



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S2 35...45 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="#">3RT2036-1NB30</a>                                                                                                                              |
| • of the supplied circuit-breakers                                                  | <a href="#">3RV2031-4VA10</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                                             | 12.2 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                                                                              | 2.38 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 | 35 ... 45 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>                                                                                                                                         | 45 A                                              |
| <ul style="list-style-type: none"> <li>• at AC-3e at 400 V rated value</li> </ul>                                                                                                                                        | 45 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>                                                                                    | 22 000 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>                                                                                   | 22 000 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>                                                                                                                                                   | 650 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>                                                                                                                                                 | 45 A                                              |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                 | 45 A                                              |
| <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> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> </ul> | 32 mm<br>0 mm<br>50 mm<br>10 mm<br>10 mm          |
| <ul style="list-style-type: none"> <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>     | 32 mm<br>0 mm<br>50 mm<br>10 mm<br>10 mm          |
| <b>Connections/ Terminals</b>                                                                                                                                                                                            |                                                   |
| <b>type of electrical connection</b>                                                                                                                                                                                     |                                                   |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>                                                                                                                                             | screw-type terminals                              |
| <ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> </ul>                                                                                                                                    | 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 | 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=3RA2130-4VA36-0NB3>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2130-4VA36-0NB3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4VA36-0NB3>

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

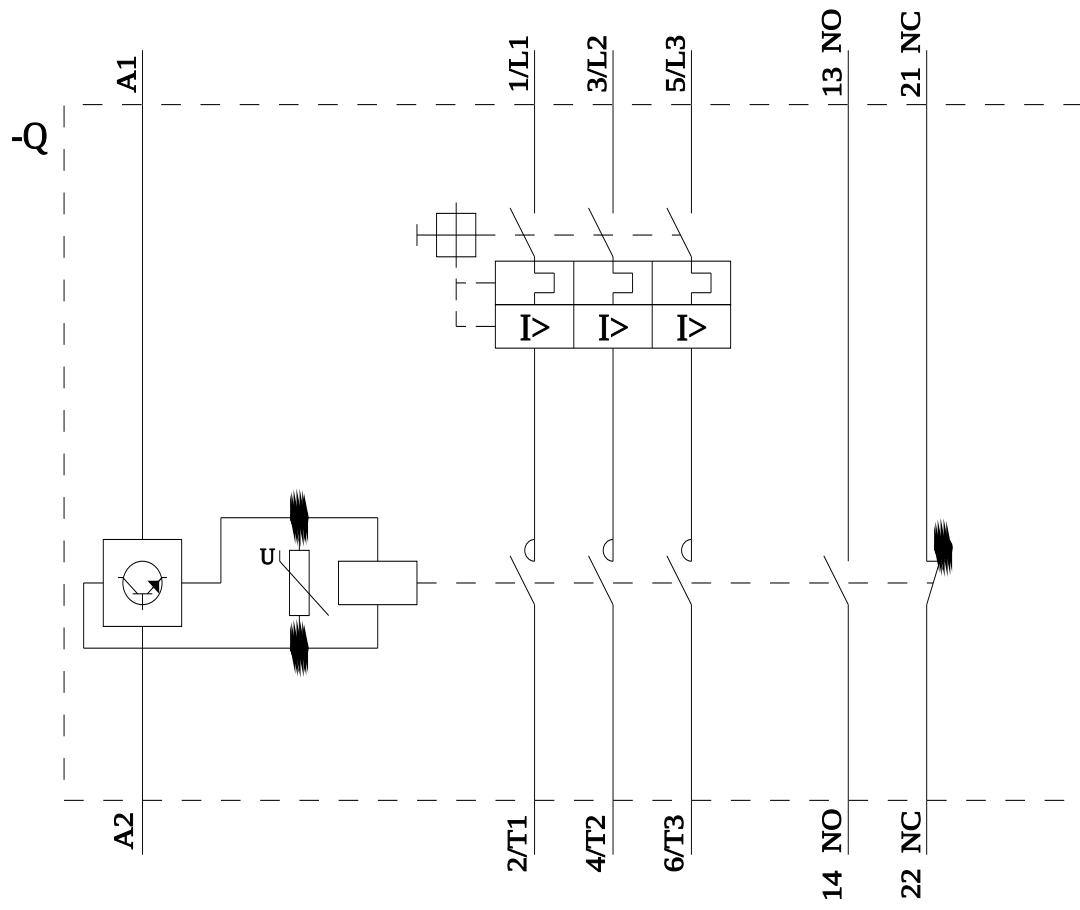
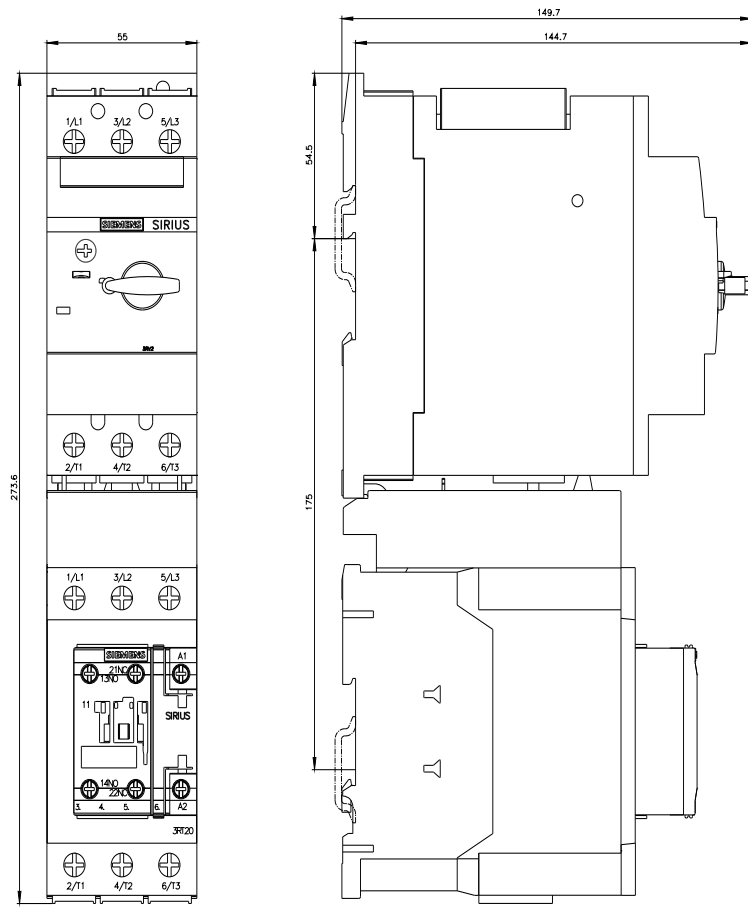
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2130-4VA36-0NB3&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2130-4VA36-0NB3&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2130-4VA36-0NB3/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2130-4VA36-0NB3&objecttype=14&gridview=view1>





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