



Fuseless motor starter Direct start 600VAC Size S0 0.45-0.63A 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 (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	3RT2023-1AK60
• of the supplied circuit-breakers	3RV2011-0GA10
• 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	6 g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of coordination	2
SVHC substance name	Lead CAS-No. 7439-92-1
Net 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	0.45 ... 0.63 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	0.6 A
operating power at AC-3	
• at 400 V rated value	180 W
• at 500 V rated value	180 W
• at 690 V rated value	250 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		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		8.19 A	
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	
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			
Environment	General Product Approval	For use in hazardous locations	other

[Environmental Conformations](#)



[Confirmation](#)

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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=3RA2120-0GD23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0GD23-0AK6>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-0GD23-0AK6&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-0GD23-0AK6>

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>



