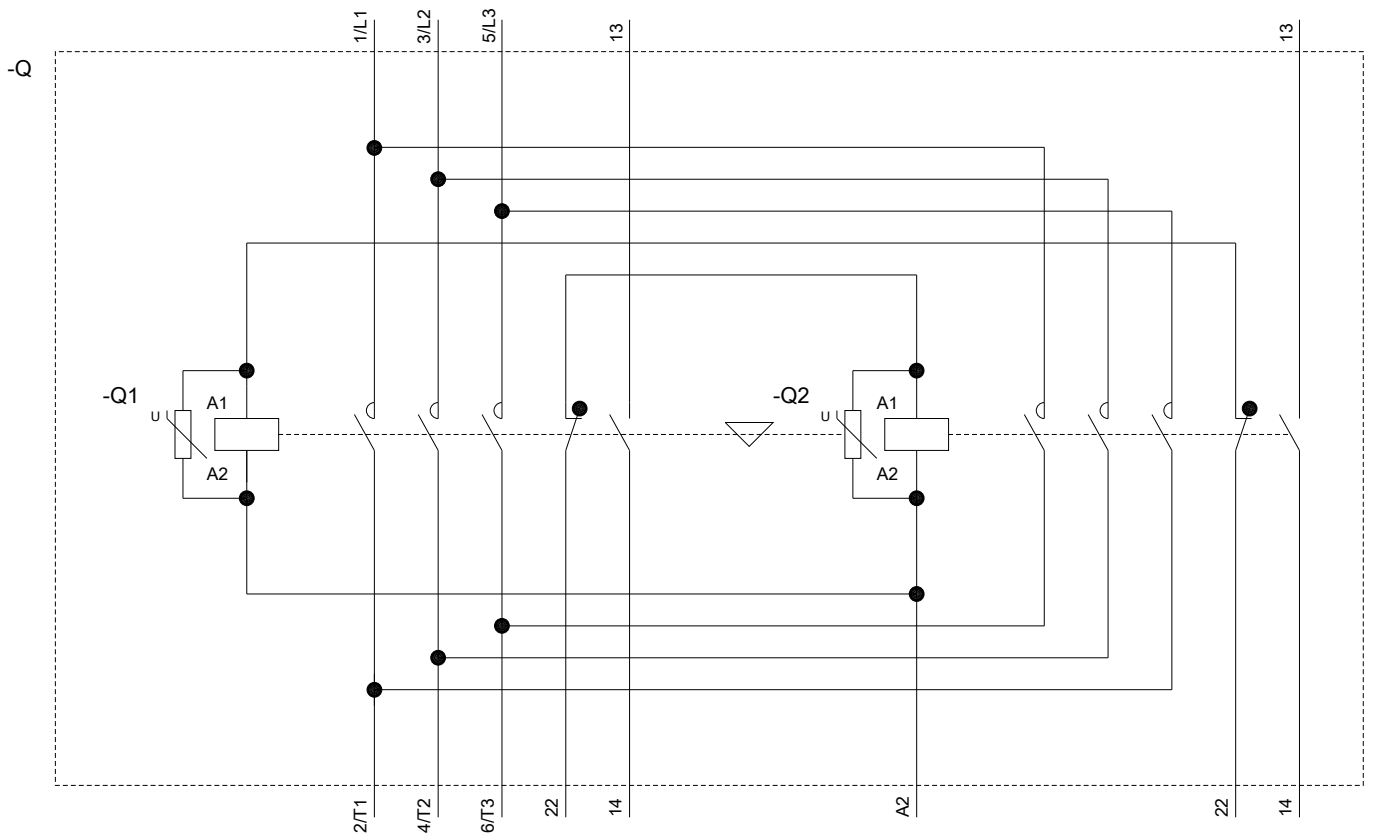
### Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2335-8XB30-1KB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2335-8XB30-1KB4&objecttype=14&gridview=view1>





last modified:

08/13/2020