



Fuseless motor starter Direct start 600VAC Size S0 2.2-3.2A 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	3RV2011-1DA10
• 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
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	2.2 ... 3.2 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	2.7 A
operating power at AC-3	
• at 400 V rated value	1 100 W
• at 500 V rated value	1 500 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	41.6 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	2.8 A		
• at 600 V rated value	3.16 A		
yielded mechanical performance [hp]			
• for single-phase AC motor			
— at 110/120 V rated value	0.1 hp		
— at 230 V rated value	0.25 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	0.5 hp		
— at 220/230 V rated value	0.75 hp		
— at 460/480 V rated value	1.5 hp		
— at 575/600 V rated value	2 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		
Installation/ mounting/ dimensions			
mounting position	vertical		
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug		
height	193.1 mm		
width	45 mm		
depth	97.1 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 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			
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 hazard-	Declaration of Conformity	other

[Confirmation](#)[Confirmation](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RA2120-1DA23-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1DA23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1DA23-0AK6>

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

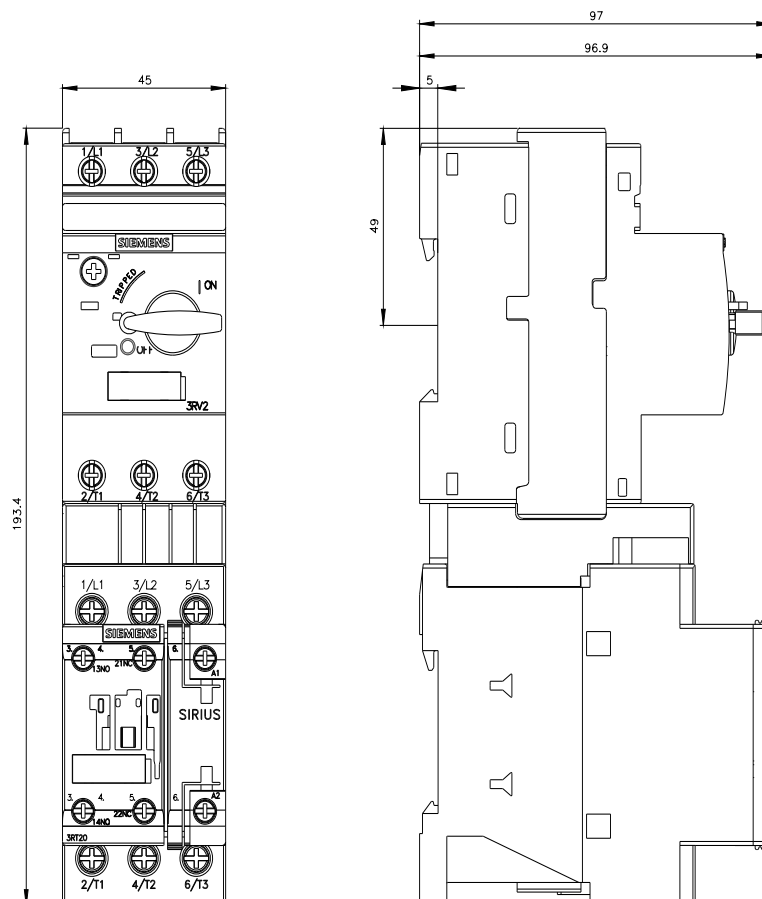
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1DA23-0AK6&lang=en

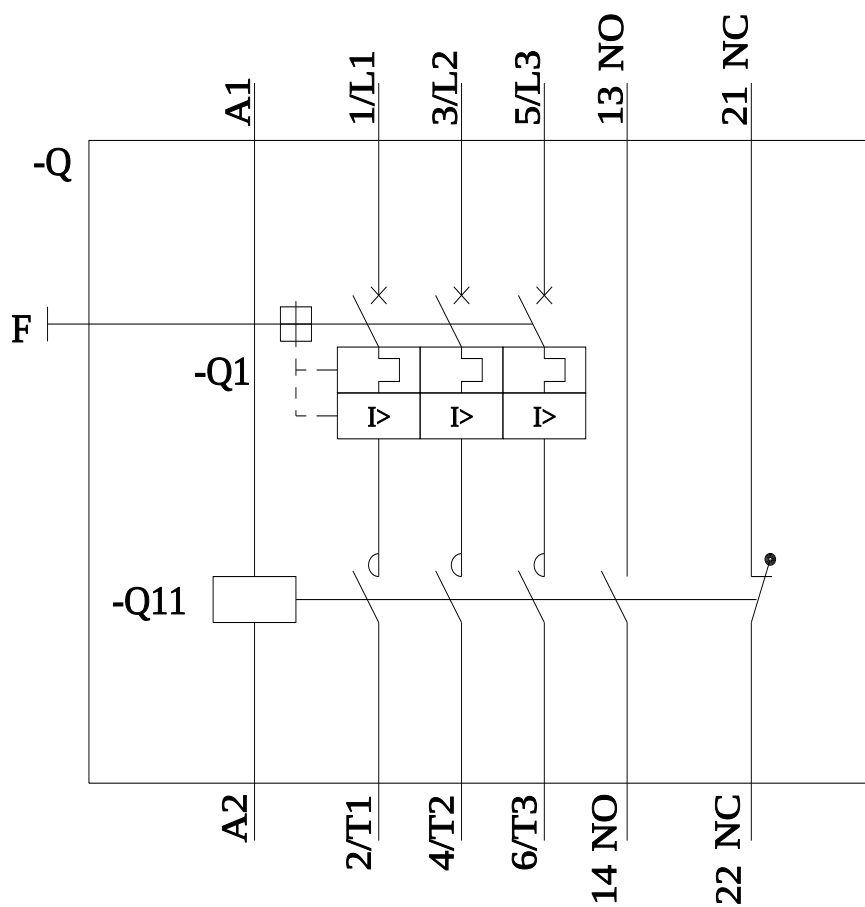
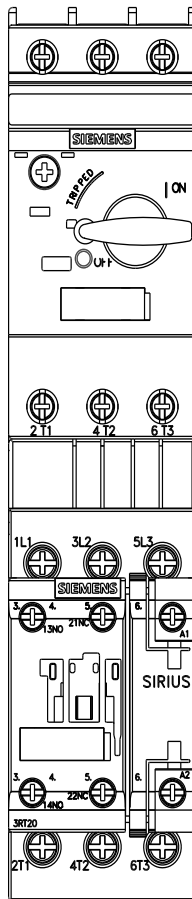
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1DA23-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1DA23-0AK6&objecttype=14&gridview=view1>





last modified:

12/15/2020