

FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S0, 9...12.5A, AC 110/120V 50/60HZ SCREW TERMINAL FOR BUSBAR SYSTEMS 60MM TYPE OF ASSIGNMENT 2, IQ = 150KA (ALSO FULFILLS TYPE OF ASSIGNMENT 1) 1NO+1NC (CONTACTOR)



<b>Product brand name</b>	SIRIUS
<b>Product designation</b>	non-fused load feeders 3RA2
<b>Design of the product</b>	direct starter
<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 busbar adapter</li> <li>• of the supplied link module</li> </ul>	<a href="#">3RT2024-1AK60</a> <a href="#">3RV2021-1KA10</a> <a href="#">8US1251-5NT10</a> <a href="#">3RA2921-1AA00</a>

General technical data	
<b>Size of the circuit-breaker</b>	S0
<b>Size of load feeder</b>	S0
<b>Product extension</b>	
<ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>	Yes
<b>Insulation voltage</b>	
<ul style="list-style-type: none"> <li>• with degree of pollution 3 at AC rated value</li> </ul>	690 V
<b>Degree of pollution</b>	3
<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

• of the terminal	IP00
<b>Shock resistance</b>	
• acc. to IEC 60068-2-27	6g / 11 ms
<b>Mechanical service life (switching cycles)</b>	
• of contactor typical	10 000 000
<b>Type of assignment</b>	2

### Main circuit

<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>	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
— at 500 V rated value	7 500 W
— at 690 V rated value	7 500 W

### Control circuit/ Control

<b>Control supply voltage at AC</b>	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
<b>Apparent holding power of magnet coil at AC</b>	8.5 V·A

### Protective and monitoring functions

<b>Trip class</b>	CLASS 10
<b>Design of the overload release</b>	thermal (bimetallic)
<b>Response value current</b>	
• of instantaneous short-circuit trip unit	162.5 A

### UL/CSA ratings

<b>Full-load current (FLA) for three-phase AC motor</b>	
• at 480 V rated value	11 A
• at 600 V rated value	11 A
<b>Yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp

• for three-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

<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 690 V acc. to IEC 60947-4-1 rated value	4 000 A
• at 400 V acc. to IEC 60947-4-1 rated value	153 000 A
• at 500 V acc. to IEC 60947-4-1 rated value	42 000 A

### Installation/ mounting/ dimensions

<b>Mounting position</b>	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>	
• for grounded parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	30 mm
— at the side	9 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	30 mm
— downwards	10 mm
— at the side	9 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> <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			
 CSA	 UL	 EAC	 ATEX	 EG-Konf.	<a href="#">Miscellaneous</a>

Test Certificates	Marine / Shipping		
<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Special Test Certificate</a>		
 ABS	 LRS	 PRS	 RINA

Marine / Shipping	other	Railway	
 RMRS	 DNV-GL DNVGL.COM/AF	<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>

## 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=3RA2120-1KD24-0AK6>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1KD24-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KD24-0AK6>

