

Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 3.50...5.00 A 24 V DC screw terminal for 60 mm busbar systems (also fulfills type of coordination 1)  
Type of coordination 2, Iq = 150 kA 1 NO+1 NC (contactor)

|  |  |
|--|--|
| <b>product brand name</b>  | SIRIUS   |
| <b>product designation</b>   | Direct (on-line) starter   |
| <b>design of the product</b>   | for 60 mm busbars  |
| <b>product type designation</b>  | 3RA21  |
| <b>manufacturer's article number</b>   |  |
| <ul style="list-style-type: none"> <li>• of the supplied contactor</li> <li>• of the supplied circuit-breakers</li> <li>• of the supplied busbar adapter</li> <li>• of the supplied link module</li> </ul> | <a href="#">3RT2024-1BB40</a><br><a href="#">3RV2011-1FA10</a><br><a href="#">8US1251-5NT10</a><br><a href="#">3RA2921-1BA00</a> |
| <b>General technical data</b>  |  |
| <b>size of the circuit-breaker</b>   | S00  |
| <b>size of load feeder</b>   | S0   |
| <b>power loss [W] for rated value of the current</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC in hot operating state per pole</li> <li>• without load current share typical</li> </ul>  | 2.7 W<br>5.9 W   |
| <b>type of calculation of power loss current-dependent</b>   | quadratic  |
| insulation voltage with degree of pollution 3 at AC rated value  | 690 V  |
| <b>surge voltage resistance rated value</b>  | 6 kV   |
| <b>degree of protection NEMA rating</b>  | other  |
| <b>shock resistance according to IEC 60068-2-27</b>  | 6 g / 11 ms  |
| mechanical service life (operating cycles) of contactor typical  | 10 000 000   |
| <b>type of coordination</b>  | 2  |
| <b>reference code according to IEC 81346-2:2019</b>  | Q  |
| <b>Substance Prohibition (day/month/year)</b>  | 10/01/2009   |
| <b>SVHC substance name</b>   | Lead CAS-No. 7439-92-1   |
| <b>Net Weight</b>  | 1.45 kg  |
| <b>Ambient conditions</b>  |  |
| <b>ambient temperature</b>   |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>   | -20 ... +60 °C<br>-50 ... +80 °C<br>-50 ... +80 °C   |
| <b>temperature compensation</b>  | -20 ... +60 °C   |
| relative humidity during operation   | 10 ... 95 %  |
| <b>Main circuit</b>  |  |
| <b>number of poles for main current circuit</b>  | 3  |
| <b>design of the switching contact</b>   | electromechanical  |
| <b>adjustable current response value current of the current-dependent overload release</b>   | 3.5 ... 5 A  |
| <b>operating voltage</b>   |  |
| <ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> <li>• at AC-3e rated value maximum</li> </ul>   | 690 V<br>690 V<br>690 V  |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz   |
| <b>operational current</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> <li>• at AC-3e at 400 V rated value</li> </ul>  | 5 A<br>5 A   |
| <b>operating power</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>  | 1 500 W  |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>● at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>  | 1 500 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)   |
| <b>response value current of instantaneous short-circuit trip unit</b>  | 65 A   |
| <b>UL/CSA ratings</b>   |  |
| <b>full-load current (FLA) for 3-phase AC motor</b>   |  |
| <ul style="list-style-type: none"> <li>● at 480 V rated value</li> <li>● at 600 V rated value</li> </ul>  | 5 A<br>5 A   |
| <b>yielded mechanical performance [hp]</b>  |  |
| <ul style="list-style-type: none"> <li>● for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> <li>● for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul> | 0.25 hp<br>0.5 hp<br>1.5 hp<br>1.5 hp<br>3 hp<br>5 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>  |  |
| <ul style="list-style-type: none"> <li>● at 400 V according to IEC 60947-4-1 rated value</li> </ul>   | 150 000 A  |
| <b>Installation/ mounting/ dimensions</b>   |  |
| <b>mounting position</b>  | vertical   |
| <b>fastening method</b>   | for snapping onto 60 mm busbar systems   |
| <b>height</b>   | 260 mm   |
| <b>width</b>  | 45 mm  |
| <b>depth</b>  | 165 mm   |
| <b>required spacing</b>   |  |
| <ul style="list-style-type: none"> <li>● for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>● for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>                  | 20 mm<br>0 mm<br>50 mm<br>20 mm<br>10 mm<br>20 mm<br>0 mm<br>50 mm<br>10 mm<br>20 mm |
| <b>Connections/ Terminals</b>   |  |
| <b>type of electrical connection</b>  |  |
| <ul style="list-style-type: none"> <li>● for main current circuit</li> <li>● for auxiliary and control circuit</li> </ul>   | screw-type terminals<br>screw-type terminals   |
| <b>Safety related data</b>  |  |
| <b>product function suitable for safety function</b>  | Yes  |
| <b>Electrical Safety</b>  |  |
| <b>touch protection on the front according to IEC 60529</b>   | finger-safe, for vertical contact from the front                                     |
| <b>Communication/ Protocol</b>  |  |

