



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S0, 7...10A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, TYPE OF ASSIGNMENT 2, IQ = 150KA (ALSO FULFILLS TYPE OF ASSIGNMENT 1) 1NO+1NC (CONTACTOR)

| | |
|---|-----------------------------|
| product brand name | SIRIUS |
| product designation | non-fused load feeders 3RA2 |
| design of the product | direct starter |
| manufacturer's article number | |
| • of the supplied contactor | 3RT2024-1AK60 |
| • of the supplied circuit-breakers | 3RV2021-1JA10 |
| • of the supplied link module | 3RA2921-1AA00 |
| General technical data | |
| size of the circuit-breaker | S0 |
| 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 acc. to IEC 60068-2-27 | 6g / 11 ms |
| mechanical service life (switching cycles) of contactor typical | 10 000 000 |
| type of assignment | 2 |
| Substance Prohibition (Date) | 01.10.2009 00:00:00 |
| Ambient conditions | |
| • ambient temperature during operation | -20 ... +60 °C |
| • ambient temperature during storage | -50 ... +80 °C |
| • ambient temperature during transport | -50 ... +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 | 7 ... 10 A |
| • operating voltage rated value | 690 V |
| • operating voltage 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 | 8.5 A |
| operating power at AC-3 | |
| • at 400 V rated value | 4 000 W |
| • at 500 V rated value | 5 500 W |
| • at 690 V rated value | 7 500 W |
| Control circuit/ Control | |

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| control supply voltage at AC | |
| • at 50 Hz rated value | 110 V |
| • at 60 Hz rated value | 120 V |
| apparent holding power of magnet coil at AC | 8.5 V·A |
| Protective and monitoring functions | |
| trip class | CLASS 10 |
| design of the overload release | thermal (bimetallic) |
| response value current of instantaneous short-circuit trip unit | 130 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 7.92 A |
| • at 600 V rated value | 9.19 A |
| yielded mechanical performance [hp] | |
| • for single-phase AC motor | |
| — at 110/120 V rated value | 0.5 hp |
| — at 230 V rated value | 1.5 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 2 hp |
| — at 220/230 V rated value | 3 hp |
| — at 460/480 V rated value | 5 hp |
| — at 575/600 V rated value | 7.5 hp |
| Short-circuit protection | |
| product function short circuit protection | Yes |
| design of the short-circuit trip | magnetic |
| conditional short-circuit current (Iq) | |
| • at 690 V acc. to IEC 60947-4-1 rated value | 4 000 A |
| • at 400 V acc. to IEC 60947-4-1 rated value | 153 000 A |
| • at 500 V acc. to IEC 60947-4-1 rated value | 42 000 A |
| Installation/ mounting/ dimensions | |
| mounting position | vertical |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail |
| height | 193.1 mm |
| width | 45 mm |
| depth | 97.1 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) |
| • at AWG cables for main contacts | 2x (16 ... 12), 2x (14 ... 8) |
| • connectable conductor cross-section for main contacts finely stranded with core end processing | 1 ... 6 mm ² |
| Safety related data | |
| B10 value with high demand rate acc. to SN 31920 | 1 000 000 |
| proportion of dangerous failures with high demand rate | 73 % |

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| acc. to SN 31920 | |
| protection class IP on the front acc. to IEC 60529 | IP20 |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |
| Certificates/ approvals | |
| General Product Approval | For use in hazardous locations |



[Miscellaneous](#)



Test Certificates

Marine / Shipping

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other

Railway



[Confirmation](#)

[Vibration and Shock](#)

Further information

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=3RA2120-1JA24-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1JA24-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JA24-0AK6>

