



FUSELESS LOAD FEEDER REVERSING OPERATION, AC 400V, S00  
5.5 ... 8A, 4KW, DC 24V SCREW TERMINAL FOR RAIL MOUNTING,  
TYPE OF ASSIGNMENT 1,IQ = 150KA 1NC (CONTACTOR)

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Reversing starter
<b>design of the product</b>	for standard rail or screw mounting
<b>product type designation</b>	3RA22
<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="#">3RT2016-1BB42</a> <a href="#">3RV2011-1HA10</a> <a href="#">3RA1921-1DA00</a>
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S00
<b>size of load feeder</b>	S00
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<b>degree of protection NEMA rating</b>	other
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	30 000 000
<b>type of assignment</b>	1
<b>type of protection according to ATEX directive 2014/34/EU</b>	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
<b>Substance Prohibitation (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>temperature compensation</b>	-20 ... +60 °C
relative humidity during operation	10 ... 95 %
<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	
• at 400 V rated value	3 000 W
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
<b>control supply voltage at DC</b>	
• rated value	24 V
• rated value	24 ... 24 V
<b>holding power of magnet coil at DC</b>	4 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 3-phase AC motor</b>	
• at 480 V rated value	8 A
<b>yielded mechanical performance [hp]</b>	
• for 3-phase AC motor	
— 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 according to IEC 60947-4-1 rated value	150 000 A
<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>	170 mm
<b>width</b>	90 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
• for grounded parts	
— forwards	32 mm
— backwards	0 mm
— upwards	50 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	32 mm
— backwards	0 mm
— upwards	50 mm
— downwards	10 mm
— at the side	10 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
• for main current circuit	screw-type terminals
• for auxiliary and control 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 cables for main contacts	2x (20 ... 16), only for contactor 2x (18 ... 14), 2x 12
connectable conductor cross-section for main contacts finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>
<b>Safety related data</b>	
B10 value with high demand rate according to SN 31920	1 000 000
<b>proportion of dangerous failures</b>	

• with high demand rate according to SN 31920	73 %
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front
<b>Communication/ Protocol</b>	
<b>protocol is supported</b>	
• PROFINET IO protocol	No
• PROFIsafe protocol	No
protocol is supported AS-Interface protocol	No

**Certificates/ approvals**

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Declaration of Conformity</b>
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<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
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<b>Marine / Shipping</b>	<b>other</b>	<b>Railway</b>
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**Dangerous Good**

[Transport Information](#)

**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=3RA2210-1HA16-2BB4>
- Cax online generator  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2210-1HA16-2BB4>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1HA16-2BB4>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2210-1HA16-2BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2210-1HA16-2BB4&lang=en)
- Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1HA16-2BB4/char>
- Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2210-1HA16-2BB4&objecttype=14&gridview=view1>

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