



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S0, 5.5...8A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, 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 link module</li> </ul>	<a href="#">3RT2024-1AK60</a> <a href="#">3RV2021-1HA10</a> <a href="#">3RA2921-1AA00</a>
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S0
<b>size of load feeder</b>	S0
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>degree of pollution</b>	3
<b>surge voltage resistance rated value</b>	6 kV
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	10 000 000
<b>type of assignment</b>	2
<b>Substance Prohibitance (Date)</b>	10/01/2009
<b>Ambient conditions</b>	
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-20 ... +60 °C -50 ... +80 °C -50 ... +80 °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 current response value current of the current-dependent overload release</b>	5.5 ... 8 A
<b>operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> </ul>	690 V 690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	6.5 A
operating power at AC-3	
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	3 000 W 4 000 W 5 500 W
<b>Control circuit/ Control</b>	

<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>	<p>110 V 120 V</p>
<b>apparent holding power of magnet coil at AC</b>	8.5 VA
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	104 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
<ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>	<p>7.92 A 6.33 A</p>
<b>yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> <li>• for 3-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>	<p>0.33 hp 1 hp 2 hp 2 hp 5 hp 5 hp</p>
<b>Short-circuit protection</b>	
<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 690 V according to IEC 60947-4-1 rated value</li> <li>• at 400 V according to IEC 60947-4-1 rated value</li> <li>• at 500 V according to IEC 60947-4-1 rated value</li> </ul>	<p>4 000 A 153 000 A 42 000 A</p>
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	vertical
<b>fastening method</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>	97.1 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>	<p>10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm</p>
<b>Connections/ Terminals</b>	
type of electrical connection for main current circuit	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts stranded</li> <li>• at AWG cables for main contacts</li> </ul>	<p>1 ... 10 mm<sup>2</sup>, 2x (2.5 ... 6 mm<sup>2</sup>) 2x (16 ... 12), 2x (14 ... 8)</p>
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm <sup>2</sup>
<b>Safety related data</b>	
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 %
<b>protection class IP on the front according to IEC</b>	IP20

60529

touch protection on the front according to IEC 60529      finger-safe, for vertical contact from the front

Certificates/ approvals

General Product Approval      For use in hazardous locations      Declaration of Conformity



[Confirmation](#)



Declaration of Conformity      Test Certificates      Marine / Shipping



EG-Konf.

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS



BUREAU VERITAS



LRS

Marine / Shipping      other      Railway



PRS



RINA



RMRS



DNV-GL

[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=3RA2120-1HA24-0AK6>
- Cax online generator  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1HA24-0AK6>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1HA24-0AK6>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1HA24-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1HA24-0AK6&lang=en)
- Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1HA24-0AK6/char>
- Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1HA24-0AK6&objecttype=14&gridview=view1>

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