

Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0
 7.00...10.0 A 230 V AC Spring-type terminal for installation on
 standard mounting rail (also fulfills type of coordination 1) Type of
 coordination 2, Iq = 150 kA 1 NO+1 NC (contactor)



| | |
|--|-------------------------------------|
| Product brand name | SIRIUS |
| Product designation | Direct (on-line) starter |
| Design of the product | for standard rail or screw mounting |
| Product type designation | 3RA21 |
| Manufacturer's article number | |
| <ul style="list-style-type: none"> • of the supplied contactor | 3RT2024-2AP00 |
| <ul style="list-style-type: none"> • of the supplied circuit-breakers | 3RV2021-1JA20 |
| <ul style="list-style-type: none"> • of the supplied link module | 3RA2921-2AA00 |

| General technical data | |
|--|------------|
| Size of the circuit-breaker | S0 |
| Size of load feeder | S0 |
| Insulation voltage | |
| <ul style="list-style-type: none"> • with degree of pollution 3 at AC rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| Protection class IP | |
| <ul style="list-style-type: none"> • on the front | IP20 |
| <ul style="list-style-type: none"> • of the terminal | IP20 |
| Shock resistance | |
| <ul style="list-style-type: none"> • acc. 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 |

| | |
|------------------------------------|----------------|
| Ambient conditions | |
| 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 pick-up value current of the current-dependent overload release | 7 ... 10 A |
| Operating voltage | |
| • rated value | 690 V |
| • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current | |
| • at AC-3 | |
| — at 400 V rated value | 8.5 A |
| Operating power | |
| • at AC-3 | |
| — at 400 V rated value | 4 000 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 |
| Apparent holding power of magnet coil at AC | 8.5 V·A |

| | |
|---|-----|
| 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 three-phase AC motor | |
| • at 480 V rated value | 7.6 A |
| Yielded mechanical performance [hp] | |
| • for three-phase AC motor | |
| — at 200/208 V rated value | 2 hp |

| | |
|----------------------------|--------|
| — at 220/230 V rated value | 3 hp |
| — at 460/480 V rated value | 5 hp |
| — at 575/600 V rated value | 7.5 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 acc. to IEC 60947-4-1 rated value | 150 000 A |

Installation/ mounting/ dimensions

| | |
|--------------------------|--|
| Mounting position | vertical |
| Mounting type | 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 | 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 |

Safety related data

| | |
|--|-----------|
| B10 value | |
| • with high demand rate acc. to SN 31920 | 1 000 000 |
| Proportion of dangerous failures | |
| • with high demand rate acc. to SN 31920 | 73 % |

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=3RA2120-1JE24-0AP0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1JE24-0AP0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JE24-0AP0>

