

LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S0, 3.5.  
 .5A, DC 24V SCREW CONNECTION FOR RAIL-MOUNTING,  
 TYPE OF COORDINATION 2, IQ = 150KA (ALSO FULFILLS TYPE  
 OF COORDINATION 1) 1NO+1NC (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>	
<ul style="list-style-type: none"> <li>• of the supplied contactor</li> <li>• of the supplied circuit-breakers</li> <li>• of the supplied link module</li> </ul>	<a href="#">3RT2024-1BB40</a> <a href="#">3RV2021-1FA10</a> <a href="#">3RA2921-1BA00</a>

General technical data	
<b>Size of the circuit-breaker</b>	S0
<b>Size of load feeder</b>	S0
<b>Insulation voltage</b>	
<ul style="list-style-type: none"> <li>• with degree of pollution 3 rated value</li> </ul>	690 V
<b>Surge voltage resistance rated value</b>	6 kV
<b>Protection class IP</b>	
<ul style="list-style-type: none"> <li>• on the front</li> </ul>	IP20
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	10 000 000
<b>Type of assignment</b>	2

<b>Protection against electrical shock</b>	finger-safe
<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
<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 current of the current-dependent overload release</b>	3.5 ... 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	3.6 A
<b>Operating power</b>	
• at AC-3	
— at 400 V rated value	1 500 W
<b>Control circuit/ Control</b>	
<b>Control supply voltage at DC</b>	
• rated value	24 V
<b>Holding power of magnet coil at DC</b>	5.9 W
<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>	
• at 480 V rated value	4.8 A
<b>Yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	0.17 hp
— at 230 V rated value	0.5 hp
• for three-phase AC motor	
— at 200/208 V rated value	1 hp

— at 220/230 V rated value	1 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	3 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>	
• at 400 V acc. to IEC 60947-4-1 rated value	153 000 A

### Installation/ mounting/ dimensions

<b>Mounting position</b>	vertical
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail
<b>Height</b>	193.1 mm
<b>Width</b>	45 mm
<b>Depth</b>	107 mm
<b>Required spacing</b>	
• 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

<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
<b>Type of connectable conductor cross-sections</b>	
• for main contacts	
— stranded	1 ... 10 mm <sup>2</sup> , 2x (2.5 ... 6 mm <sup>2</sup> )
• at AWG conductors for main contacts	2x (16 ... 12), 2x (14 ... 8)
<b>Connectable conductor cross-section for main contacts</b>	
• finely stranded with core end processing	1 ... 6 mm <sup>2</sup>

### Safety related data

<b>B10 value</b>	
• with high demand rate acc. to SN 31920	1 000 000
<b>Proportion of dangerous failures</b>	

• with high demand rate acc. to SN 31920

73 %

## Certificates/approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity
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CSA



UL



ATEX



IECEX



EG-Konf.

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

[Special Test Certificate](#)



ABS



BUREAU VERITAS



LRS



PRS

Marine / Shipping	other	Railway
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RINA



RMRS



DNVGL.COM/AF

[Environmental Confirmations](#)

[Confirmation](#)

[Vibration and Shock](#)

