

Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0  
 9.00...12.5 A 230 V AC 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>	Direct (on-line) starter
<b>Design of the product</b>	for 60 mm busbars
<b>Product type designation</b>	3RA21
<b>Manufacturer's article number</b>	
<ul style="list-style-type: none"> <li>• of the supplied contactor</li> </ul>	<a href="#">3RT2024-1AP00</a>
<ul style="list-style-type: none"> <li>• of the supplied circuit-breakers</li> </ul>	<a href="#">3RV2011-1KA10</a>
<ul style="list-style-type: none"> <li>• of the supplied busbar adapter</li> </ul>	<a href="#">8US1251-5NT10</a>
<ul style="list-style-type: none"> <li>• of the supplied link module</li> </ul>	<a href="#">3RA2921-1AA00</a>

General technical data	
<b>Size of the circuit-breaker</b>	S00
<b>Size of load feeder</b>	S0
<ul style="list-style-type: none"> <li>• Insulation voltage with degree of pollution 3 at AC rated value</li> </ul>	690 V
<b>Surge voltage resistance rated value</b>	6 kV
<ul style="list-style-type: none"> <li>• protection class IP on the front</li> </ul>	IP20
<ul style="list-style-type: none"> <li>• Protection class IP of the terminal</li> </ul>	IP20
<b>Shock resistance</b>	
<ul style="list-style-type: none"> <li>• acc. to IEC 60068-2-27</li> </ul>	6g / 11 ms

<b>Mechanical service life (switching cycles)</b>	
• 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

<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 pick-up value of the current-dependent overload release</b>	9 ... 12.5 A
<b>Operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating current</b>	
• at AC-3	
— at 400 V rated value	11.5 A
<b>Operating power</b>	
• at AC-3	
— at 400 V rated value	5 500 W

<b>Control circuit/ Control</b>	
<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage at AC</b>	
• at 50 Hz rated value	230 V
<b>Apparent holding power of magnet coil at AC</b>	8.5 V·A

<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>UL/CSA ratings</b>	
<b>Full-load current (FLA) for three-phase AC motor</b>	

<ul style="list-style-type: none"> <li>• at 480 V rated value</li> </ul>	11 A
<b>Yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>• for three-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>	3 hp 3 hp 7.5 hp 10 hp

### Short-circuit protection

<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 acc. to IEC 60947-4-1 rated value</li> </ul>	150 000 A

### Installation/ mounting/ dimensions

<ul style="list-style-type: none"> <li>• <b>mounting position</b></li> </ul>	vertical
<b>Mounting type</b>	for snapping onto 60 mm busbar systems
<b>Height</b>	260 mm
<b>Width</b>	45 mm
<b>Depth</b>	155 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> <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>	20 mm 0 mm 50 mm 20 mm 10 mm  20 mm 0 mm 50 mm 10 mm 20 mm

### Connections/ Terminals

<ul style="list-style-type: none"> <li>• Type of electrical connection for main current circuit</li> </ul>	screw-type terminals
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### Safety related data

<b>B10 value</b>	
<ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	1 000 000
<b>Proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	73 %

### Certificates/ approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity
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[Miscellaneous](#)

Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other	Railway
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[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=3RA2120-1KD24-0AP0>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1KD24-0AP0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KD24-0AP0>

