SIEMENS

Data sheet

3RA2324-8XB30-2AK6



reversing contactor assembly, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, spring-loaded terminal, electrical and mechanical interlock, auxiliary contacts: 2×1 NO

| product brand name | SIRIUS |
|--|------------------------------|
| product designation | Reversing contactor assembly |
| product type designation | 3RA23 |
| manufacturer's article number | |
| 1 of the supplied contactor | <u>3RT2024-2AK60</u> |
| 2 of the supplied contactor | <u>3RT2024-2AK60</u> |
| of the supplied RH assembly kit | <u>3RA2923-2AA2</u> |
| 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) | |
| of contactor typical | 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 | |
| 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 | |
| at AC-3 rated value maximum | 690 V |
| at AC-3e rated value maximum | 690 V |
| operational current | |
| • at AC-3 | |
| — at 400 V rated value | 12 A |
| — at 500 V rated value | 12 A |
| — at 690 V rated value | 9 A |
| • at AC-3e | |
| — at 400 V rated value | 12 A |

| — at 500 V rated value | 12 A |
|--|--|
| — at 690 V rated value | 9 A |
| operating power | |
| • at AC-3 | |
| — at 400 V rated value | 5.5 kW |
| — at 500 V rated value | 5.5 kW |
| — at 690 V rated value | 7.5 kW |
| • at AC-3e | |
| — at 400 V rated value | 5.5 kW |
| — at 690 V rated value | 7.5 kW |
| at AC-4 at 400 V rated value | 5.5 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 |
| apparent pick-up power of magnet coil at AC | |
| • at 50 Hz | 65 VA |
| inductive power factor with closing power of the coil | |
| at 50 Hz | 0.82 |
| | 0.02 |
| apparent holding power of magnet coil at AC • at 50 Hz | 8.5 VA |
| | AV C.5 |
| inductive power factor with the holding power of the coil | 0.05 |
| • at 50 Hz | 0.25 |
| A multismu stranit | |
| Auxiliary circuit | |
| number of NO contacts for auxiliary contacts | |
| number of NO contacts for auxiliary contacts per direction of rotation | 1 |
| number of NO contacts for auxiliary contacts per direction of rotation instantaneous contact | 2 |
| number of NO contacts for auxiliary contacts per direction of rotation instantaneous contact contact reliability of auxiliary contacts | |
| number of NO contacts for auxiliary contacts per direction of rotation instantaneous contact contact reliability of auxiliary contacts UL/CSA ratings | 2 |
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| number of NO contacts for auxiliary contacts per direction of rotation instantaneous contact contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor | 2 < 1 error per 100 million operating cycles |
| number of NO contacts for auxiliary contacts 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 | 2 <1 error per 100 million operating cycles |
| number of NO contacts for auxiliary contacts 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 | 2 <1 error per 100 million operating cycles |
| number of NO contacts for auxiliary contacts 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 at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor | 2 < 1 error per 100 million operating cycles 11 A 11 A |
| number of NO contacts for auxiliary contacts 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 11 A 11 A 3 hp |
| number of NO contacts for auxiliary contacts 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 11 A 11 A 3 hp 7.5 hp |
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| number of NO contacts for auxiliary contacts 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 | 2 <1 error per 100 million operating cycles 11 A 11 A 3 hp 7.5 hp 10 hp |
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| number of NO contacts for auxiliary contacts 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 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required | 2 < 1 error per 100 million operating cycles 11 A 11 A 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A |
| number of NO contacts for auxiliary contacts 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 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of assignment 2 required for short-circuit protection of the auxiliary switch required | 2 < 1 error per 100 million operating cycles 11 A 11 A 3 hp 7.5 hp 10 hp A600 / Q600 gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 25 A |
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| number of NO contacts for auxiliary contacts 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 at 600 V rated value 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 assignment 2 required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position | 2 < 1 error per 100 million operating cycles 11 A 11 A 11 A 3 hp 7.5 hp 10 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; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and so can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and back |
| number of NO contacts for auxiliary contacts 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 at 600 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 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 11 A 11 A 11 A 3 hp 7.5 hp 10 hp A600 / Q600 |
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| number of NO contacts for auxiliary contacts • 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 • at 600 V rated value vielded 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 | 2 < 1 error per 100 million operating cycles 11 A 11 A 11 A 3 hp 7.5 hp 10 hp A600 / Q600 |
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| General Product Approval | Declaration of Conformity | Test Certificates |
|---|--|-------------------|
| entineates/ approvais | | |
| product function control circuit interface with IO link ertificates/ approvals | No | |
| protocol is supported AS-Interface protocol | No | |
| product function bus communication | Yes | |
| ommunication/ Protocol | | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front | |
| protection class IP on the front according to IEC 60529 | IP20 | |
| 61508 | | |
| T1 value for proof test interval or service life according to EIC | 20 a | |
| with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 | 100 FIT | |
| with low demand rate according to SN 31920 with high demand rate according to SN 21920 | 40 % 75 % | |
| proportion of dangerous failures | 40.% | |
| B10 value with high demand rate according to SN 31920 | 1 000 000 | |
| afety related data | 4 000 000 | |
| for AWG cables for auxiliary contacts | 2x (20 14) | |
| — finely stranded without core end processing | 2x (0.5 1.5 mm ²) | |
| finely stranded with core end processing | 2x (0.5 1.5 mm ²) | |
| — solid or stranded | 2x (0.5 2.5 mm²) | |
| for auxiliary contacts | | |
| type of connectable conductor cross-sections | | |
| finely stranded without core end processing | 2x (1 6 mm²) | |
| finely stranded with core end processing | 2x (1 6 mm²) | |
| solid or stranded | 2x (1 10 mm ²) | |
| • solid | 2x (1 10 mm ²) | |
| type of connectable conductor cross-sections for main contacts | | |
| of magnet coil | Spring-type terminals | |
| at contactor for auxiliary contacts | Spring-type terminals | |
| for auxiliary and control circuit | spring-loaded terminals | |
| for main current circuit | spring-loaded terminals | |
| type of electrical connection | | |
| onnections/ Terminals | | |
| — at the side | 6 mm | |
| — downwards | 6 mm | |
| — upwards | 6 mm | |
| — backwards | 0 mm | |
| — forwards | 6 mm | |
| for live parts | | |
| — downwards | 6 mm | |
| — at the side | 6 mm | |
| — upwards | 6 mm | |
| — backwards | 0 mm | |
| — forwards | 6 mm | |
| for grounded parts | | |
| — at the side | 6 mm | |
| — upwards — downwards | 6 mm 6 mm | |
| — backwards | 0 mm | |
| h luur ada | 0 | |

