



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S2 22 ... 32 A 20 ... 33 V AC/DC screw terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I<sub>q</sub> = 100 kA 1 NO+1 NC (contactor) with circuit (integrated)

|                                                                                     |                                                                                                                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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="#">3RT2035-1NB30</a>                                                                                                                              |
| • of the supplied circuit-breakers                                                  | <a href="#">3RV2031-4EA10</a>                                                                                                                              |
| • of the supplied link module                                                       | <a href="#">3RA2931-1AA00</a>                                                                                                                              |
| <b>General technical data</b>                                                       |                                                                                                                                                            |
| size of the circuit-breaker                                                         | S2                                                                                                                                                         |
| size of load feeder                                                                 | S2                                                                                                                                                         |
| power loss [W] for rated value of the current                                       |                                                                                                                                                            |
| • at AC in hot operating state per pole                                             | 8.2 W                                                                                                                                                      |
| • without load current share typical                                                | 2 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 assignment                                                                  | 2                                                                                                                                                          |
| reference code according to IEC 81346-2:2019                                        | Q                                                                                                                                                          |
| Substance Prohibitance (Date)                                                       | 03/01/2017                                                                                                                                                 |
| SVHC substance name                                                                 | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>Melamine - 108-78-1 |
| Weight                                                                              | 2.28 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 | 22 ... 32 A                                                                                                                                                |
| operating voltage                                                                   |                                                                                                                                                            |
| • rated value                                                                       | 690 V                                                                                                                                                      |

|                                                                                                                                                             |                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>                                                                             | 690 V                                             |
| <ul style="list-style-type: none"> <li>• at AC-3e rated value maximum</li> </ul>                                                                            | 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> </ul>                                                                            | 32 A                                              |
| <ul style="list-style-type: none"> <li>• at AC-3e at 400 V rated value</li> </ul>                                                                           | 32 A                                              |
| <b>operating power</b>                                                                                                                                      |                                                   |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>                       | 15 000 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>                      | 15 000 W                                          |
| <b>Control circuit/ Control</b>                                                                                                                             |                                                   |
| <b>type of voltage of the control supply voltage</b>                                                                                                        | AC/DC                                             |
| <b>control supply voltage at AC</b>                                                                                                                         |                                                   |
| <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>                                                                                    | 20 ... 33 V                                       |
| <ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>                                                                                    | 20 ... 33 V                                       |
| <b>control supply voltage at DC rated value</b>                                                                                                             | 20 ... 33 V                                       |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                          | 2 VA                                              |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                | 2 VA                                              |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                | 2 VA                                              |
| <b>inductive power factor with the holding power of the coil</b>                                                                                            | 1                                                 |
| <b>holding power of magnet coil at DC</b>                                                                                                                   | 1 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>                                                                                      | 416 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> </ul>                                                                                    | 32 A                                              |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                    | 32 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> </ul> </li> </ul> | 2 hp                                              |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul> </li> </ul>                                | 5 hp                                              |
| <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> </ul> </li> </ul>      | 10 hp                                             |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220/230 V rated value</li> </ul> </li> </ul>                            | 10 hp                                             |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> </ul> </li> </ul>                            | 20 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>                                                         | 100 000 A                                         |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                   |                                                   |
| <b>mounting position</b>                                                                                                                                    | vertical, horizontal                              |
| <b>fastening method</b>                                                                                                                                     | screw and snap-on mounting to two 35 mm DIN rails |
| <b>height</b>                                                                                                                                               | 274 mm                                            |
| <b>width</b>                                                                                                                                                | 55 mm                                             |
| <b>depth</b>                                                                                                                                                | 150 mm                                            |
| <b>required spacing</b>                                                                                                                                     |                                                   |
| <ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>                        | 32 mm                                             |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— backwards</li> </ul> </li> </ul>                                           | 0 mm                                              |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— upwards</li> </ul> </li> </ul>                                             | 50 mm                                             |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>                                         | 10 mm                                             |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul>                                           | 10 mm                                             |
| <ul style="list-style-type: none"> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>                            | 32 mm                                             |

|               |       |
|---------------|-------|
| — backwards   | 0 mm  |
| — upwards     | 50 mm |
| — downwards   | 10 mm |
| — at the side | 10 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

|                                               |     |
|-----------------------------------------------|-----|
| 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 hazard-  
ous locations

##### Test Certificates



[Type Test Certificates/Test Report](#)

##### Test Certificates

##### Marine / Shipping

[Special Test Certificate](#)



##### Marine / Shipping

##### other

##### Railway

##### Dangerous goods

##### Environment



[Confirmation](#)

[Special Test Certificate](#)

[Transport Information](#)

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### 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=3RA2130-4EA35-0NB3>

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2130-4EA35-0NB3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4EA35-0NB3>