|   |    |
|---|----|
| <b>protocol is supported</b>                |    |
| • PROFINET IO protocol                      | No |
| • PROFIsafe protocol                        | No |
| protocol is supported AS-Interface protocol | No |

**Approvals Certificates**

|                    |                                 |                                       |
|--------------------|---------------------------------|---------------------------------------|
| <b>Environment</b> | <b>General Product Approval</b> | <b>For use in hazardous locations</b> |
|--------------------|---------------------------------|---------------------------------------|

[Environmental Confirmations](#)



|                          |                             |
|--------------------------|-----------------------------|
| <b>Test Certificates</b> | <b>Maritime application</b> |
|--------------------------|-----------------------------|

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



|                             |              |
|-----------------------------|--------------|
| <b>Maritime application</b> | <b>other</b> |
|-----------------------------|--------------|



[Confirmation](#)

[Confirmation](#)



|                |                        |
|----------------|------------------------|
| <b>Railway</b> | <b>Dangerous goods</b> |
|----------------|------------------------|

[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=3RA2120-1FD24-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FD24-0BB4>

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

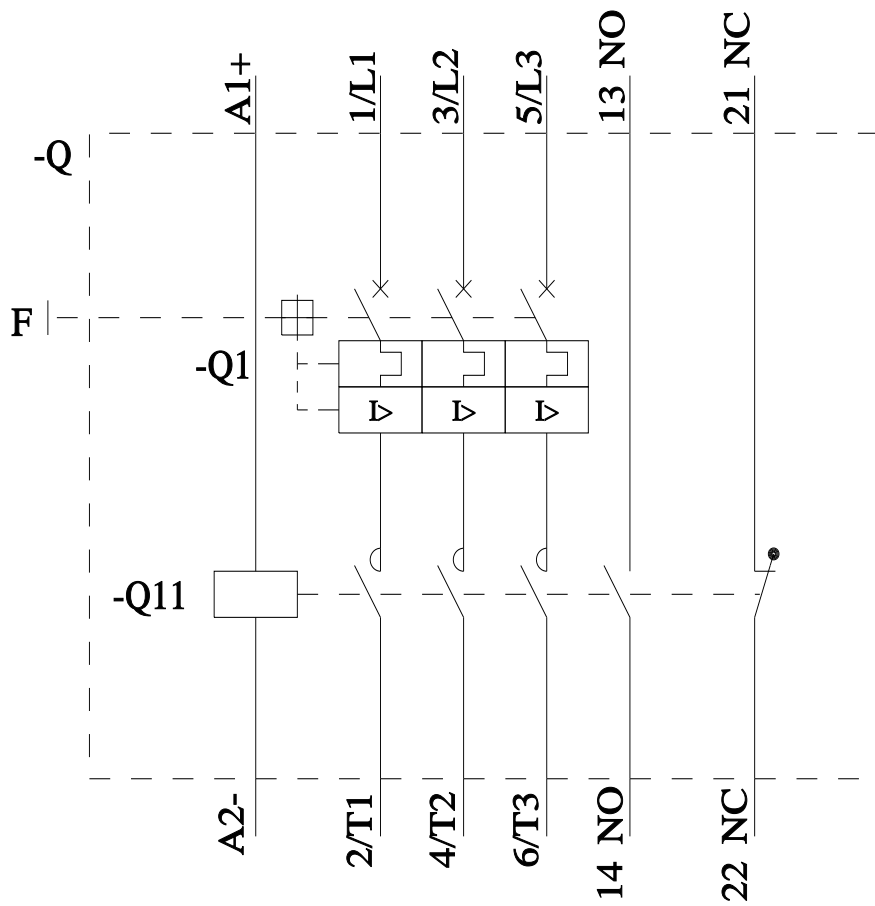
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1FD24-0BB4&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FD24-0BB4&lang=en)

**Cax online generator**

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1FD24-0BB4>

**Characteristic curves**

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



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