

Load feeder fuseless, Reversing duty 400 V AC, Size S0 18...25 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>                                                                 | Reversing starter             |
| <b>design of the product</b>                                                               | for 60 mm busbars             |
| <b>product type designation</b>                                                            | 3RA22                         |
| <b>manufacturer's article number</b>                                                       |                               |
| • of the supplied contactor                                                                | <a href="#">3RT2027-1BB40</a> |
| • of the supplied circuit-breakers                                                         | <a href="#">3RV2021-4DA10</a> |
| • of the supplied RS assembly kit                                                          | <a href="#">3RA2923-1DB1</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                         |
| <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 Prohibitance (day/month/year)</b>                                             | 10/01/2009                    |
| <b>Net Weight</b>                                                                          | 2.6 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> | 18 ... 25 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                                                             | 25 A                          |
| • at AC-3e at 400 V rated value                                                            | 25 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>                                 |                                                  |
| type of voltage of the control supply voltage                   | DC                                               |
| control supply voltage at DC rated value                        | 24 V                                             |
| holding power of magnet coil at DC                              | 5.9 W                                            |
| <b>Auxiliary circuit</b>                                        |                                                  |
| product extension auxiliary switch                              | Yes                                              |
| <b>Protective and monitoring functions</b>                      |                                                  |
| trip class                                                      | CLASS 10                                         |
| design of the overload release                                  | thermal (bimetallic)                             |
| response value current of instantaneous short-circuit trip unit | 325 A                                            |
| <b>UL/CSA ratings</b>                                           |                                                  |
| full-load current (FLA) for 3-phase AC motor                    |                                                  |
| • at 480 V rated value                                          | 25 A                                             |
| • at 600 V rated value                                          | 25 A                                             |
| yielded mechanical performance [hp]                             |                                                  |
| • for single-phase AC motor                                     |                                                  |
| — at 110/120 V rated value                                      | 2 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                                      | 20 hp                                            |
| <b>Short-circuit protection</b>                                 |                                                  |
| product function short circuit protection                       | Yes                                              |
| design of the short-circuit trip                                | magnetic                                         |
| conditional short-circuit current (I <sub>q</sub> )             |                                                  |
| • at 400 V according to IEC 60947-4-1 rated value               | 150 000 A                                        |
| <b>Installation/ mounting/ dimensions</b>                       |                                                  |
| mounting position                                               | vertical                                         |
| fastening method                                                | for snapping onto 60 mm busbar systems           |
| height                                                          | 260 mm                                           |
| width                                                           | 90 mm                                            |
| depth                                                           | 165 mm                                           |
| required spacing                                                |                                                  |
| • for grounded parts                                            |                                                  |
| — forwards                                                      | 32 mm                                            |
| — backwards                                                     | 0 mm                                             |
| — upwards                                                       | 50 mm                                            |
| — at the side                                                   | 10 mm                                            |
| — downwards                                                     | 10 mm                                            |
| • for live parts                                                |                                                  |
| — forwards                                                      | 32 mm                                            |
| — backwards                                                     | 0 mm                                             |
| — upwards                                                       | 50 mm                                            |
| — downwards                                                     | 10 mm                                            |
| — at the side                                                   | 10 mm                                            |
| <b>Connections/ Terminals</b>                                   |                                                  |
| type of electrical connection                                   |                                                  |
| • for main current circuit                                      | screw-type terminals                             |
| • for auxiliary and control circuit                             | screw-type terminals                             |
| <b>Safety related data</b>                                      |                                                  |
| product function suitable for safety function                   | Yes                                              |
| <b>Electrical Safety</b>                                        |                                                  |
| touch protection on the front according to IEC 60529            | finger-safe, for vertical contact from the front |
| <b>Communication/ Protocol</b>                                  |                                                  |
| 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 |
|-------------------|----------------------|
|-------------------|----------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



| 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=3RA2220-4DD27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-4DD27-0BB4>

