



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 16...22 A  
24 V DC Spring-type terminal for installation on standard mounting rail (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 standard rail or screw mounting |
| <b>product type designation</b>                                                            | 3RA21                               |
| <b>manufacturer's article number</b>                                                       |                                     |
| • of the supplied contactor                                                                | 3RT2027-2BB40                       |
| • of the supplied circuit-breakers                                                         | 3RV2021-4CA20                       |
| • of the supplied link module                                                              | 3RA2921-2AA00                       |
| <b>General technical data</b>                                                              |                                     |
| <b>size of the circuit-breaker</b>                                                         | S0                                  |
| <b>size of load feeder</b>                                                                 | S0                                  |
| insulation voltage with degree of pollution 3 at AC rated value                            | 690 V                               |
| <b>surge voltage resistance rated value</b>                                                | 6 kV                                |
| shock resistance acc. to IEC 60068-2-27                                                    | 6g / 11 ms                          |
| mechanical service life (switching cycles) of contactor typical                            | 10 000 000                          |
| <b>type of assignment</b>                                                                  | 2                                   |
| <b>type of protection according to ATEX directive 2014/34/EU</b>                           | Ex II (2) GD                        |
| certificate of suitability according to ATEX directive 2014/34/EU                          | DMT 02 ATEX F 001                   |
| Substance Prohibition (Date)                                                               | 01.10.2009 00:00:00                 |
| <b>Ambient conditions</b>                                                                  |                                     |
| • ambient temperature during operation                                                     | -20 ... +60 °C                      |
| • ambient temperature during storage                                                       | -50 ... +80 °C                      |
| • ambient temperature 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                         |
| • operating voltage rated value                                                            | 690 V                               |
| • operating voltage at AC-3 rated value maximum                                            | 690 V                               |
| <b>operating frequency rated value</b>                                                     | 50 ... 60 Hz                        |
| operational current at AC-3 at 400 V rated value                                           | 22 A                                |

|                                                     |  |                                                              |                           |
|-----------------------------------------------------|--|--------------------------------------------------------------|---------------------------|
| operating power at AC-3                             |  | 11 000 W                                                     |                           |
| • at 400 V rated value                              |  |                                                              |                           |
| Control circuit/ Control                            |  |                                                              |                           |
| type of voltage of the control supply voltage       |  | DC                                                           |                           |
| control supply voltage at DC                        |  | 24 V                                                         |                           |
| • rated value                                       |  |                                                              |                           |
| holding power of magnet coil at DC                  |  | 5.9 W                                                        |                           |
| Auxiliary circuit                                   |  |                                                              |                           |
| product extension auxiliary switch                  |  | Yes                                                          |                           |
| Protective and monitoring functions                 |  |                                                              |                           |
| trip class                                          |  | CLASS 10                                                     |                           |
| design of the overload release                      |  | thermal (bimetallic)                                         |                           |
| Short-circuit protection                            |  |                                                              |                           |
| product function short circuit protection           |  | Yes                                                          |                           |
| design of the short-circuit trip                    |  | magnetic                                                     |                           |
| conditional short-circuit current (I <sub>q</sub> ) |  | 150 000 A                                                    |                           |
| • at 400 V acc. to IEC 60947-4-1 rated value        |  |                                                              |                           |
| Installation/ mounting/ dimensions                  |  |                                                              |                           |
| mounting position                                   |  | vertical                                                     |                           |
| fastening method                                    |  | screw and snap-on mounting onto 35 mm standard mounting rail |                           |
| height                                              |  | 243 mm                                                       |                           |
| width                                               |  | 45 mm                                                        |                           |
| depth                                               |  | 107 mm                                                       |                           |
| required spacing                                    |  |                                                              |                           |
| • for grounded parts                                |  |                                                              |                           |
| — forwards                                          |  |                                                              |                           |
| — backwards                                         |  |                                                              |                           |
| — upwards                                           |  |                                                              |                           |
| — at the side                                       |  |                                                              |                           |
| — downwards                                         |  |                                                              |                           |
| • for live parts                                    |  |                                                              |                           |
| — forwards                                          |  |                                                              |                           |
| — backwards                                         |  |                                                              |                           |
| — upwards                                           |  |                                                              |                           |
| — downwards                                         |  |                                                              |                           |
| — at the side                                       |  |                                                              |                           |
| Connections/ Terminals                              |  |                                                              |                           |
| type of electrical connection                       |  | spring-loaded terminals                                      |                           |
| • for main current circuit                          |  |                                                              |                           |
| Safety related data                                 |  |                                                              |                           |
| B10 value with high demand rate acc. to SN 31920    |  | 1 000 000                                                    |                           |
| proportion of dangerous failures                    |  | 73 %                                                         |                           |
| • with high demand rate acc. to SN 31920            |  |                                                              |                           |
| touch protection on the front acc. to IEC 60529     |  | finger-safe, for vertical contact from the front             |                           |
| Certificates/ approvals                             |  |                                                              |                           |
| General Product Approval                            |  | For use in hazardous locations                               | Declaration of Conformity |



