








Fuseless motor starter Direct start 600VAC Size S0 4.5-6.3A 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	
• of the supplied contactor	3RT2024-1AK60
• of the supplied circuit-breakers	3RV2011-1GA15
• of the supplied busbar adapter	8US1251-5NT10
• of the supplied link module	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 assignment	2
Weight	1.06 kg
Ambient conditions	
ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-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	4.5 ... 6.3 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	5 A
operating power at AC-3	
• at 400 V rated value	2 200 W
• at 500 V rated value	3 000 W
Control circuit/ Control	
control supply voltage at AC	
• 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
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	81.9 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor <ul style="list-style-type: none">at 480 V rated valueat 600 V rated value	4.8 A 6.3 A	
yielded mechanical performance [hp] <ul style="list-style-type: none">for single-phase AC motor<ul style="list-style-type: none">at 110/120 V rated valueat 230 V rated valuefor 3-phase AC motor<ul style="list-style-type: none">at 200/208 V rated valueat 220/230 V rated valueat 460/480 V rated valueat 575/600 V rated value	0.25 hp 0.5 hp 1 hp 1.5 hp 3 hp 5 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">at 400 V according to IEC 60947-4-1 rated valueat 500 V according to IEC 60947-4-1 rated value	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">for grounded parts<ul style="list-style-type: none">forwardsbackwardsupwardsat the sidedownwardsfor live parts<ul style="list-style-type: none">forwardsbackwardsupwardsdownwardsat the side	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



[Type Test Certificates/Test Report](#)

Test Certificates		Marine / Shipping				
Special Test Certificate		 ABS	 BUREAU VERITAS	 DNV	 LRS	 PRS
Marine / Shipping		other	Railway	Environment		
 RINA	 RMRS	Confirmation	Special Test Certificate	Environmental Confirmations		

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=3RA2125-1GD24-0AK6>
Cax online generator
<http://support.automation.siemens.com/VW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-1GD24-0AK6>
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GD24-0AK6>
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-1GD24-0AK6&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-1GD24-0AK6/char>
Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-1GD24-0AK6&objecttype=14&gridview=view1>

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