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

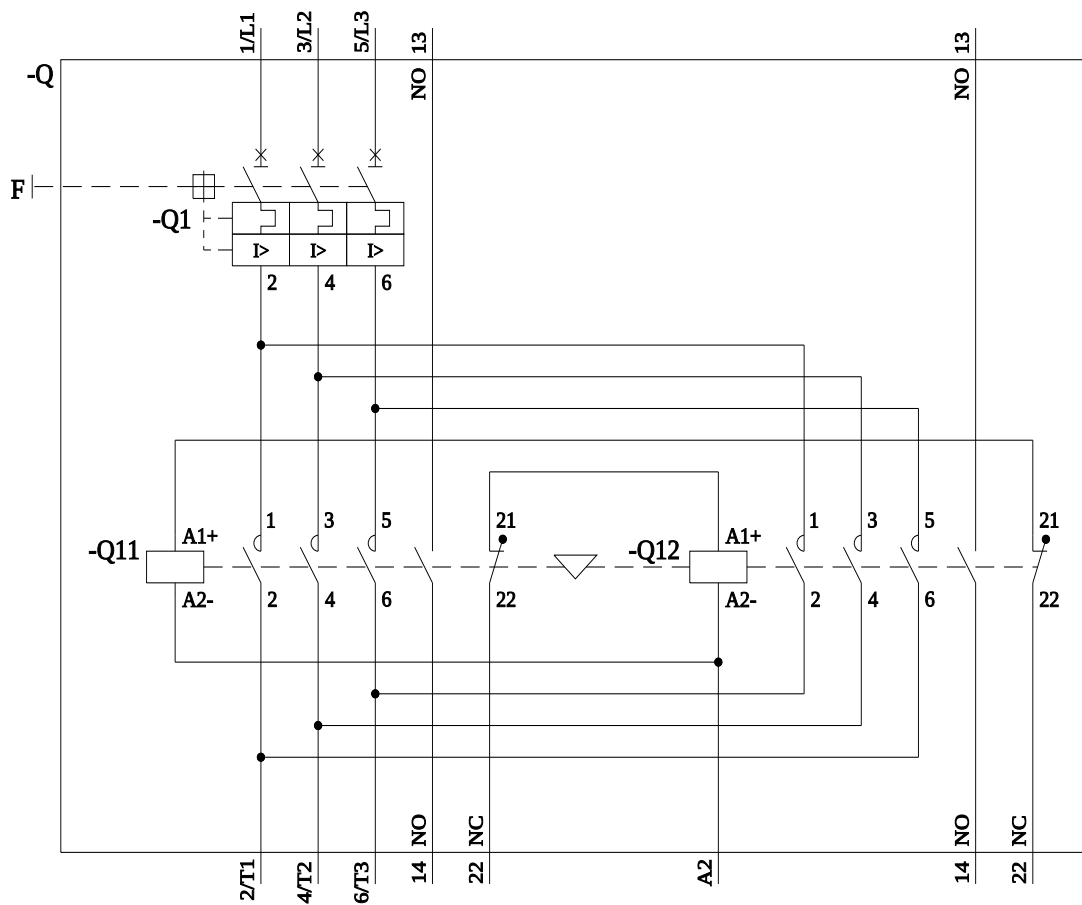
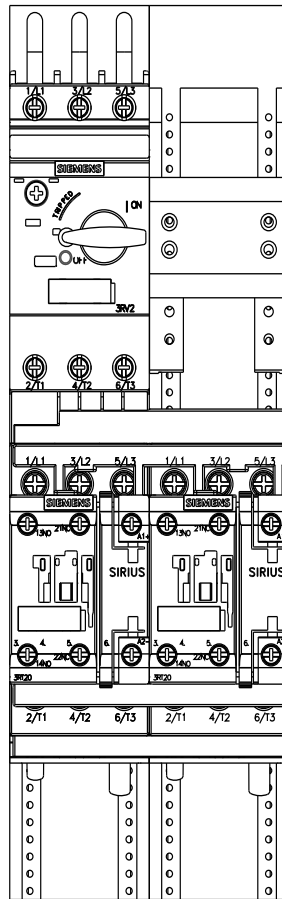
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Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-4DD27-0BB4>

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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