Marine / Shipping







Marine / Shipping

Confirmation

other

Vibration and Shock

Railway

Further information

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

https://press.siemens.com/global/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=3RA2324-8XB30-2AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2324-8XB30-2AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AK6

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

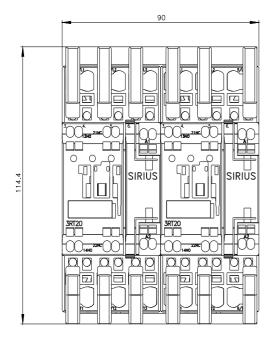
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2324-8XB30-2AK6&lang=en

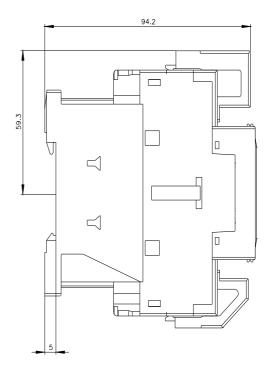
Characteristic: Tripping characteristics, I²t, Let-through current

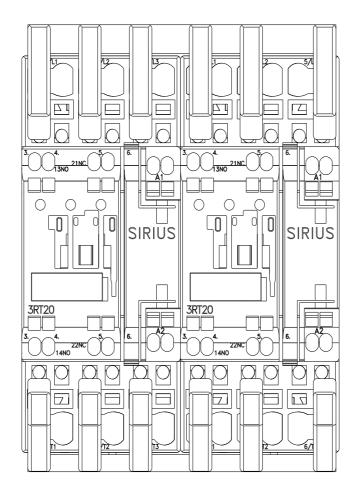
https://support.industry.siemens.com/cs/ww/en/ps/3RA2324-8XB30-2AK6/char

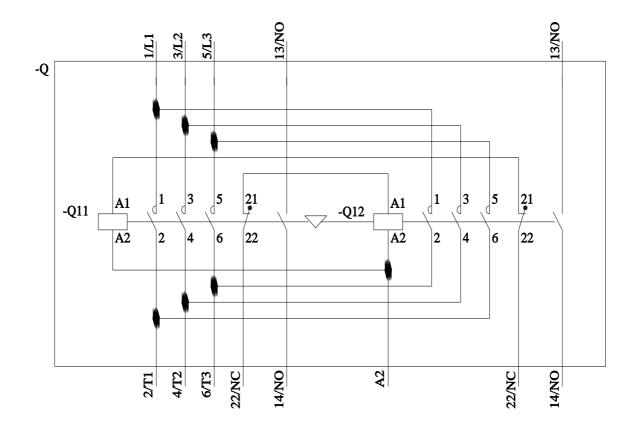
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2324-8XB30-2AK6&objecttype=14&gridview=view1









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