

Fuseless motor starter Direct start 600VAC Size S00 5.5-8Amp  
 220/240VAC 50/60HZ screw connection For snapping onto 60 mm  
 busbar systems Type of coordination 1 1NO (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 busbar adapter</li> <li>• of the supplied link module</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">3RT2016-1AP61</a></li> <li><a href="#">3RV2011-1HA10</a></li> <li><a href="#">8US1251-5DS10</a></li> <li><a href="#">3RA1921-1DA00</a></li> </ul>

General technical data	
<b>Size of the circuit-breaker</b>	S00
<b>Size of load feeder</b>	S00
<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

<ul style="list-style-type: none"> <li>• of the terminal</li> </ul>	IP00
<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>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	30 000 000
<b>Type of assignment</b>	1

### 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>	5.5 ... 8 A
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>	6.5 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <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

### Control circuit/ Control

<b>Control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	220 V
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	187 ... 242 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	240 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	192 ... 264 V
<b>Apparent holding power of magnet coil at AC</b>	4.8 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.25

### Auxiliary circuit

<b>Number of NC contacts for auxiliary contacts</b>	0
<b>Number of NO contacts for auxiliary contacts</b>	1

### Protective and monitoring functions

<b>Trip class</b>	CLASS 10
<b>Design of the overload release</b>	thermal (bimetallic)
<b>Response value current</b>	
<ul style="list-style-type: none"> <li>• of instantaneous short-circuit trip unit</li> </ul>	104 A

### UL/CSA ratings

<b>Full-load current (FLA) for three-phase AC motor</b>	
• at 480 V rated value	7.6 A
• at 600 V rated value	6.33 A
<b>Yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 hp
• for three-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	5 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>	
• at 400 V acc. to IEC 60947-4-1 rated value	153 000 A

<b>Installation/ mounting/ dimensions</b>	
<b>Mounting position</b>	vertical
<b>Mounting type</b>	for snapping onto 60 mm busbar systems
<b>Height</b>	200 mm
<b>Width</b>	45 mm
<b>Depth</b>	155.1 mm
<b>Required spacing</b>	
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	20 mm
— at the side	9 mm
— downwards	10 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	20 mm
— downwards	10 mm
— at the side	9 mm

<b>Connections/ Terminals</b>	
<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	0.5 ... 4 mm <sup>2</sup> , 2x (0.75 ... 2.5 mm <sup>2</sup> )
• at AWG conductors for main contacts	2x (20 ... 16), only for contactor 2x (18 ... 14), 2x 12
<b>Connectable conductor cross-section for main contacts</b>	
• finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>

<b>Safety related data</b>	
<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**

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

<b>Test Certificates</b>	<b>Marine / Shipping</b>
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



<b>Marine / Shipping</b>	<b>other</b>	<b>Railway</b>
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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=3RA2110-1HD16-1AP6>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1HD16-1AP6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HD16-1AP6>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2110-1HD16-1AP6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1HD16-1AP6&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HD16-1AP6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1HD16-1AP6&objecttype=14&gridview=view1>





