



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 7.00...10.0 A 24 V DC Spring-type terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I<sub>q</sub> = 150 kA 1 NO+1 NC (contactor)

|                                                                                     |                                |
|-------------------------------------------------------------------------------------|--------------------------------|
| 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                                                       |                                |
| • of the supplied contactor                                                         | <a href="#">3RT2024-2BB40</a>  |
| • of the supplied circuit-breakers                                                  | <a href="#">3RV2021-1JA20</a>  |
| • of the supplied link module                                                       | <a href="#">3RA2921-2AA00</a>  |
| <b>General technical data</b>                                                       |                                |
| size of the circuit-breaker                                                         | S0                             |
| size of load feeder                                                                 | S0                             |
| power loss [W] for rated value of the current                                       |                                |
| • at AC in hot operating state per pole                                             | 3.4 W                          |
| • without load current share typical                                                | 5.9 W                          |
| type of calculation of power loss current-dependent                                 | quadratic                      |
| 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                                        | 6 g / 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 Prohibitance (day/month/year)                                             | 03/01/2017                     |
| SVHC substance name                                                                 | Lead CAS-No. 7439-92-1         |
| Net Weight                                                                          | 1.2 kg                         |
| <b>Ambient conditions</b>                                                           |                                |
| ambient temperature                                                                 |                                |
| • during operation                                                                  | -20 ... +60 °C                 |
| • during storage                                                                    | -50 ... +80 °C                 |
| • during transport                                                                  | -50 ... +80 °C                 |
| temperature compensation                                                            | -20 ... +60 °C                 |
| relative humidity during operation                                                  | 10 ... 95 %                    |
| <b>Main circuit</b>                                                                 |                                |
| 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                          |

|                                                                 |                                                |
|-----------------------------------------------------------------|------------------------------------------------|
| • at AC-3 rated value maximum                                   | 690 V                                          |
| • at AC-3e rated value maximum                                  | 690 V                                          |
| <b>operating frequency rated value</b>                          | 50 ... 60 Hz                                   |
| <b>operational current</b>                                      |                                                |
| • at AC-3 at 400 V rated value                                  | 10 A                                           |
| • at AC-3e at 400 V rated value                                 | 10 A                                           |
| <b>operating power</b>                                          |                                                |
| • at AC-3                                                       |                                                |
| — at 400 V rated value                                          | 4 000 W                                        |
| • at AC-3e                                                      |                                                |
| — at 400 V rated value                                          | 4 000 W                                        |
| <b>Control circuit/ Control</b>                                 |                                                |
| <b>type of voltage of the control supply voltage</b>            | DC                                             |
| <b>control supply voltage at DC rated value</b>                 | 24 V                                           |
| <b>holding power of magnet coil at DC</b>                       | 5.9 W                                          |
| <b>Auxiliary circuit</b>                                        |                                                |
| <b>product extension auxiliary switch</b>                       | Yes                                            |
| <b>Protective and monitoring functions</b>                      |                                                |
| <b>trip class</b>                                               | CLASS 10                                       |
| <b>design of the overload release</b>                           | thermal (bimetallic)                           |
| response value current of instantaneous short-circuit trip unit | 130 A                                          |
| <b>UL/CSA ratings</b>                                           |                                                |
| <b>full-load current (FLA) for 3-phase AC motor</b>             |                                                |
| • at 480 V rated value                                          | 10 A                                           |
| • at 600 V rated value                                          | 10 A                                           |
| <b>yielded mechanical performance [hp]</b>                      |                                                |
| • 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                                      | 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                                          |
| <b>Short-circuit protection</b>                                 |                                                |
| <b>product function short circuit protection</b>                | Yes                                            |
| <b>design of the short-circuit trip</b>                         | magnetic                                       |
| <b>conditional short-circuit current (I<sub>q</sub>)</b>        |                                                |
| • at 400 V according to IEC 60947-4-1 rated value               | 150 000 A                                      |
| <b>Installation/ mounting/ dimensions</b>                       |                                                |
| <b>mounting position</b>                                        | vertical                                       |
| <b>fastening method</b>                                         | screw and snap-on mounting onto 35 mm DIN rail |
| <b>height</b>                                                   | 243 mm                                         |
| <b>width</b>                                                    | 45 mm                                          |
| <b>depth</b>                                                    | 107 mm                                         |
| <b>required spacing</b>                                         |                                                |
| • 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 spring-loaded terminals
- for auxiliary and control circuit spring-loaded terminals

## Safety related data

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

### protocol is supported

- PROFINET IO protocol No
- PROFIsafe protocol No

protocol is supported AS-Interface protocol No

## Approvals Certificates

### Environment

### General Product Approval

For use in hazardous locations

[Environmental Confirmations](#)



## Test Certificates

## Maritime application

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



## Maritime application

## other



[Confirmation](#)

[Confirmation](#)



## Railway

## Dangerous goods

[Special Test Certificate](#)

[Transport Information](#)

## 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=3RA2120-1JE24-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JE24-0BB4>

