



Reversing contactor assembly AC-3, 18,5 kW/400 V, AC/DC 20-33V 3-pole, Size S2 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>	
<ul style="list-style-type: none"> <li>• 1 of the supplied contactor</li> <li>• 2 of the supplied contactor</li> <li>• of the supplied RS assembly kit</li> </ul>	<a href="#">3RT2035-1NB30</a> <a href="#">3RT2035-1NB30</a> <a href="#">3RA2933-2AA1</a>
<b>General technical data</b>	
<b>size of contactor</b>	S2
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>	7.7g / 5 ms, 4.5g / 10 ms 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> <li>• at DC</li> </ul>	12g / 5 ms, 7g / 10 ms 12g / 5 ms, 7g / 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>	10/01/2014
<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>	41 A 41 A 24 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>	18.5 kW

— at 500 V rated value	22 kW
— at 690 V rated value	22 kW
● at AC-4 at 400 V rated value	18.5 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/DC
<b>control supply voltage 1 at AC</b>	
● at 50 Hz	20 ... 33 V
● at 60 Hz	20 ... 33 V
<b>control supply voltage 1</b>	
● at DC	20 ... 33 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>design of the surge suppressor</b>	with varistor
<b>apparent pick-up power of magnet coil at AC</b>	
● at 50 Hz	40 VA
● at 60 Hz	40 VA
<b>inductive power factor with closing power of the coil</b>	
● at 50 Hz	0.64
● at 60 Hz	0.5
<b>apparent holding power of magnet coil at AC</b>	
● at 50 Hz	2 VA
● at 60 Hz	2 VA
<b>inductive power factor with the holding power of the coil</b>	
● at 50 Hz	0.36
● at 60 Hz	0.39
<b>closing power of magnet coil at DC</b>	23 W
<b>holding power of magnet coil at DC</b>	1 W

### Auxiliary circuit

<b>number of NC contacts for auxiliary contacts</b>	
● per direction of rotation	0
<b>number of NO contacts for auxiliary contacts</b>	
● 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	40 A
● at 600 V rated value	41 A
<b>yielded mechanical performance [hp] for 3-phase AC motor</b>	
● at 220/230 V rated value	15 hp
● at 460/480 V rated value	30 hp
● at 575/600 V rated value	40 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: 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 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 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— at the side 10 mm</li> <li>— downwards 10 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— backwards 0 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> </ul>	
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit screw-type terminals</li> <li>• for auxiliary and control circuit screw-type terminals</li> <li>• at contactor for auxiliary contacts Screw-type terminals</li> <li>• of magnet coil Screw-type terminals</li> </ul>	
<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 2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)</li> <li>— solid or stranded 2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (1 ... 25 mm<sup>2</sup>), 1x (1 ... 35 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG cables for main contacts 2x (18 ... 2), 1x (18 ... 1)</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>	
<b>Safety related data</b>	
B10 value with high demand rate according to SN 31920	1 000 000
<b>proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with low demand rate according to SN 31920 40 %</li> <li>• with high demand rate according to SN 31920 73 %</li> </ul>	
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
<b>Communication/ Protocol</b>	
<b>product function bus communication</b>	Yes
protocol is supported AS-Interface protocol	No
product function control circuit interface with IO link	No
<b>Certificates/ approvals</b>	
<b>General Product Approval</b>	<b>Declaration of Conformity</b>



[Confirmation](#)



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