



Fuseless motor starter Direct start 600VAC Size S0 0.45-0.63A 110/120VAC 50/60HZ screw connection For screw mounting Or 35 mm rail-mounting 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 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	0.76 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		Snap-mounted to DIN rail or screw-mounted with additional push-in lug
height		193 mm
width		45 mm
depth		97 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](#)

[Confirmation](#)



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=3RA2120-0GA23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0GA23-0AK6>

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

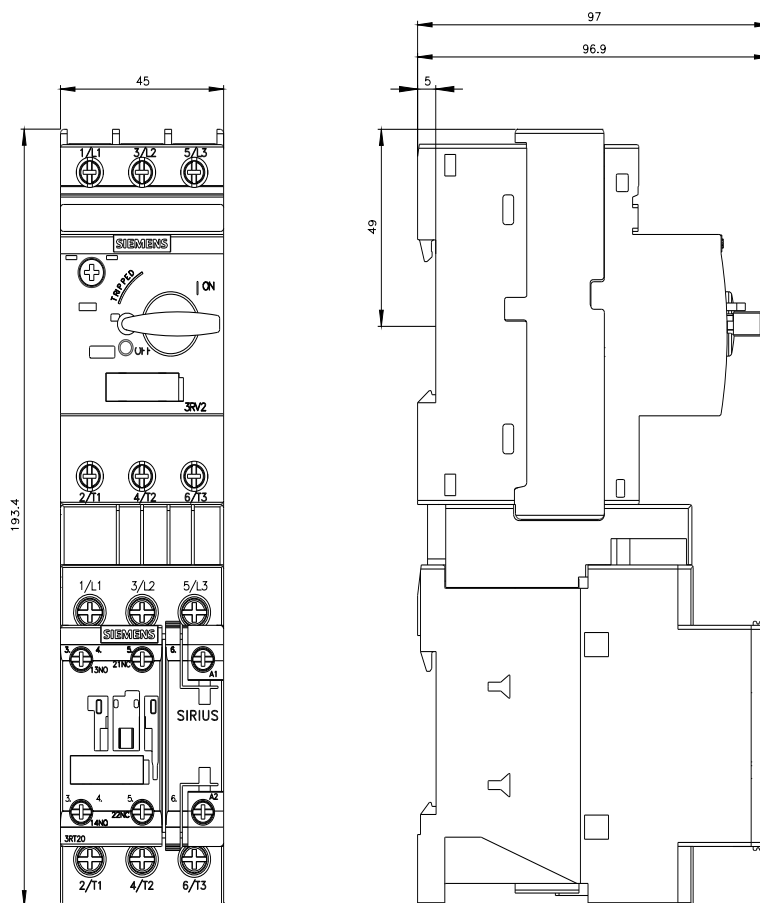
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-0GA23-0AK6&lang=en

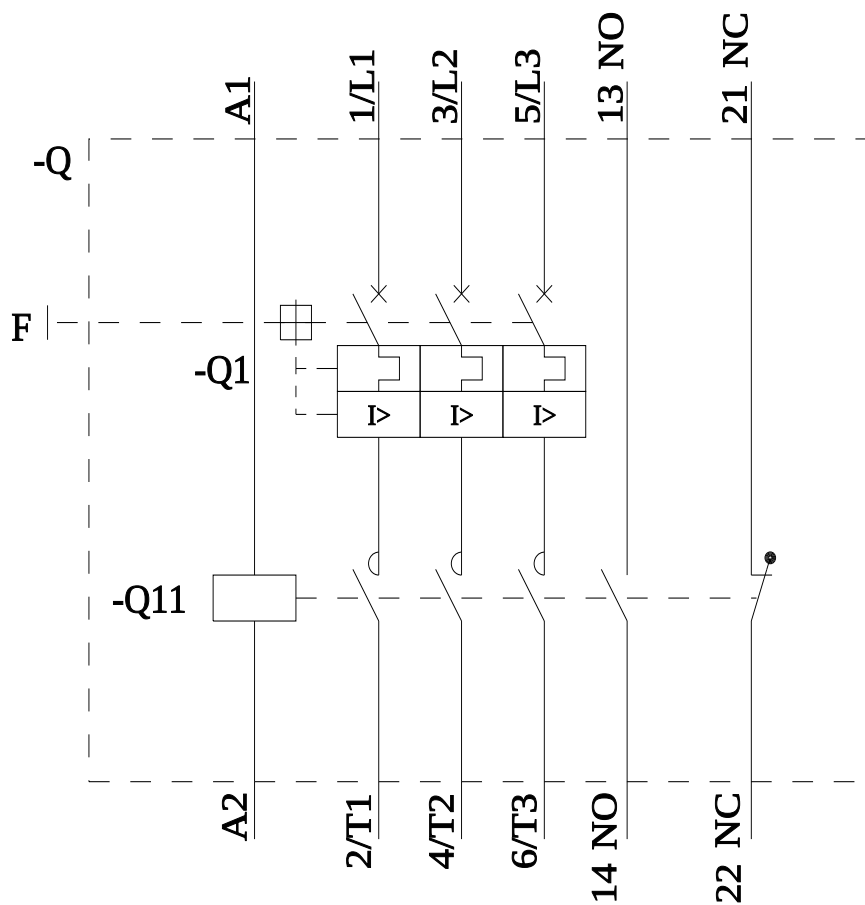
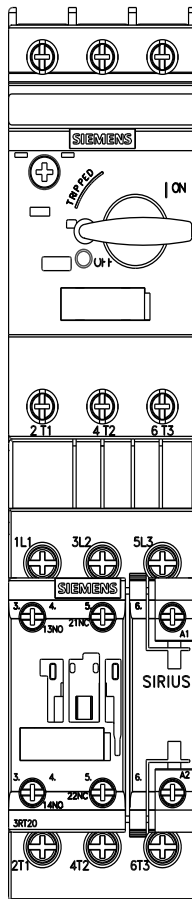
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-0GA23-0AK6>

Characteristic curves

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





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