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

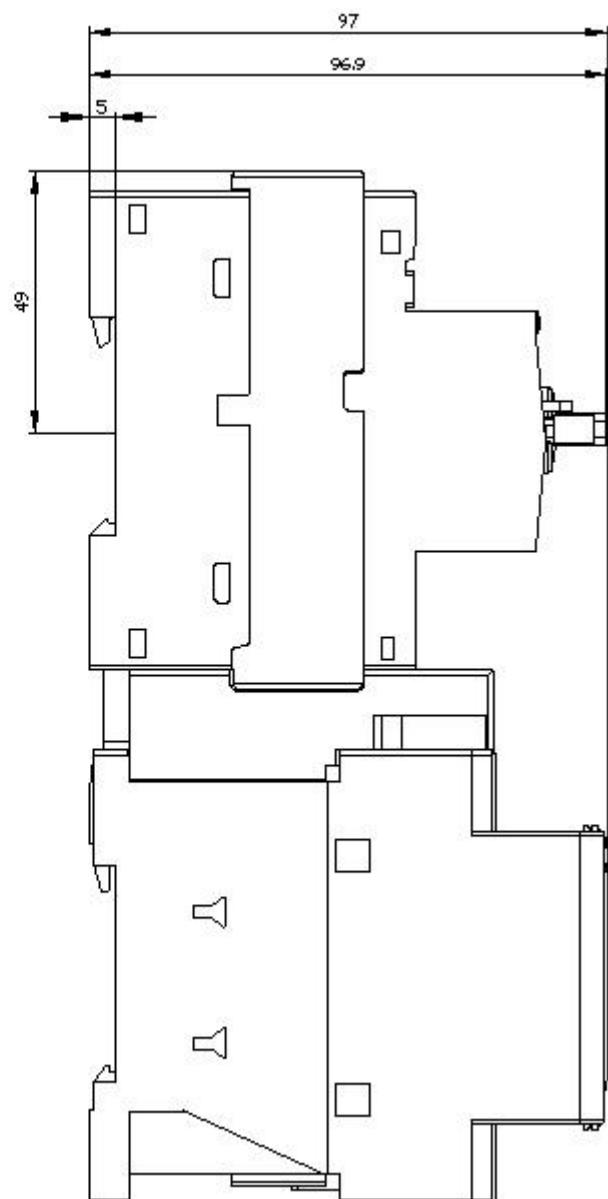
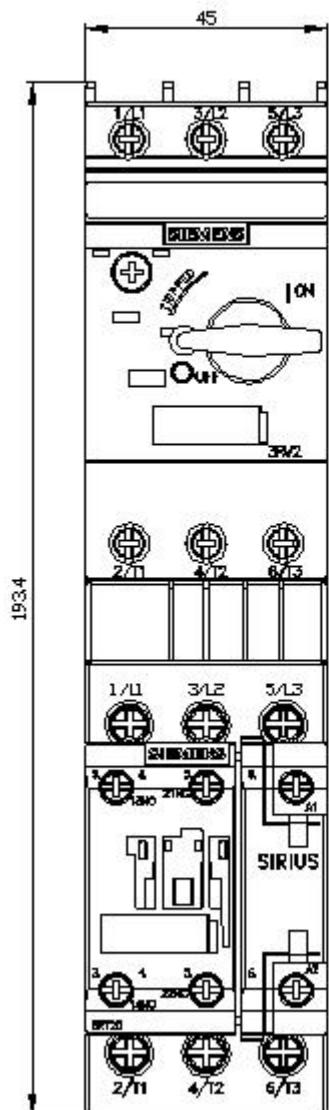
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1JA24-0AK6&lang=en

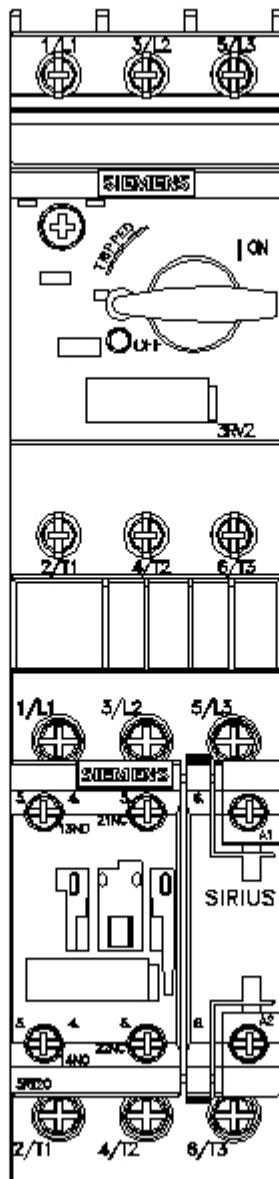
Characteristic: Tripping characteristics, I^2t , Let-through current