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

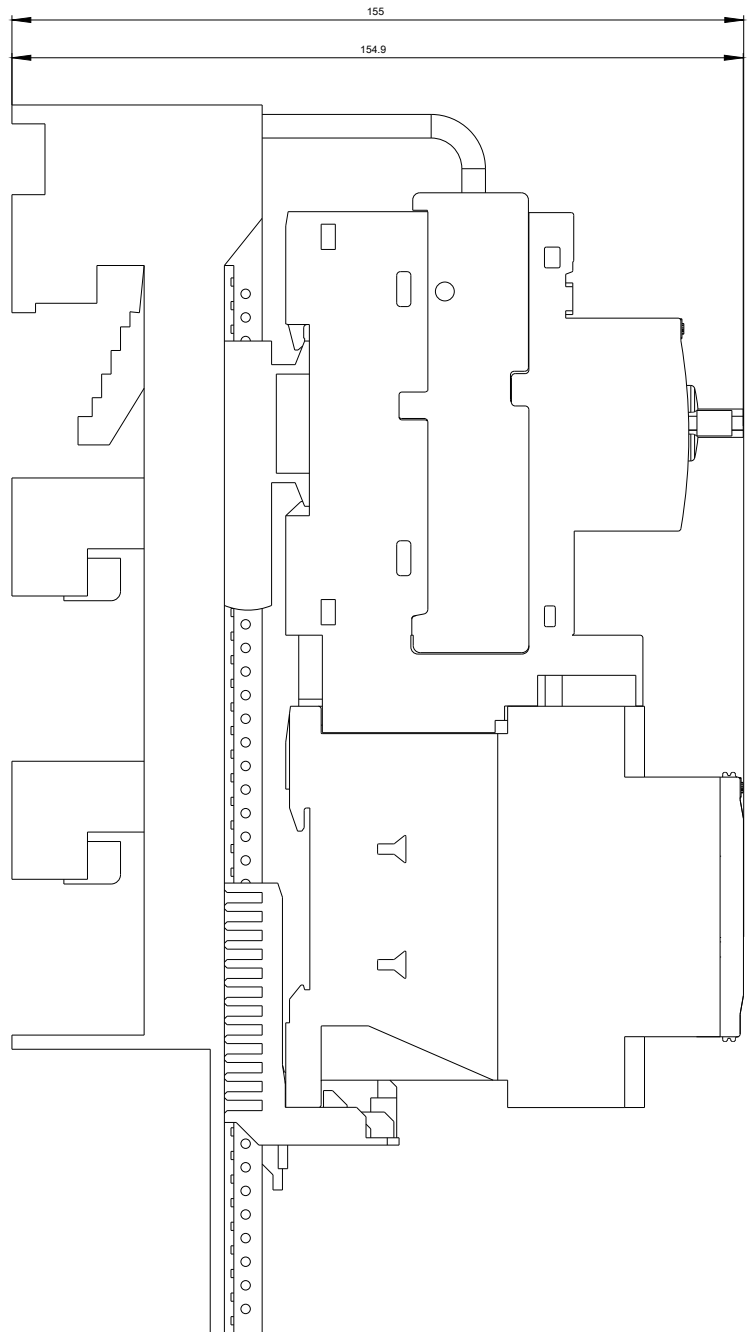
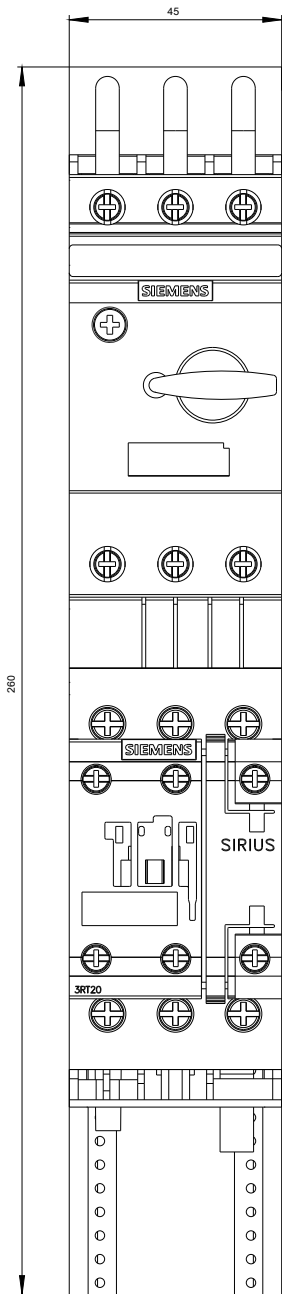
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1KD24-0AP0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1KD24-0AP0&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KD24-0AP0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1KD24-0AP0&objecttype=14&gridview=view1>







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