








FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 17-22A  
110/120V AC 50/60HZ SCREW CONNECTION FOR SNAPPING ONTO 60 MM  
BUSBAR SYSTEMS TYPE OF COORDINATION 2 IQ = 50 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>	
• of the supplied contactor	<a href="#">3RT2027-1AK60</a>
• of the supplied circuit-breakers	<a href="#">3RV2021-4CA15</a>
• of the supplied busbar adapter	<a href="#">8US1251-5NT10</a>
• of the supplied link module	<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 assignment</b>	2
<b>Weight</b>	1.06 kg
<b>Ambient conditions</b>	
<b>ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-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>	17 ... 22 A
<b>operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
<b>operating frequency rated value</b>	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	11 000 W
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	110 V
• at 50 Hz rated value	88 ... 121 V
• at 60 Hz rated value	120 V
• at 60 Hz rated value	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

design of the overload release	thermal (bimetallic)	
response value current of instantaneous short-circuit trip unit	286 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor <ul style="list-style-type: none"><li>at 480 V rated value</li><li>at 600 V rated value</li></ul>	22 A 21.9 A	
yielded mechanical performance [hp] <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>	1.5 hp 3 hp  5 hp 7.5 hp 15 hp 20 hp	
Short-circuit protection		
product function short circuit protection	Yes	
design of the short-circuit trip	magnetic	
conditional short-circuit current (Iq) <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	
Installation/ mounting/ dimensions		
mounting position	vertical	
fastening method	for snapping onto 60 mm busbar systems	
height	260 mm	
width	45 mm	
depth	155 mm	
required spacing <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	
Connections/ Terminals		
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	
Safety related data		
proportion of dangerous failures with high demand rate according to SN 31920	73 %	
B10 value with high demand rate according to SN 31920	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		
General Product Approval	For use in hazard-ous locations	Test Certificates



[Special Test Certificate](#)

Test Certificates		Marine / Shipping				
<a href="#">Type Test Certificates/Test Report</a>		 ABS	 BUREAU VERITAS	 DNV	 LRS	 PRS
Marine / Shipping		other	Railway	Environment		
 RINA	 RMRS	<a href="#">Confirmation</a>	<a href="#">Special Test Certificate</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=3RA2125-4CD27-0AK6>  
Cax online generator  
<http://support.automation.siemens.com/VW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4CD27-0AK6>  
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4CD27-0AK6>  
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2125-4CD27-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4CD27-0AK6&lang=en)  
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4CD27-0AK6/char>  
Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-4CD27-0AK6&objecttype=14&gridview=view1>

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