[Miscellaneous](#)

Test Certificates

Marine / Shipping

[Type Test  
Certificates/Test  
Report](#)

[Special Test  
Certificate](#)



#### Marine / Shipping

#### other

#### Railway



[Confirmation](#)

[Vibration and Shock](#)

#### Further information

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=3RA2120-4CE27-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4CE27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CE27-0BB4>

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

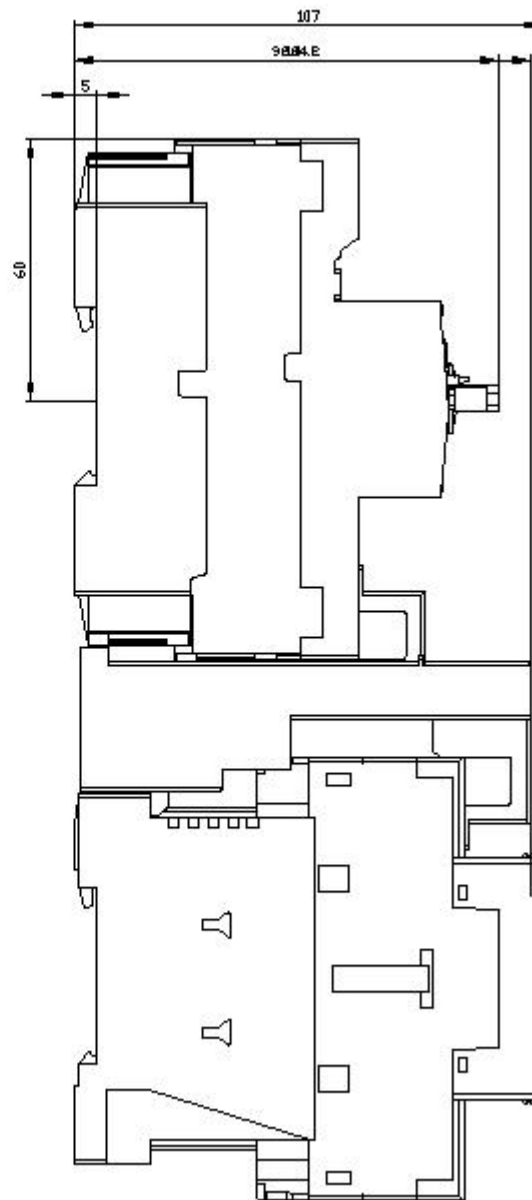
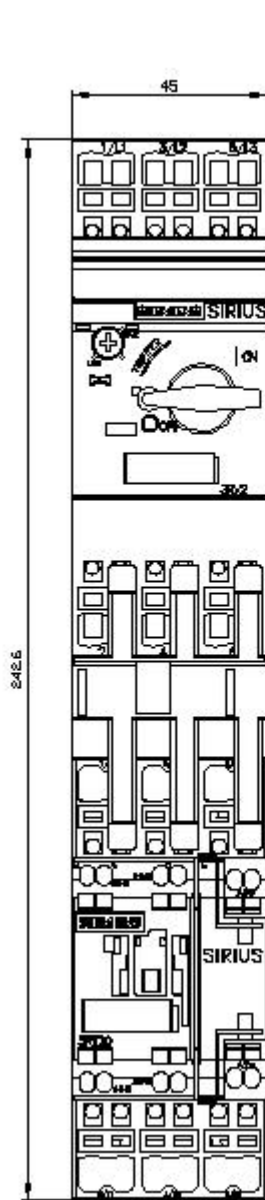
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-4CE27-0BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CE27-0BB4&lang=en)