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

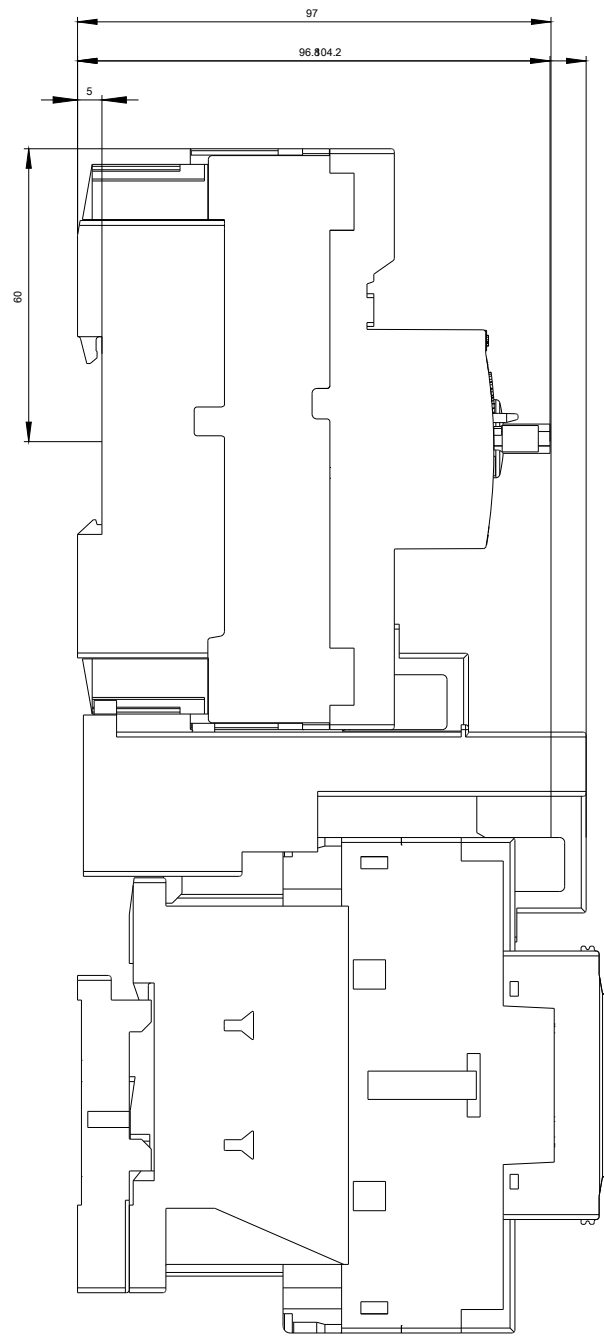
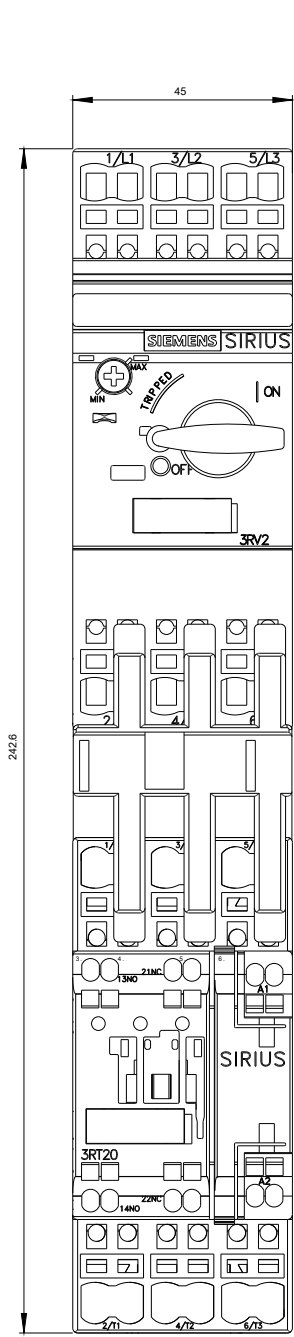
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1JE24-0AP0&lang=en

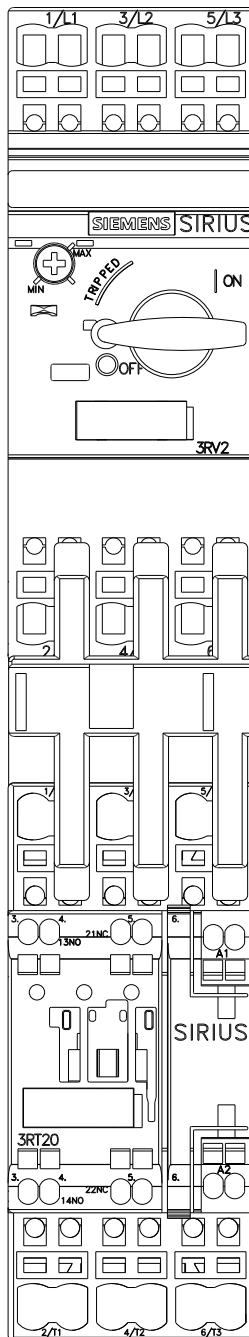
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JE24-0AP0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1JE24-0AP0&objecttype=14&gridview=view1>







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