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

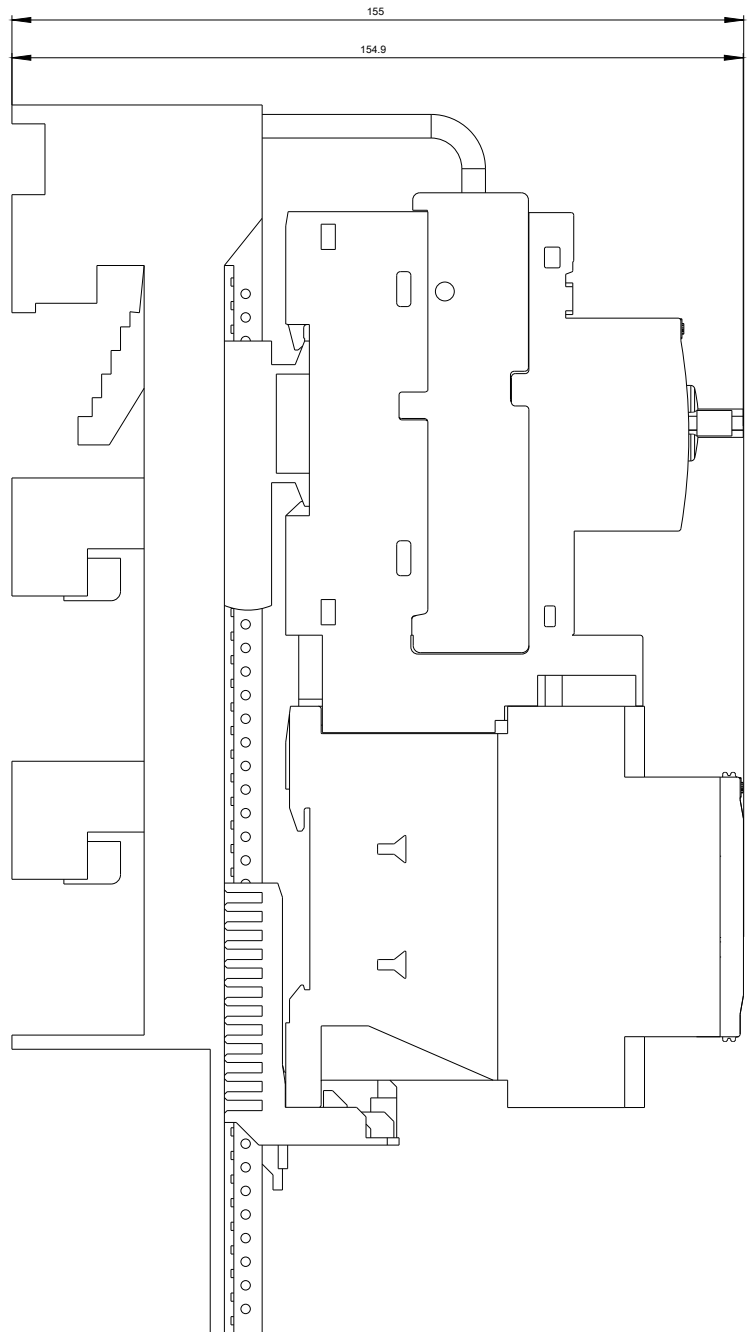
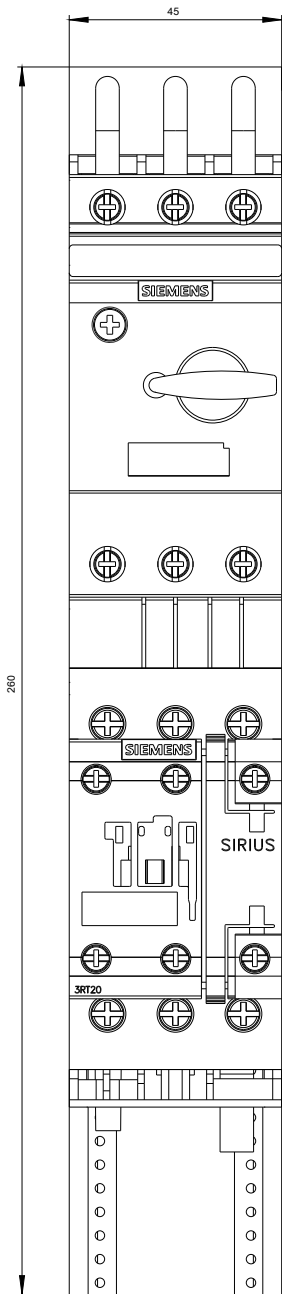
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1KD24-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1KD24-0AK6&lang=en)

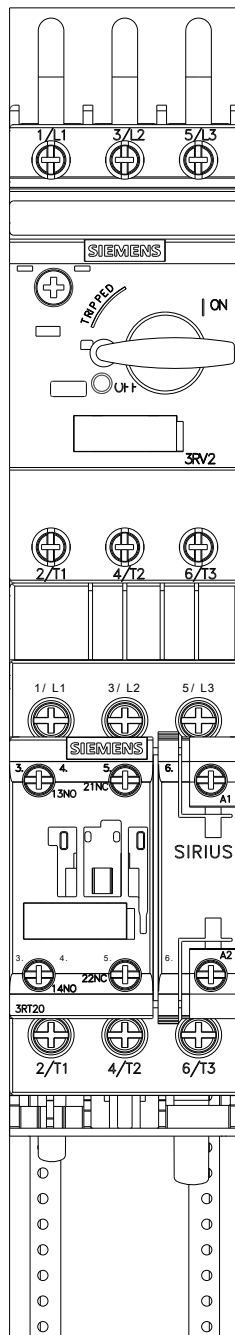
### Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KD24-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1KD24-0AK6&objecttype=14&gridview=view1>







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