

Fuseless motor starter Direct start 600VAC Size S0 3.5-5A 110/120VAC 50/60HZ 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 (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	
<ul style="list-style-type: none"> of the supplied contactor of the supplied circuit-breakers of the supplied busbar adapter of the supplied link module 	3RT2024-1AK60 3RV2011-1FA15 8US1251-5NT10 3RA2921-1AA00
General technical data	
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
Weight	1.06 kg
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport 	-20 ... +60 °C -50 ... +80 °C -55 ... +80 °C
Main circuit	
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	3.5 ... 5 A
operating voltage	
<ul style="list-style-type: none"> rated value at AC-3 rated value maximum 	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	3.6 A
operating power at AC-3	
<ul style="list-style-type: none"> at 400 V rated value at 500 V rated value 	1 500 W 2 200 W
Control circuit/ Control	
control supply voltage at AC	
<ul style="list-style-type: none"> at 50 Hz rated value at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value 	110 V 88 ... 121 V 120 V 96 ... 132 V
apparent holding power of magnet coil at AC	7.2 VA
inductive power factor with the holding power of the coil	0.28
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
Protective and monitoring functions	
trip class	CLASS 10

design of the overload release	thermal (bimetallic)	
response value current of instantaneous short-circuit trip unit	65 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor		
• at 480 V rated value	4.8 A	
• at 600 V rated value	4.55 A	
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 110/120 V rated value	0.17 hp	
— at 230 V rated value	0.5 hp	
• for 3-phase AC motor		
— at 200/208 V rated value	1 hp	
— at 220/230 V rated value	1 hp	
— at 460/480 V rated value	3 hp	
— at 575/600 V rated value	3 hp	
Short-circuit protection		
product function short circuit protection	Yes	
design of the short-circuit trip	magnetic	
conditional short-circuit current (I_q)		
• at 400 V according to IEC 60947-4-1 rated value	153 000 A	
• at 500 V according to IEC 60947-4-1 rated value	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		
• 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 mm ² , 2x (2.5 ... 6 mm ²)	
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm ²	
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 hazardous locations	Test Certificates



[Special Test Certificate](#)

Test Certificates		Maritime application			
Type Test Certificates/Test Report					
Maritime application	other	Railway	Environment		
			Confirmation	Special Test Certificate	Environmental Confirmations

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=3RA2125-1FD24-0AK6>

Cax online generator
<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1FD24-0AK6>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1FD24-0AK6>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1FD24-0AK6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1FD24-0AK6/char>

Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1FD24-0AK6&objecttype=14&gridview=view1>

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