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

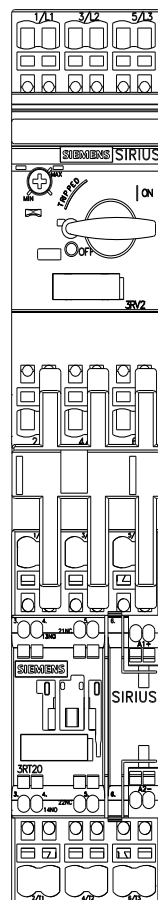
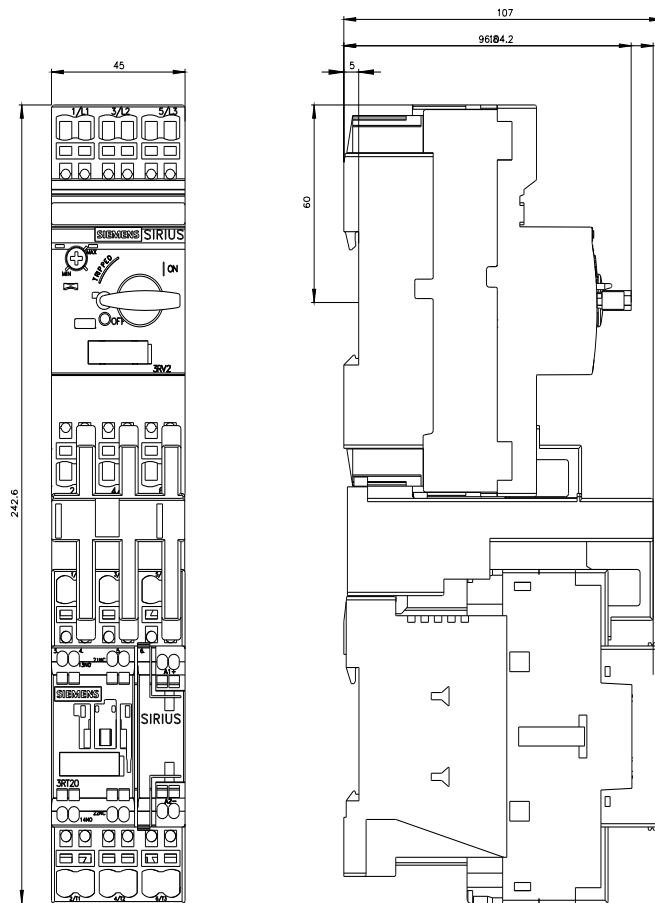
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1JE24-0BB4&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1JE24-0BB4&lang=en)

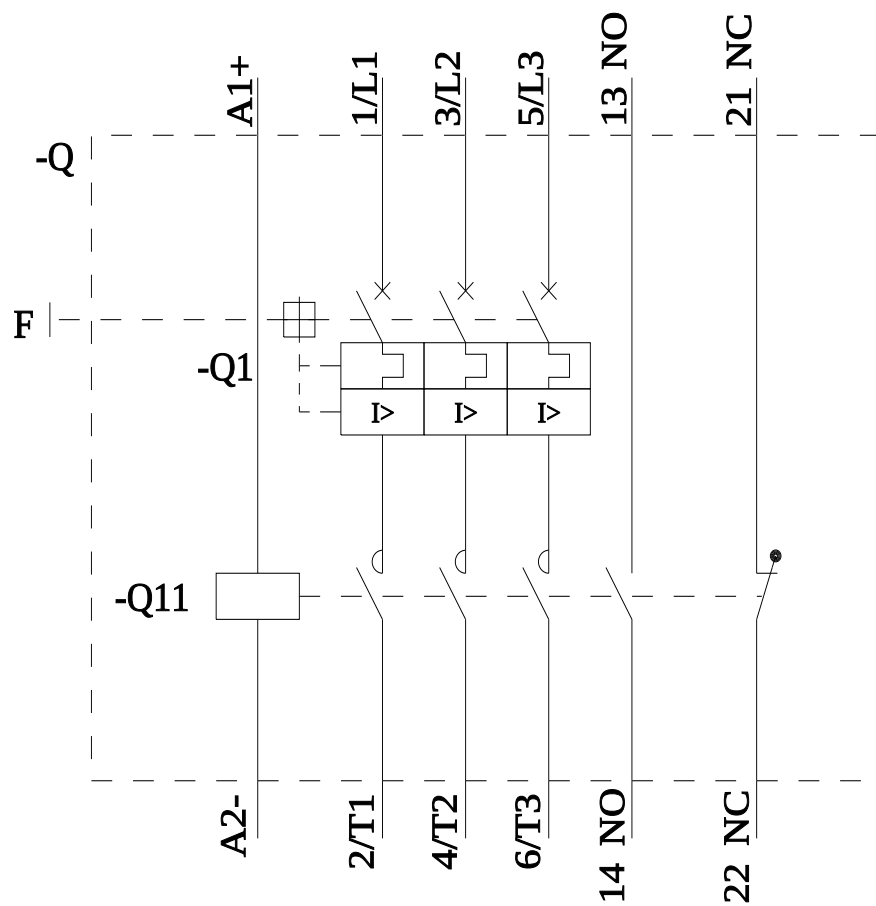
### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1JE24-0BB4>

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>)





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