

Fuseless motor starter Direct start 600VAC Size S0 4.5-6.3A 110/120VAC 50/60HZ screw connection For snapping onto 60 mm busbar systems Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (MSP) 1NO+1NC (contactor)

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| product brand name | SIRIUS |
| product designation | non-fused motor starter 3RA2 |
| design of the product | direct starter |
| manufacturer's article number | |
| <ul style="list-style-type: none"> of the supplied contactor of the supplied circuit-breakers of the supplied busbar adapter of the supplied link module | 3RT2024-1AK60 3RV2011-1GA15 8US1251-5NT10 3RA2921-1AA00 |
| General technical data | |
| size of the circuit-breaker | S00 |
| size of load feeder | S0 |
| product extension auxiliary switch | Yes |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 6 kV |
| shock resistance according to IEC 60068-2-27 | 6g / 11 ms |
| mechanical service life (operating cycles) of contactor typical | 10 000 000 |
| type of coordination | 2 |
| Weight | 1.06 kg |
| Ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> during operation during storage during transport | -20 ... +60 °C -50 ... +80 °C -55 ... +80 °C |
| Main circuit | |
| number of poles for main current circuit | 3 |
| design of the switching contact | electromechanical |
| adjustable current response value current of the current-dependent overload release | 4.5 ... 6.3 A |
| operating voltage | |
| <ul style="list-style-type: none"> rated value at AC-3 rated value maximum | 690 V 690 V |
| operating frequency rated value | 50 ... 60 Hz |
| operational current at AC-3 at 400 V rated value | 5 A |
| operating power at AC-3 | |
| <ul style="list-style-type: none"> at 400 V rated value at 500 V rated value | 2 200 W 3 000 W |
| Control circuit/ Control | |
| control supply voltage at AC | |
| <ul style="list-style-type: none"> at 50 Hz rated value at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value | 110 V 88 ... 121 V 120 V 96 ... 132 V |
| apparent holding power of magnet coil at AC | 7.2 VA |
| inductive power factor with the holding power of the coil | 0.28 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts | 2 |
| number of NO contacts for auxiliary contacts | 2 |
| Protective and monitoring functions | |
| trip class | CLASS 10 |

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| design of the overload release | thermal (bimetallic) | |
| response value current of instantaneous short-circuit trip unit | 81.9 A | |
| UL/CSA ratings | | |
| full-load current (FLA) for 3-phase AC motor | | |
| • at 480 V rated value | 4.8 A | |
| • at 600 V rated value | 6.3 A | |
| yielded mechanical performance [hp] | | |
| • for single-phase AC motor | | |
| — at 110/120 V rated value | 0.25 hp | |
| — at 230 V rated value | 0.5 hp | |
| • for 3-phase AC motor | | |
| — at 200/208 V rated value | 1 hp | |
| — at 220/230 V rated value | 1.5 hp | |
| — at 460/480 V rated value | 3 hp | |
| — at 575/600 V rated value | 5 hp | |
| Short-circuit protection | | |
| product function short circuit protection | Yes | |
| design of the short-circuit trip | magnetic | |
| conditional short-circuit current (I_q) | | |
| • at 400 V according to IEC 60947-4-1 rated value | 153 000 A | |
| • at 500 V according to IEC 60947-4-1 rated value | 100 000 A | |
| Installation/ mounting/ dimensions | | |
| mounting position | vertical | |
| fastening method | for snapping onto 60 mm busbar systems | |
| height | 260 mm | |
| width | 45 mm | |
| depth | 155 mm | |
| required spacing | | |
| • for grounded parts | | |
| — forwards | 10 mm | |
| — backwards | 0 mm | |
| — upwards | 30 mm | |
| — at the side | 9 mm | |
| — downwards | 10 mm | |
| • for live parts | | |
| — forwards | 10 mm | |
| — backwards | 0 mm | |
| — upwards | 30 mm | |
| — downwards | 10 mm | |
| — at the side | 9 mm | |
| Connections/ Terminals | | |
| type of electrical connection for main current circuit | screw-type terminals | |
| type of connectable conductor cross-sections for main contacts stranded | 1 ... 10 mm ² , 2x (2.5 ... 6 mm ²) | |
| connectable conductor cross-section for main contacts finely stranded with core end processing | 1 ... 6 mm ² | |
| Safety related data | | |
| proportion of dangerous failures with high demand rate according to SN 31920 | 73 % | |
| B10 value with high demand rate according to SN 31920 | 1 000 000 | |
| Electrical Safety | | |
| 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 | |
| Approvals Certificates | | |
| General Product Approval | For use in hazardous locations | Test Certificates |



[Type Test Certificates/Test Report](#)

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|---|---|---|---|---|---|
| Test Certificates | | Maritime application | | | |
| Special Test Certificate |  |  |  |  |  |
| Maritime application | other | Railway | Environment | | |
|  |  |  | Confirmation | Special Test Certificate | Environmental Confirmations |

Further information

- Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- Information for data generation and storage
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
- 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=3RA2125-1GD24-0AK6>
- Cax online generator
<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1GD24-0AK6>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GD24-0AK6>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1GD24-0AK6&lang=en
- Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GD24-0AK6/char>
- Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1GD24-0AK6&objecttype=14&gridview=view1>

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