



Fuseless motor starter Direct start 600VAC Size S0 0.7-1A 110/120VAC 50/60Hz screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	<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="#">3RT2023-1AK60</a> <a href="#">3RV2011-0JA10</a> <a href="#">3RA2921-1AA00</a>
<b>General technical data</b>	
size of the circuit-breaker	S00
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 coordination	2
SVHC substance name	Lead - 7439-92-1
Net Weight	0.76 kg
<b>Ambient conditions</b>	
ambient temperature	<ul style="list-style-type: none"> <li>• during operation -20 ... +60 °C</li> <li>• during storage -50 ... +80 °C</li> <li>• during transport -55 ... +80 °C</li> </ul>
<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	0.7 ... 1 A
operating voltage	<ul style="list-style-type: none"> <li>• rated value 690 V</li> <li>• at AC-3 rated value maximum 690 V</li> </ul>
operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	0.85 A
operating power at AC-3	<ul style="list-style-type: none"> <li>• at 400 V rated value 250 W</li> <li>• at 500 V rated value 370 W</li> <li>• at 690 V rated value 550 W</li> </ul>
<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>	7.2 VA		
<b>inductive power factor with the holding power of the coil</b>	0.28		
<b>Auxiliary circuit</b>			
number of NC contacts for auxiliary contacts	1		
number of NO contacts for auxiliary contacts	1		
<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	13 A		
<b>UL/CSA ratings</b>			
<b>yielded mechanical performance [hp]</b>			
• for 3-phase AC motor			
— at 575/600 V rated value	0.5 hp		
<b>Short-circuit protection</b>			
product function short circuit protection	Yes		
design of the short-circuit trip	magnetic		
conditional short-circuit current (I <sub>q</sub> )			
• at 400 V according to IEC 60947-4-1 rated value	153 000 A		
<b>Installation/ mounting/ dimensions</b>			
mounting position	vertical		
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug		
height	193.1 mm		
width	45 mm		
depth	97.1 mm		
required spacing			
• for grounded parts			
— forwards	10 mm		
— backwards	0 mm		
— upwards	30 mm		
— at the side	9 mm		
— downwards	10 mm		
• for live parts			
— forwards	10 mm		
— backwards	0 mm		
— upwards	30 mm		
— downwards	10 mm		
— at the side	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	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		
<b>Approvals Certificates</b>			
Environment	General Product Approval	For use in hazardous locations	other

other

[Confirmation](#)

#### 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=3RA2120-0JA23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0JA23-0AK6>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-0JA23-0AK6&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-0JA23-0AK6&lang=en)

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-0JA23-0AK6>

Characteristic curves

[https://curves.samaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.samaris.siemens.com/curves/<mmp_prod_noCOMP=)



