3RA2325-8XB30-1AK6

## **Data sheet**



reversing contactor assembly, AC-3e/AC-3, 17 A, 7.5 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>	3RT2025-1AK60
• 2 of the supplied contactor	3RT2025-1AK60
<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
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	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	
during operation	-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	17 A
— at 500 V rated value	17 A
— at 690 V rated value	
	13 A
• at AC-3e	13 A

— at 500 V rated value	17 A
— at 690 V rated value	13 A
operating power	
• at AC-3	
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
• at AC-3e	
— at 400 V rated value	7.5 kW
	11 kW
— at 690 V rated value	
at AC-4 at 400 V rated value	7.5 kW
operating frequency	
• at AC-3 maximum	1 000 1/h
at AC-3e maximum	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage 1 at AC	
at 50 Hz rated value	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
	0.0 1.1
apparent pick-up power of magnet coil at AC	CENA
• at 50 Hz	65 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.82
apparent holding power of magnet coil at AC	
● at 50 Hz	8.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
Auxiliary circuit	
number of NO contacts for auxiliary contacts	
per direction of rotation	1
·	
• Instantaneous contact	
instantaneous contact     contact reliability of auxiliary contacts	2 < 1 error per 100 million operating cycles
contact reliability of auxiliary contacts	< 1 error per 100 million operating cycles
contact reliability of auxiliary contacts UL/CSA ratings	
contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	< 1 error per 100 million operating cycles
contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	< 1 error per 100 million operating cycles  14 A
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	< 1 error per 100 million operating cycles
contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	< 1 error per 100 million operating cycles  14 A
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	< 1 error per 100 million operating cycles  14 A
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	< 1 error per 100 million operating cycles  14 A 17 A
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	< 1 error per 100 million operating cycles  14 A 17 A 5 hp
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	< 1 error per 100 million operating cycles  14 A 17 A  5 hp 10 hp
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	< 1 error per 100 million operating cycles  14 A 17 A  5 hp 10 hp 15 hp
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  Short-circuit protection	< 1 error per 100 million operating cycles  14 A 17 A  5 hp 10 hp 15 hp
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  Short-circuit protection  design of the fuse link	< 1 error per 100 million operating cycles  14 A 17 A  5 hp 10 hp 15 hp
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  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit	< 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600
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  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
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  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	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
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  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	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A
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  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	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
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  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	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A
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  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  Installation/ mounting/ dimensions	< 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method height	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method  height width	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
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  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	4 1 error per 100 million operating cycles 14 A 17 A 5 hp 10 hp 15 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
<ul> <li>for live parts</li> </ul>	
— 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)
finely stranded with core end processing	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>	
<ul><li>— solid or stranded</li></ul>	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)
for AWG cables for auxiliary contacts	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 %
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 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=3RA2325-8XB30-1AK6

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2325-8XB30-1AK6

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

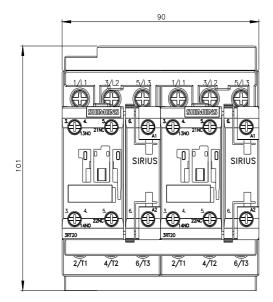
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2325-8XB30-1AK6&lang=en

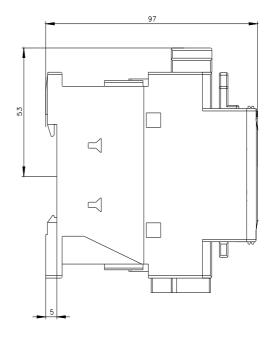
Characteristic: Tripping characteristics, I2t, Let-through current

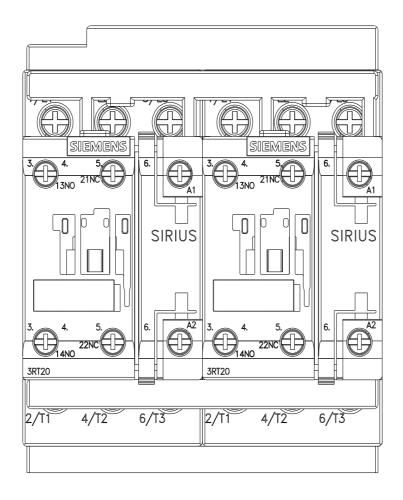
https://support.industry.siemens.com/cs/ww/en/ps/3RA2325-8XB30-1AK6/char

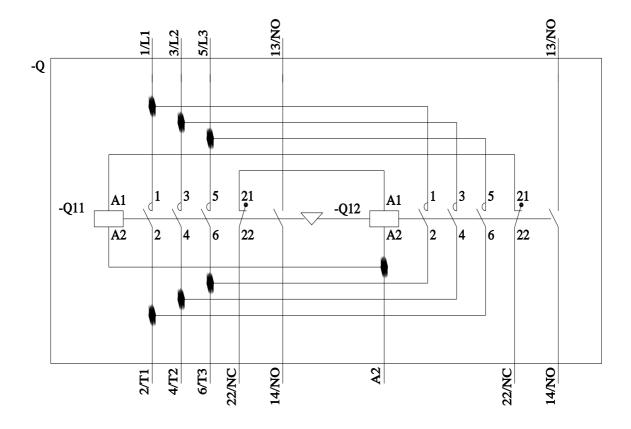
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2325-8XB30-1AK6&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