## **Data sheet**



reversing contactor assembly, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, screw terminal, electrical and mechanical interlock, auxiliary contacts: 2 x 1 NO

product brand name	SIRIUS
product designation	Reversing contactor assembly
product type designation	3RA23
manufacturer's article number	
<ul> <li>1 of the supplied contactor</li> </ul>	3RT2023-1AK60
<ul> <li>2 of the supplied contactor</li> </ul>	3RT2023-1AK60
<ul> <li>of the supplied RH assembly kit</li> </ul>	3RA2923-2AA1
General technical data	
size of contactor	S0
product extension auxiliary switch	Yes
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
• at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operational current	
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	9 A
— at 690 V rated value	9 A
• at AC-3e	
— at 400 V rated value	9 A

— at 500 V rated value	9 A
— at 690 V rated value	9 A
operating power	
• at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 400 V rated value	4 kW
— at 690 V rated value	7.5 kW
at AC-4 at 400 V rated value	4 kW
operating frequency	
• at AC-3 maximum	1 000 1/h
at AC-3 maximum     at AC-3e maximum	1 000 1/h
Control circuit/ Control	1 000 1/11
	AC
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC  • at 50 Hz rated value	440.V
	110 V
• at 60 Hz rated value	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	V.O 1.1
• at 50 Hz	65 VA
	OV VA
inductive power factor with closing power of the coil	0.02
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	0.51/4
• at 50 Hz	8.5 VA
inductive power factor with the holding power of the coil	0.05
• at 50 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
• per direction of rotation	1
<ul><li>per direction of rotation</li><li>instantaneous contact</li></ul>	2
per direction of rotation     instantaneous contact     contact reliability of auxiliary contacts	
per direction of rotation     instantaneous contact     contact reliability of auxiliary contacts  UL/CSA ratings	2
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per direction of rotation     instantaneous contact     contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor     at 220/230 V rated value	2 < 1 error per 100 million operating cycles  7.6 A 9 A 3 hp
per direction of rotation     instantaneous contact     contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor     at 220/230 V rated value     at 460/480 V rated value	2 <1 error per 100 million operating cycles  7.6 A 9 A  3 hp 5 hp
per direction of rotation instantaneous contact contact reliability of auxiliary contacts  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 V rated value	2 < 1 error per 100 million operating cycles  7.6 A 9 A  3 hp 5 hp 7.5 hp
per direction of rotation instantaneous contact  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value contact rating of auxiliary contacts according to UL	2 < 1 error per 100 million operating cycles  7.6 A 9 A  3 hp 5 hp 7.5 hp
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per direction of rotation instantaneous contact  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link for short-circuit protection of the main circuit  with type of coordination 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required	2 <1 error per 100 million operating cycles  7.6 A 9 A 3 hp 5 hp 7.5 hp A600 / Q600  gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
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per direction of rotation instantaneous contact  contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	7.6 A 9 A 3 hp 5 hp 7.5 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gG: 10 A +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 101 mm 90 mm

— backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
<ul> <li>for grounded parts</li> </ul>	
— 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	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>solid or stranded</li> </ul>	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	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	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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 a
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	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** 



Confirmation









**Test Certificates** 

Marine / Shipping

Special Test Certificate













Confirmation

Vibration and Shock

## **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/qlobal/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2323-8XB30-1AK6

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2323-8XB30-1AK6}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2323-8XB30-1AK6

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

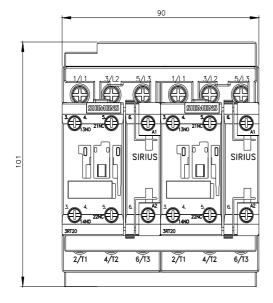
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2323-8XB30-1AK6&lang=en

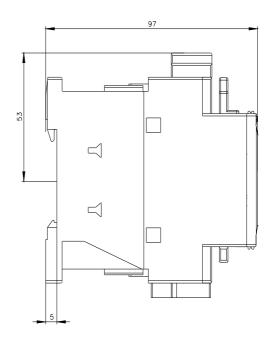
Characteristic: Tripping characteristics, I2t, Let-through current

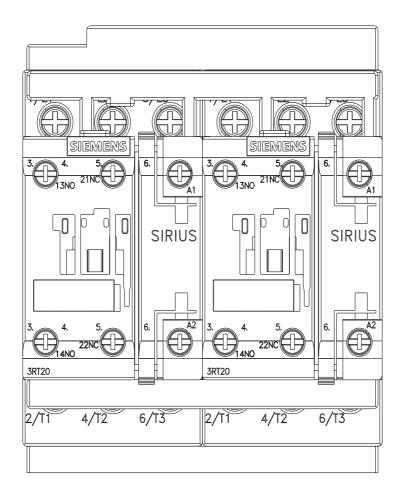
https://support.industry.siemens.com/cs/ww/en/ps/3RA2323-8XB30-1AK6/char

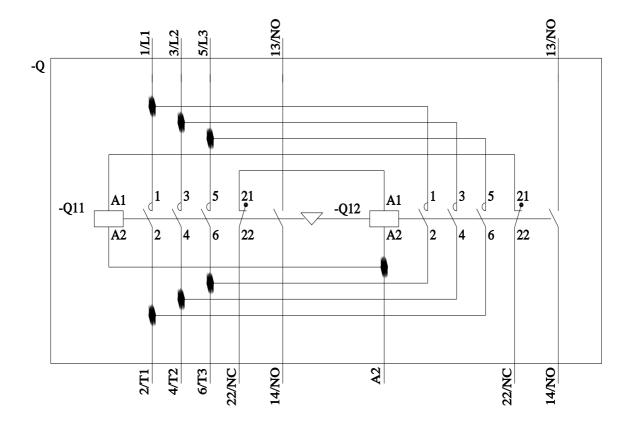
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2323-8XB30-1AK6&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