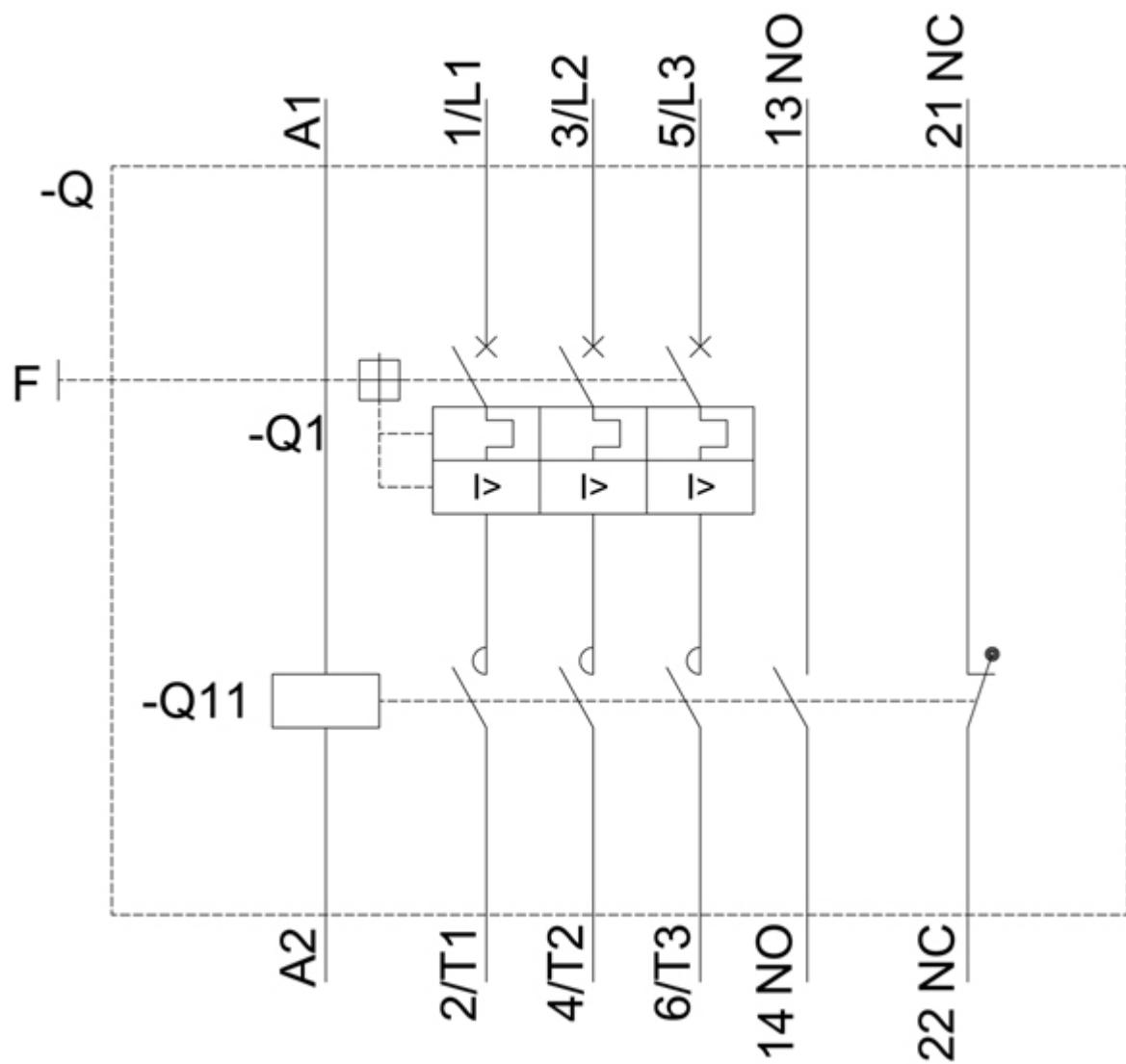
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JA24-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1JA24-0AK6&objecttype=14&gridview=view1>







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12/15/2020