



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 9.00...12.5 A 230 V AC Spring-type terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, I_q = 150 kA 1 NO+1 NC (contactor)

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| product brand name | SIRIUS |
| product designation | Direct (on-line) starter |
| design of the product | for 60 mm busbars |
| product type designation | 3RA21 |
| manufacturer's article number | |
| <ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied busbar adapter • of the supplied link module | 3RT2024-2AP00 3RV2021-1KA20 8US1251-5NT11 3RA2921-2AA00 |
| General technical data | |
| size of the circuit-breaker | S0 |
| size of load feeder | S0 |
| 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 (switching cycles) of contactor typical | 10 000 000 |
| type of assignment | 2 |
| type of protection according to ATEX directive 2014/34/EU | Ex II (2) GD |
| certificate of suitability according to ATEX directive 2014/34/EU | DMT 02 ATEX F 001 |
| Substance Prohibance (Date) | 03/01/2017 |
| Ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport | -20 ... +60 °C -50 ... +80 °C -50 ... +80 °C |
| temperature compensation | -20 ... +60 °C |
| relative humidity during operation | 10 ... 95 % |
| Main circuit | |
| 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 | 9 ... 12.5 A |
| operating voltage | |
| <ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum | 690 V 690 V |

| | |
|-------------------------------------------------------------|--------------------------------------------------|
| operating frequency rated value | 50 ... 60 Hz |
| operational current at AC-3 at 400 V rated value | 11.5 A |
| operating power at AC-3 | |
| • at 400 V rated value | 5 500 W |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| control supply voltage at AC | |
| • at 50 Hz rated value | 230 V |
| • at 50 Hz rated value | 230 ... 230 V |
| apparent holding power of magnet coil at AC | 8.5 VA |
| Auxiliary circuit | |
| product extension auxiliary switch | Yes |
| Protective and monitoring functions | |
| trip class | CLASS 10 |
| design of the overload release | thermal (bimetallic) |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 11 A |
| yielded mechanical performance [hp] | |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 3 hp |
| — at 220/230 V rated value | 3 hp |
| — at 460/480 V rated value | 7.5 hp |
| — at 575/600 V rated value | 10 hp |
| Short-circuit protection | |
| product function short circuit protection | Yes |
| design of the short-circuit trip | magnetic |
| conditional short-circuit current (I_q) | |
| • at 400 V according to IEC 60947-4-1 rated value | 150 000 A |
| Installation/ mounting/ dimensions | |
| mounting position | vertical |
| fastening method | for snapping onto 60 mm busbar systems |
| height | 260 mm |
| width | 45 mm |
| depth | 165 mm |
| required spacing | |
| • 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 |
| Connections/ Terminals | |
| type of electrical connection | |
| • for main current circuit | spring-loaded terminals |
| • for auxiliary and control circuit | spring-loaded terminals |
| Safety related data | |
| B10 value with high demand rate according to SN 31920 | 1 000 000 |
| proportion of dangerous failures | |
| • with high demand rate according to SN 31920 | 73 % |
| 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
- PROFIsafe protocol

No
No
No

protocol is supported AS-Interface protocol

Certificates/ approvals

General Product Approval

For use in hazardous locations

Declaration of Conformity



[Confirmation](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

other



[Environmental Confirmations](#)

[Confirmation](#)

Railway

[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=3RA2120-1KH24-0AP0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1KH24-0AP0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KH24-0AP0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1KH24-0AP0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KH24-0AP0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1KH24-0AP0&objecttype=14&gridview=view1>

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