



Fuseless motor starter Direct start 600VAC Size S0 0.45-0.63A 220/240VAC 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	
<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 	3RT2023-1AP60 3RV2011-0GA10 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 (switching cycles) of contactor typical	10 000 000
type of assignment	2
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	0.45 ... 0.63 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	0.6 A
operating power at AC-3	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 690 V rated value 	180 W 180 W 250 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 	220 V 176 ... 242 V 240 V 192 ... 264 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)			
<ul style="list-style-type: none"> • 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			
<ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at 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			
<ul style="list-style-type: none"> • for main contacts stranded • at AWG cables for main contacts 	1 ... 10 mm ² , 2x (2.5 ... 6 mm ²) 2x (16 ... 12), 2x (14 ... 8)		
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm ²		
Safety related data			
B10 value with high demand rate according to SN 31920	1 000 000		
proportion of dangerous failures with high demand rate according to SN 31920	73 %		
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		
Certificates/ approvals			
General Product Approval	For use in hazardous locations	Declaration of Conformity	other

[Confirmation](#)



[Confirmation](#)

Further information

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=3RA2120-0GD23-0AP6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-0GD23-0AP6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0GD23-0AP6>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-0GD23-0AP6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0GD23-0AP6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-0GD23-0AP6&objecttype=14&gridview=view1>

last modified:

12/15/2020