








FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 20-25A 24V DC  
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)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	
• of the supplied contactor	<a href="#">3RT2027-1BB40</a>
• of the supplied circuit-breakers	<a href="#">3RV2021-4DA15</a>
• of the supplied link module	<a href="#">3RA2921-1BA00</a>
<b>General technical data</b>	
size of the circuit-breaker	S0
size of load feeder	S0
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of assignment	2
Weight	0.95 kg
<b>Ambient conditions</b>	
ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-55 ... +80 °C
<b>Main circuit</b>	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	20 ... 25 A
operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	22 A
operating power at AC-3	
• at 400 V rated value	11 000 W
• at 500 V rated value	15 000 W
<b>Control circuit/ Control</b>	
control supply voltage at DC rated value	24 V
holding power of magnet coil at DC	5.9 W
<b>Auxiliary circuit</b>	
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
<b>Protective and monitoring functions</b>	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	325 A
<b>UL/CSA ratings</b>	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	22.2 A

<ul style="list-style-type: none"><li>• at 600 V rated value</li></ul>	21.9 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 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>	2 hp 3 hp  5 hp 7.5 hp 15 hp 20 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><li>• at 500 V according to IEC 60947-4-1 rated value</li></ul>	153 000 A 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>	107 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 mm², 2x (2.5 ... 6 mm²)	
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm²	
<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	
<b>Electrical Safety</b>		
<b>protection class IP on the front according to IEC 60529</b>	IP20	
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front	
<b>Approvals Certificates</b>		
General Product Approval	For use in hazardous locations	Test Certificates
<div><div> EG-Konf.</div><div></div><div> UL</div><div></div><div> ATEX</div><div><a href="#">Type Test Certificates/Test Report</a></div></div>		
Test Certificates	Marine / Shipping	

[Special Test Certificate](#)



Marine / Shipping		other	Railway	Dangerous goods	Environment
		<a href="#">Confirmation</a>	<a href="#">Special Test Certificate</a>	<a href="#">Transport Information</a>	<a href="#">Environmental Confirmations</a>

#### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RA2125-4DA27-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4DA27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0BB4>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2125-4DA27-0BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4DA27-0BB4&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DA27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4DA27-0BB4&objecttype=14&gridview=view1>

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