SIEMENS

Data sheet

3RA2220-1KD24-0AP6



Fuseless motor starter Reversing operation 600VAC Size S0 9-12.5 Amp 220/240VAC 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 (per contactor)

| product brand name | SIRIUS |
|---|------------------------------|
| product designation | non-fused motor starter 3RA2 |
| design of the product | reversing starter |
| manufacturer's article number | |
| of the supplied contactor | <u>3RT2024-1AP60</u> |
| of the supplied circuit-breakers | <u>3RV2011-1KA10</u> |
| of the supplied RS assembly kit | <u>3RA2923-1DB1</u> |
| of the supplied busbar adapter | 8US1251-5NT10 |
| of the supplied link module | <u>3RA2921-1AA00</u> |
| General technical data | |
| size of the circuit-breaker | S00 |
| size of load feeder | SO |
| 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 assignment | 2 |
| Substance Prohibitance (Date) | 03/01/2017 |
| mbient conditions | |
| ambient temperature | |
| during operation | -20 +60 °C |
| during storage | -50 +80 °C |
| during transport | -55 +80 °C |
| lain 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 | 9 12.5 A |
| operating voltage | |
| rated value | 690 V |
| at AC-3 rated value maximum | 690 V |
| operating frequency rated value | 50 60 Hz |
| operational current at AC-3 at 400 V rated value | 11.5 A |
| operating power at AC-3 | |
| • at 400 V rated value | 5 500 W |
| • at 500 V rated value | 7 500 W |
| Control circuit/ Control | |

| • at 50 Hz rated value | 220 V |
|--|---|
| • at 50 Hz rated value | 176 242 V |
| • at 60 Hz rated value | 240 V |
| at 60 Hz rated value | 192 264 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 |
| design of the overload release | thermal (bimetallic) |
| response value current of instantaneous short-circuit trip unit | 162.5 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 11 A |
| • at 600 V rated value | 11 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor | |
| — at 110/120 V rated value | 0.5 hp |
| — at 230 V rated value | 2 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 3 hp |
| — at 220/230 V rated value | 3 hp |
| — at 460/480 V rated value | 7.5 hp |
| — at 575/600 V rated value | 10 hp |
| Short-circuit protection | |
| product function short circuit protection | Yes |
| design of the short-circuit trip | magnetic |
| conditional short-circuit current (Iq) | |
| | |
| at 400 V according to IEC 60947-4-1 rated value | 153 000 A |
| at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions | 153 000 A |
| č | 153 000 A vertical |
| Installation/ mounting/ dimensions | |
| Installation/ mounting/ dimensions mounting position | vertical |
| Installation/ mounting/ dimensions mounting position fastening method | vertical for snapping onto 60 mm busbar systems |
| Installation/ mounting/ dimensions mounting position fastening method height | vertical for snapping onto 60 mm busbar systems 260 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — forwards — downwards • for live parts — forwards — backwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 30 mm 30 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — downwards — backwards — downwards — backwards — downwards — backwards — downwards — backwards — downwards — backwards — upwards — backwards — backwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — forwards — oforwards — downwards — backwards — upwards — at the side — downwards — the side — upwards — upwards | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 10 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — at the side — downwards • for live parts — forwards — forwards — forwards — downwards — downwards — at the side — downwards — at the side | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely stranded with core end processing | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — at the side — downwards • for live parts — forwards — backwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side — downwards — the side — the side <u>Connections/ Terminals</u> type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 9 mm 10 mm 10 mm 9 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm 20 mm 10 mm 20 |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — downwards — the side — downwards — at the side — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts finely stranded with core end processing | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 10 mm 9 mm 10 mm 10 mm 9 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm 20 |
| Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts stranded connectable conductor cross-section for main contacts finely stranded with core end processing Safety related data | vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 10 mm 0 mm 30 mm 9 mm 10 mm 0 mm 30 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm 10 mm 9 mm screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 1 6 mm² |

| touch protection on the front according to IEC 60529 | | | finger-safe, for vertical contact from the front | | | | |
|--|---|-------------------|--|----------------------------|----------|--|--|
| Certificates/ approvals | | | | | | | |
| General Product Appr | oval | | For use in hazard- ous locations | Declaration of Conform | nity | | |
| <u>Confirmation</u> | | EHC | K ATEX | CE EG-Konf. | UK CA | | |
| Test Certificates | | Marine / Shipping | | | | | |
| Special Test Certific- ate | Type Test Certific- ates/Test Report | ABS | BUREAU VERITAS | Lloyd's Kegister uts | PRS | | |
| Marine / Shipping | | | other | Railway | | | |
| RINA | RMRS | | <u>Confirmation</u> | Vibration and Shock | | | |

Further information

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

https://press.sjemens.com/global/en/pressrelease/sjemens-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=3RA2220-1KD24-0AP6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1KD24-0AP6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KD24-0AP6

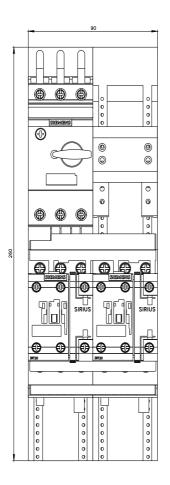
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

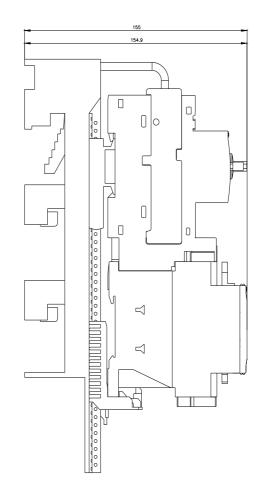
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1KD24-0AP6&lang=en

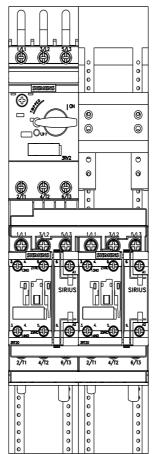
Characteristic: Tripping characteristics, I2t, Let-through current

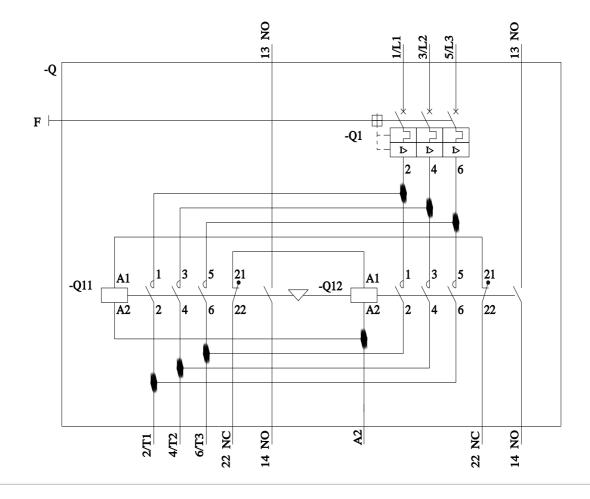
https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KD24-0AP6/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1KD24-0AP6&objecttype=14&gridview=view1









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