



FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 27-32A  
 110/120V AC 50/60HZ SCREW CONNECTION FOR SCREW MOUNTING OR 35  
 MM RAIL-MOUNTING TYPE OF COORDINATION 2 IQ = 150 KA ALSO  
 FULFILLS TYPE OF COORDINATION 1 1NO+1NC (MSP) 1NO+1NC  
 (CONTACTOR)

<b>product brand name</b>	SIRIUS
<b>product designation</b>	non-fused motor starter 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="#">3RT2027-1AK60</a> <a href="#">3RV2021-4EA15</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
<b>shock resistance according to IEC 60068-2-27</b>	6g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
<b>type of coordination</b>	2
<b>Net Weight</b>	0.76 kg
<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 -55 ... +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>	27 ... 32 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	29 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> </ul>	15 000 W 18 500 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> </ul>	110 V

<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	88 ... 121 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	120 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	96 ... 132 V
<b>apparent holding power of magnet coil at AC</b>	9.4 VA
<b>inductive power factor with the holding power of the coil</b>	0.28
<b>Auxiliary circuit</b>	
<b>number of NC contacts for auxiliary contacts</b>	2
<b>number of NO contacts for auxiliary contacts</b>	2
<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	416 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> </ul>	27 A
<ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>	27 A
<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 230 V rated value</li> </ul> </li> </ul>	5 hp
<ul style="list-style-type: none"> <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>	10 hp 10 hp 20 hp 25 hp
<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 400 V according to IEC 60947-4-1 rated value</li> </ul>	153 000 A
<ul style="list-style-type: none"> <li>• at 500 V according to IEC 60947-4-1 rated value</li> </ul>	100 000 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	vertical
<b>fastening method</b>	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
<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>	10 mm 0 mm 30 mm 9 mm 10 mm  10 mm 0 mm 30 mm 10 mm 9 mm
<b>Connections/ Terminals</b>	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts stranded	1 ... 10 mm <sup>2</sup> , 2x (2.5 ... 6 mm <sup>2</sup> )
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm <sup>2</sup>
<b>Safety related data</b>	
proportion of dangerous failures with high demand rate according to SN 31920	73 %
<b>B10 value with high demand rate according to SN 31920</b>	1 000 000

Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

**Approvals Certificates**

Environment	General Product Approval	For use in hazardous locations
<a href="#">Environmental Confirmations</a>	    	

**Test Certificates**

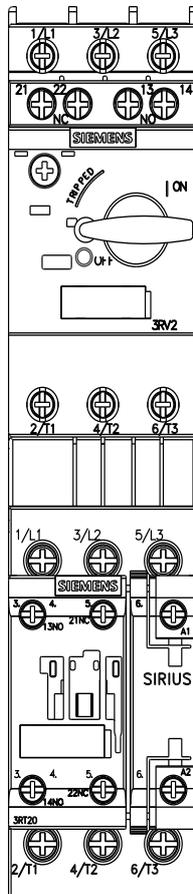
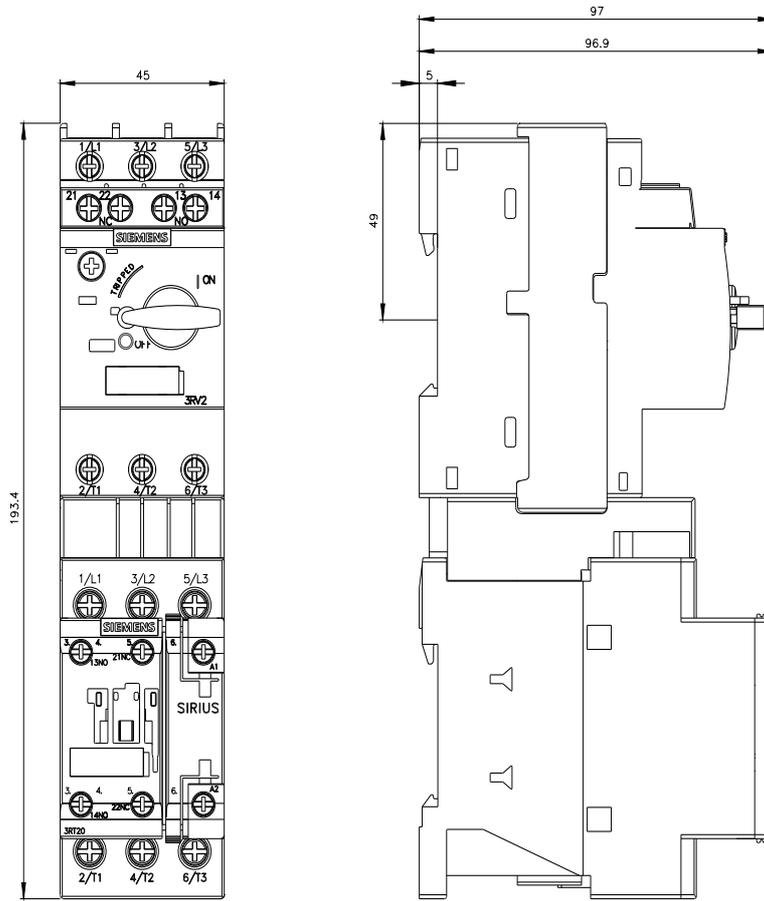
<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Special Test Certificate</a>	   
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**Maritime application**

  		<a href="#">Confirmation</a>	<a href="#">Special Test Certificate</a>
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**Further information**

- Information on the packaging  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- Information for data generation and storage  
<https://support.industry.siemens.com/cs/ww/en/view/109995012>
- 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=3RA2125-4EA27-0AK6>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4EA27-0AK6>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2125-4EA27-0AK6&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4EA27-0AK6&lang=en)
- Cax online generator  
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4EA27-0AK6>
- Characteristic curves  
[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



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