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2120-1FA24-0BB4>

**Cax online generator**

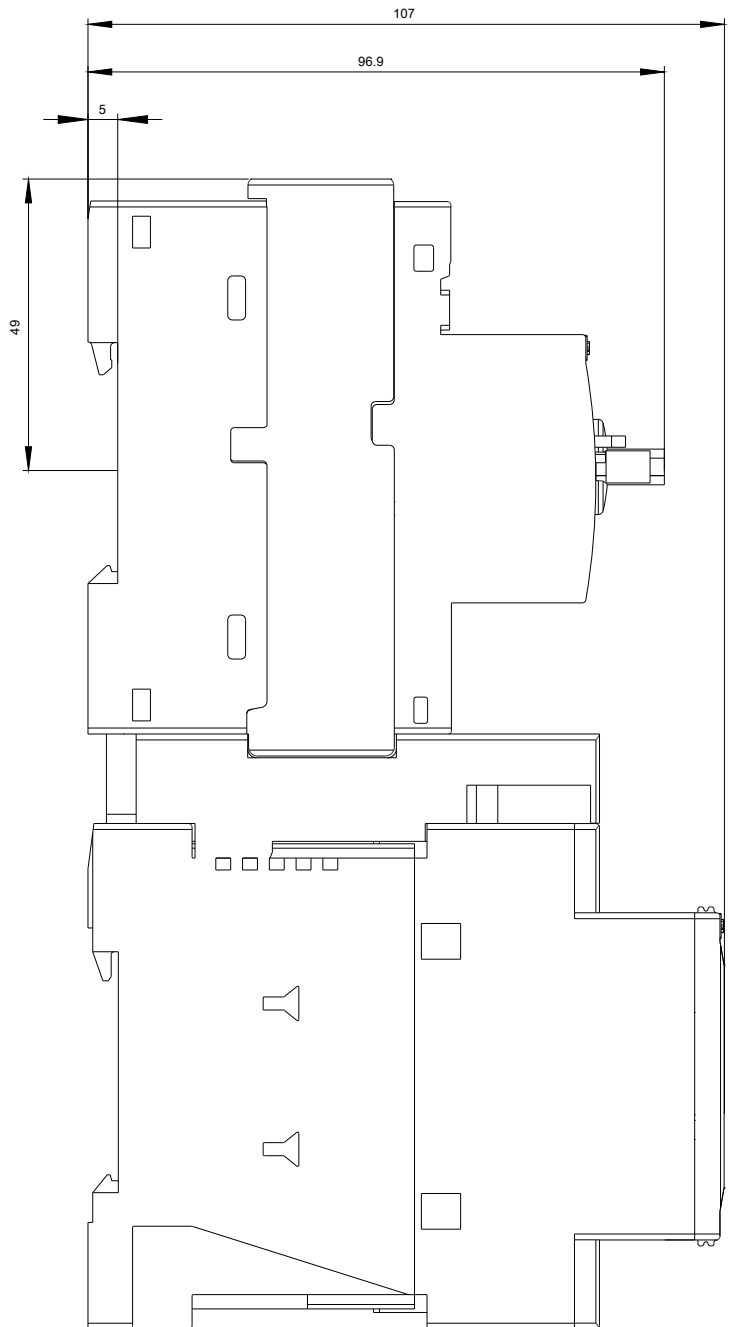
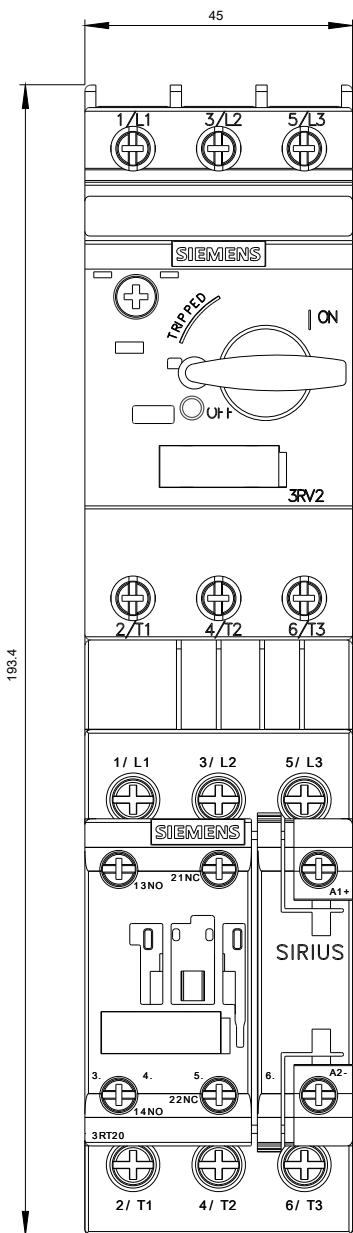
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1FA24-0BB4>

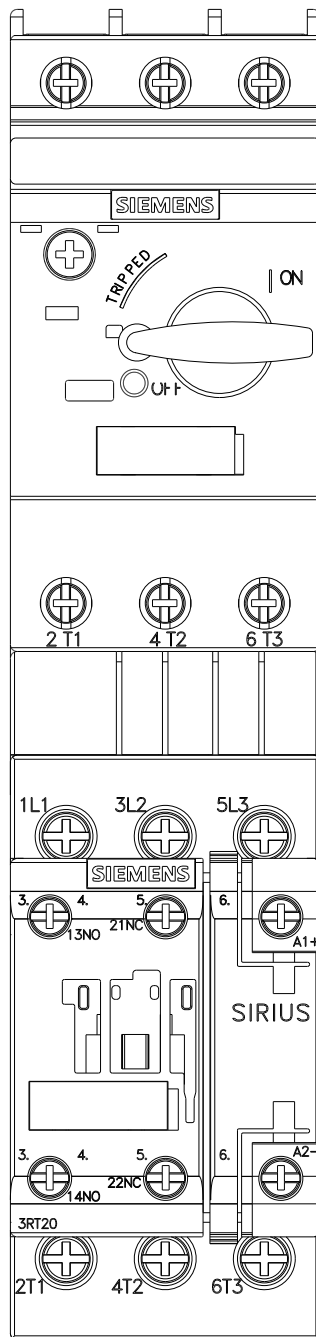
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

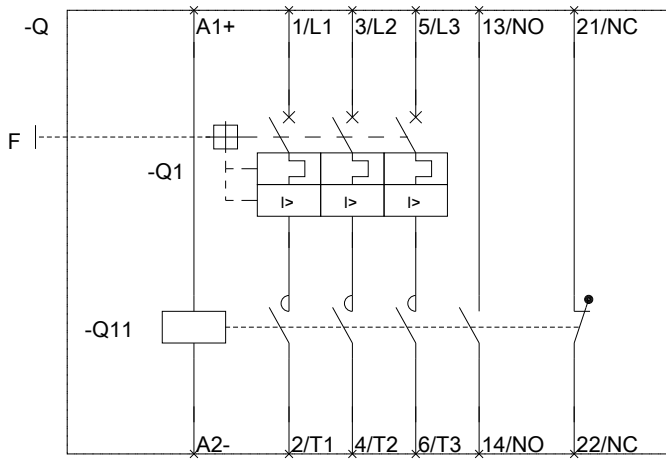
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1FA24-0BB4>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1FA24-0BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FA24-0BB4&lang=en)







last modified:

07/14/2017