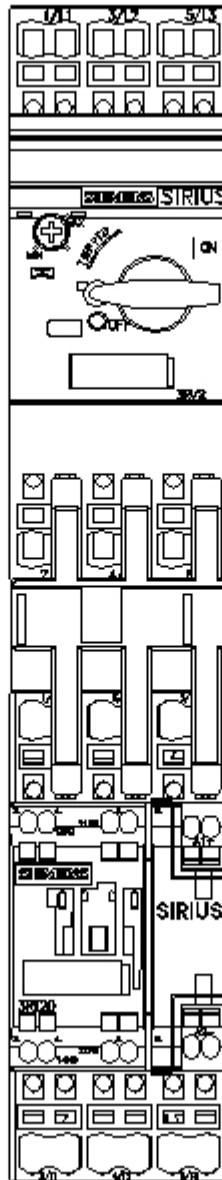
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

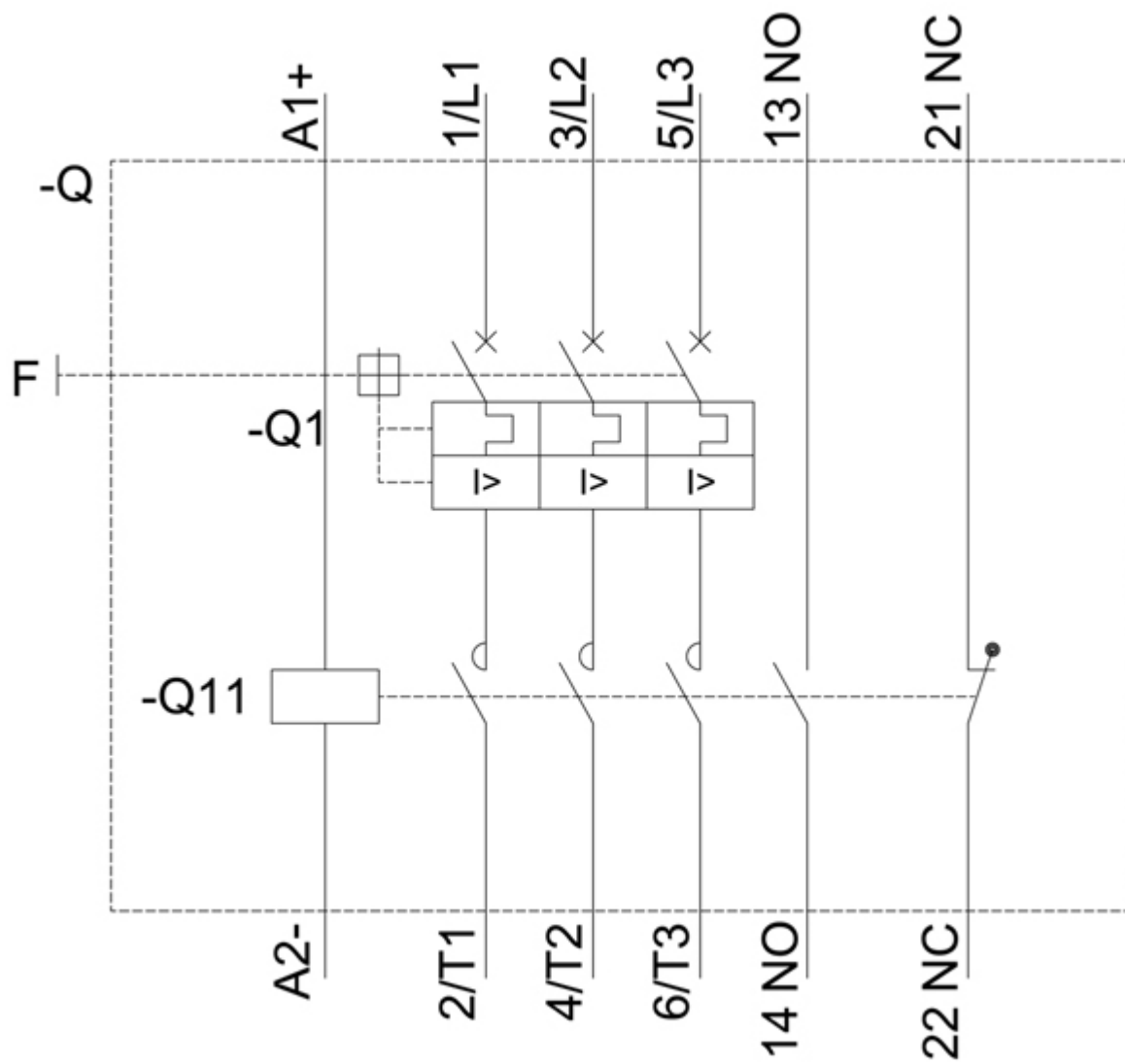
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CE27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4CE27-0BB4&objecttype=14&gridview=view1>







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