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

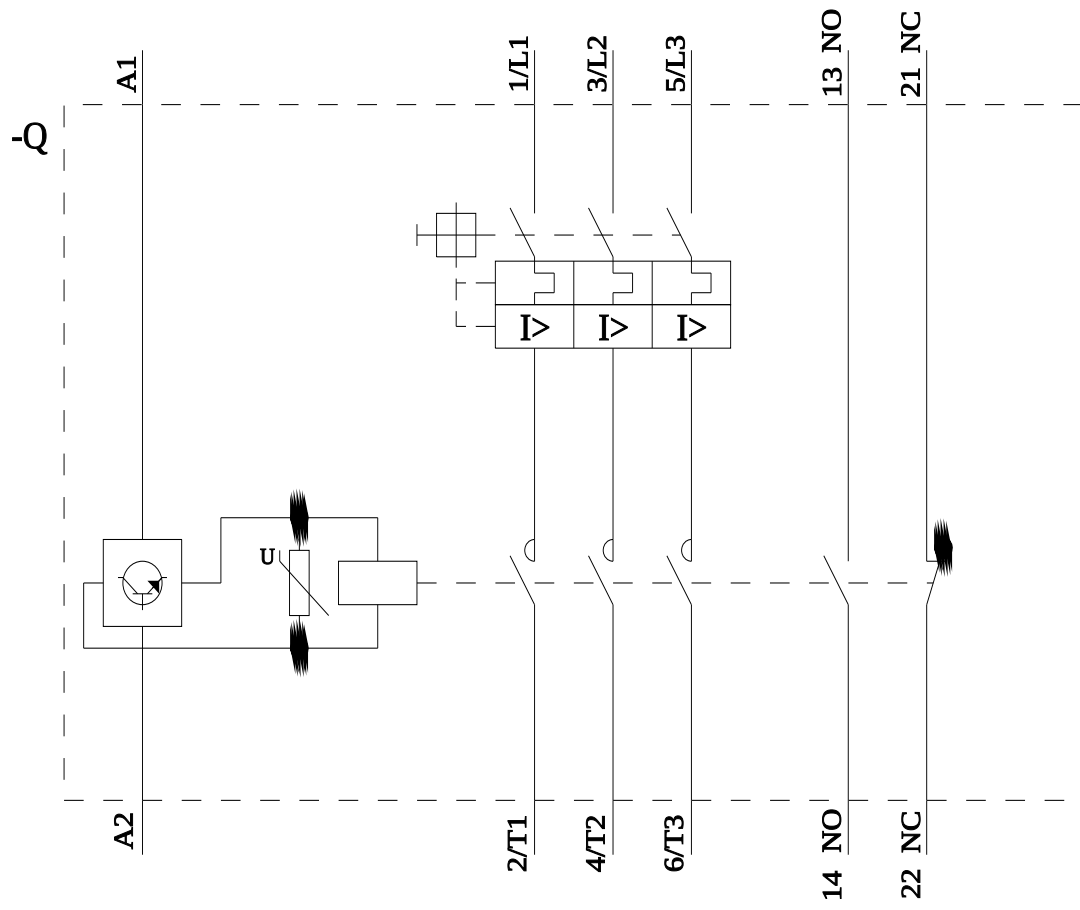
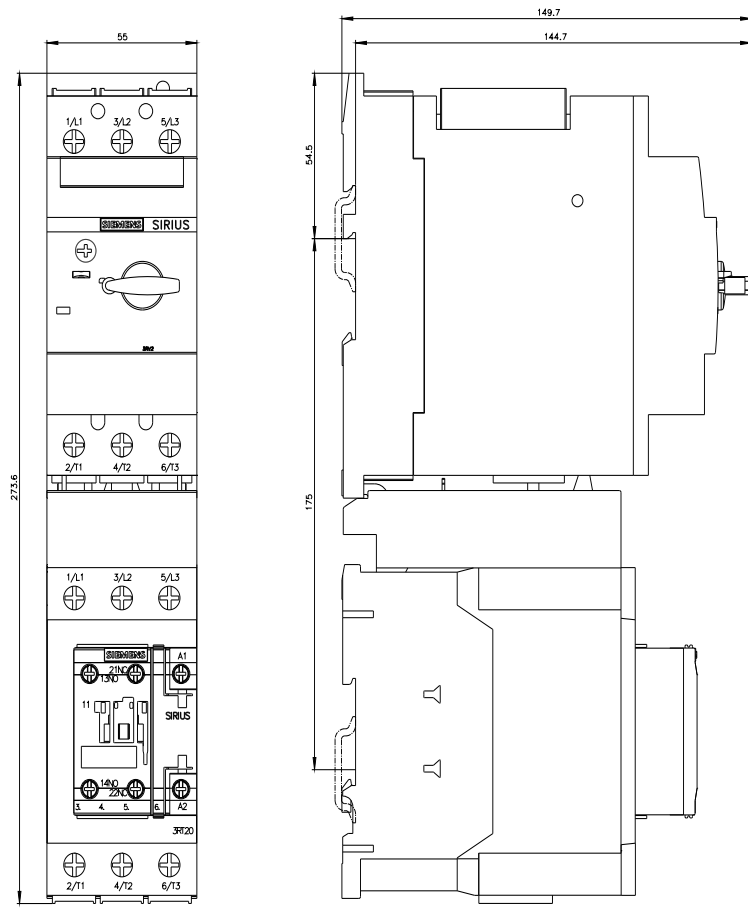
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2130-4EA35-0NB3&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2130-4EA35-0NB3&lang=en)

##### Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4EA35-0NB3/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2130-4EA35-0NB3&objecttype=14&gridview=view1>





# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Siemens:](#)

[3RA21304EA350NB3](#)