



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 3.50...5.00 A 24 V DC screw terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

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|--|---|
| product brand name | SIRIUS |
| product designation | Direct (on-line) starter |
| design of the product | for DIN-rail or screw mounting |
| product type designation | 3RA21 |
| manufacturer's article number | |
| <ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module | 3RT2024-1BB40 3RV2011-1FA10 3RA2921-1BA00 |
| General technical data | |
| size of the circuit-breaker | S00 |
| size of load feeder | S0 |
| power loss [W] for rated value of the current | |
| <ul style="list-style-type: none"> • at AC in hot operating state per pole • without load current share typical | 2.7 W 5.9 W |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| surge voltage resistance rated value | 6 kV |
| degree of protection NEMA rating | other |
| 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 |
| reference code according to IEC 81346-2:2019 | Q |
| Substance Prohibition (Date) | 10/01/2009 |
| SVHC substance name | Lead - 7439-92-1 |
| Weight | 1.01 kg |
| Ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport | -20 ... +60 °C -50 ... +80 °C -50 ... +80 °C |
| temperature compensation | -20 ... +60 °C |
| relative humidity during operation | 10 ... 95 % |
| 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 | 3.5 ... 5 A |
| operating voltage | |
| <ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum | 690 V 690 V 690 V |

| | |
|--|--|
| operating frequency rated value | 50 ... 60 Hz |
| operational current | |
| • at AC-3 at 400 V rated value | 5 A |
| • at AC-3e at 400 V rated value | 5 A |
| operating power | |
| • at AC-3 | |
| — at 400 V rated value | 1 500 W |
| • at AC-3e | |
| — at 400 V rated value | 1 500 W |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | DC |
| control supply voltage at DC rated value | 24 V |
| holding power of magnet coil at DC | 5.9 W |
| Auxiliary circuit | |
| product extension auxiliary switch | Yes |
| Protective and monitoring functions | |
| trip class | CLASS 10 |
| design of the overload release | thermal (bimetallic) |
| response value current of instantaneous short-circuit trip unit | 65 A |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 5 A |
| • at 600 V rated value | 5 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 | 1.5 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 | 150 000 A |
| Installation/ mounting/ dimensions | |
| mounting position | vertical |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail |
| height | 193 mm |
| width | 45 mm |
| depth | 107 mm |
| required spacing | |
| • for grounded parts | |
| — forwards | 20 mm |
| — backwards | 0 mm |
| — upwards | 50 mm |
| — at the side | 20 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 20 mm |
| — backwards | 0 mm |
| — upwards | 50 mm |
| — downwards | 10 mm |
| — at the side | 20 mm |
| Connections/ Terminals | |
| type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control circuit | screw-type terminals |

Safety related data

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| product function suitable for safety function | Yes |
| Electrical Safety | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front |

Communication/ Protocol

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|---|----|
| protocol is supported | |
| • PROFINET IO protocol | No |
| • PROFIsafe protocol | No |
| protocol is supported AS-Interface protocol | No |

Approvals Certificates

| | | |
|--------------------------|--------------------------------|-------------------|
| General Product Approval | For use in hazardous locations | Test Certificates |
|--------------------------|--------------------------------|-------------------|



[Type Test Certificates/Test Report](#)

Test Certificates

| | | | | | |
|--------------------------|----------------------|--|--|--|--|
| Special Test Certificate | Maritime application | | | | |
| | | | | | |

Maritime application

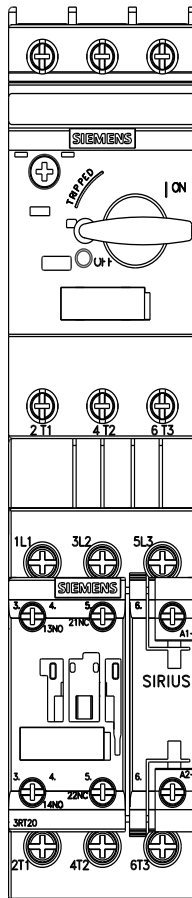
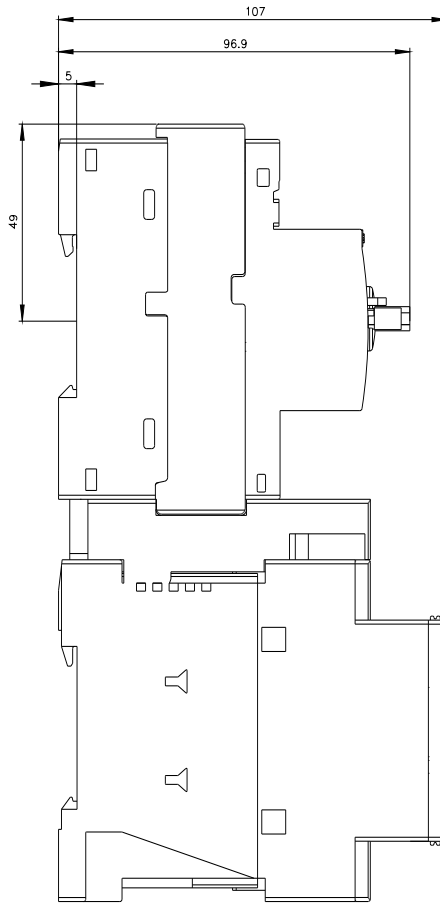
| | | | |
|----------------------|-------|------------------------------|--|
| Maritime application | other | Railway | Dangerous goods |
| | | | |
| | | Confirmation | Special Test Certificate |
| | | | Transport Information |

Environment

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|---|
| Environmental Confirmations |
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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=3RA2120-1FA24-0BB4>
 Cax online generator
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1FA24-0BB4>
 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FA24-0BB4>
 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FA24-0BB4&lang=en
 Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FA24-0BB4/char>
 Further characteristics (e.g. electrical endurance, switching frequency)
<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1FA24-0BB4&objecttype=14&gridview=view1>





last modified:

4/1/2025 