



Fuseless motor starter Direct start 600VAC Size S0 1.8-2.5A 24V DC screw connection For snapping onto 60 mm busbar systems 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	
• of the supplied contactor	<a href="#">3RT2023-1BB40</a>
• of the supplied circuit-breakers	<a href="#">3RV2011-1CA10</a>
• of the supplied busbar adapter	<a href="#">8US1251-5NT10</a>
• of the supplied link module	<a href="#">3RA2921-1BA00</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
Substance Prohibition (Date)	03/01/2017
Weight	1.25 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	1.8 ... 2.5 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	1.9 A
operating power at AC-3	
• at 400 V rated value	750 W
• at 500 V rated value	1 100 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	
Auxiliary circuit		
number of NC contacts for auxiliary contacts	1	
number of NO contacts for auxiliary contacts	1	
Protective and monitoring functions		
trip class	CLASS 10	
design of the overload release	thermal (bimetallic)	
response value current of instantaneous short-circuit trip unit	32.5 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor		
• at 480 V rated value	2.15 A	
• at 600 V rated value	2.24 A	
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 230 V rated value	0.17 hp	
• for 3-phase AC motor		
— at 200/208 V rated value	0.5 hp	
— at 220/230 V rated value	0.5 hp	
— at 460/480 V rated value	1 hp	
— at 575/600 V rated value	1.5 hp	
Short-circuit protection		
product function short circuit protection	Yes	
design of the short-circuit trip	magnetic	
conditional short-circuit current (Iq)		
• at 400 V according to IEC 60947-4-1 rated value	153 000 A	
Installation/ mounting/ dimensions		
mounting position	vertical	
fastening method	for snapping onto 60 mm busbar systems	
height	260 mm	
width	45 mm	
depth	165 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	
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	other



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Dangerous goods

Environment

[Transport Information](#)

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#### 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=3RA2120-1CD23-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1CD23-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1CD23-0BB4>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1CD23-0BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1CD23-0BB4&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1CD23-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1CD23-0BB4&objecttype=14&gridview=view1>



