



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 16...22 A 24 V DC screw terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, I<sub>q</sub> = 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>                                                       |                               |
| • of the supplied contactor                                                                | <a href="#">3RT2027-1BB40</a> |
| • of the supplied circuit-breakers                                                         | <a href="#">3RV2021-4CA10</a> |
| • of the supplied busbar adapter                                                           | <a href="#">8US1251-5NT10</a> |
| • of the supplied link module                                                              | <a href="#">3RA2921-1BA00</a> |
| <b>General technical data</b>                                                              |                               |
| <b>size of the circuit-breaker</b>                                                         | S0                            |
| <b>size of load feeder</b>                                                                 | S0                            |
| <b>power loss [W] for rated value of the current</b>                                       |                               |
| • at AC in hot operating state per pole                                                    | 5.8 W                         |
| • without load current share typical                                                       | 5.9 W                         |
| 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>                                        | 6g / 11 ms                    |
| mechanical service life (operating cycles) of contactor typical                            | 10 000 000                    |
| <b>type of assignment</b>                                                                  | 2                             |
| <b>reference code according to IEC 81346-2:2019</b>                                        | Q                             |
| <b>Substance Prohibitance (Date)</b>                                                       | 10/01/2009                    |
| <b>SVHC substance name</b>                                                                 | Lead - 7439-92-1              |
| <b>Weight</b>                                                                              | 1.485 kg                      |
| <b>Ambient conditions</b>                                                                  |                               |
| <b>ambient temperature</b>                                                                 |                               |
| • during operation                                                                         | -20 ... +60 °C                |
| • during storage                                                                           | -50 ... +80 °C                |
| • during transport                                                                         | -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> | 16 ... 22 A                   |
| <b>operating voltage</b>                                                                   |                               |
| • 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                                         | 22 A                                   |
| • at AC-3e at 400 V rated value                                        | 22 A                                   |
| <b>operating power</b>                                                 |                                        |
| • at AC-3                                                              |                                        |
| — at 400 V rated value                                                 | 11 000 W                               |
| • at AC-3e                                                             |                                        |
| — at 400 V rated value                                                 | 11 000 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)                   |
| <b>response value current of instantaneous short-circuit trip unit</b> | 286 A                                  |
| <b>UL/CSA ratings</b>                                                  |                                        |
| <b>full-load current (FLA) for 3-phase AC motor</b>                    |                                        |
| • at 480 V rated value                                                 | 22 A                                   |
| • at 600 V rated value                                                 | 22 A                                   |
| <b>yielded mechanical performance [hp]</b>                             |                                        |
| • for single-phase AC motor                                            |                                        |
| — at 110/120 V rated value                                             | 1.5 hp                                 |
| — at 230 V rated value                                                 | 3 hp                                   |
| • for 3-phase AC motor                                                 |                                        |
| — at 200/208 V rated value                                             | 7.5 hp                                 |
| — at 220/230 V rated value                                             | 7.5 hp                                 |
| — at 460/480 V rated value                                             | 15 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>                                                | 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>                                                |                                        |
| • 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                                  |
| <b>Connections/ Terminals</b>                                          |                                        |
| <b>type of electrical connection</b>                                   |                                        |
| • for main current circuit                                             | screw-type terminals                   |
| • for auxiliary and control circuit                                    | screw-type 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   |                                |
|--------------------------|--------------------------------|
| General Product Approval | For use in hazardous locations |



[Confirmation](#)

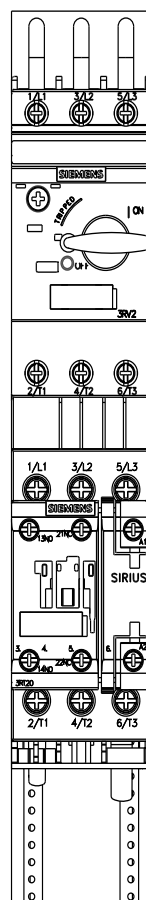
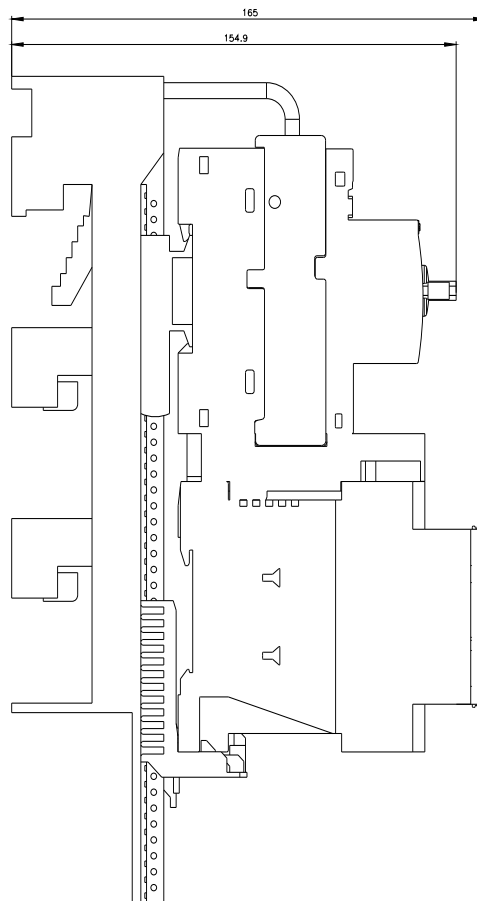


| Test Certificates                                                                              | Marine / Shipping                                    |
|------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <a href="#">Type Test Certificates/Test Report</a><br><a href="#">Special Test Certificate</a> | ABS<br>BUREAU VERITAS<br>DNV<br>Lloyd's Register LRS |

| Marine / Shipping   | other                        | Railway                                  | Dangerous goods                       |
|---------------------|------------------------------|------------------------------------------|---------------------------------------|
| PRS<br>RINA<br>RMRS | <a href="#">Confirmation</a> | <a href="#">Special Test Certificate</a> | <a href="#">Transport Information</a> |

| Environment                                 |
|---------------------------------------------|
| <a href="#">Environmental Confirmations</a> |

| Further information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <p>Information on the packaging<br/> <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a></p> <p>Information- and Downloadcenter (Catalogs, Brochures,...)<br/> <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a></p> <p>Industry Mall (Online ordering system)<br/> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2120-4CD27-0BB4">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2120-4CD27-0BB4</a></p> <p>Cax online generator<br/> <a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RA2120-4CD27-0BB4">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RA2120-4CD27-0BB4</a></p> <p>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)<br/> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CD27-0BB4">https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CD27-0BB4</a></p> <p>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)<br/> <a href="http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CD27-0BB4&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CD27-0BB4&amp;lang=en</a></p> <p>Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current<br/> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CD27-0BB4/char">https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CD27-0BB4/char</a></p> <p>Further characteristics (e.g. electrical endurance, switching frequency)<br/> <a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&amp;mlfb=3RA2120-4CD27-0BB4&amp;objecttype=14&amp;gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&amp;mlfb=3RA2120-4CD27-0BB4&amp;objecttype=14&amp;gridview=view1</a></p> |





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