



Fuseless motor starter Direct start 600VAC Size S0 27-32A 220/240VAC 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	3RT2027-1AP60
• of the supplied circuit-breakers	3RV2021-4EA10
• of the supplied link module	3RA2921-1AA00
General technical data	
size of the circuit-breaker	S0
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	27 ... 32 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	29 A
operating power at AC-3	
• at 400 V rated value	15 000 W
• at 500 V rated value	18 500 W
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	220 V
• at 50 Hz rated value	176 ... 242 V
• at 60 Hz rated value	240 V

• at 60 Hz rated value	192 ... 264 V	
apparent holding power of magnet coil at AC	9.4 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	416 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor		
• at 480 V rated value	27 A	
• at 600 V rated value	27 A	
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 230 V rated value	5 hp	
• for 3-phase AC motor		
— at 200/208 V rated value	10 hp	
— at 220/230 V rated value	10 hp	
— at 460/480 V rated value	20 hp	
— at 575/600 V rated value	25 hp	
Short-circuit protection		
product function short circuit protection	Yes	
design of the short-circuit trip	magnetic	
conditional short-circuit current (Iq)		
• at 400 V according to IEC 60947-4-1 rated value	153 000 A	
• at 500 V according to IEC 60947-4-1 rated value	100 000 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

	ous locations	
--	---------------	--

[Confirmation](#)



Test Certificates	Marine / Shipping
-------------------	-------------------

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping	other	Railway
-------------------	-------	---------



[Confirmation](#)

[Vibration and Shock](#)

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=3RA2120-4EA27-0AP6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4EA27-0AP6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4EA27-0AP6>

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

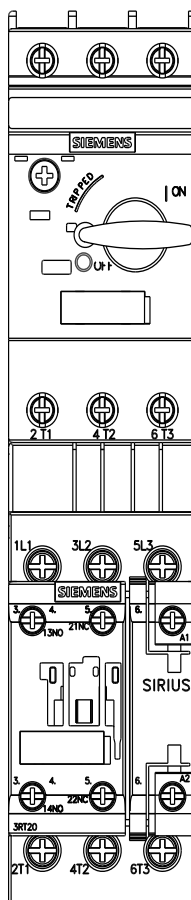
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4EA27-0AP6&lang=en

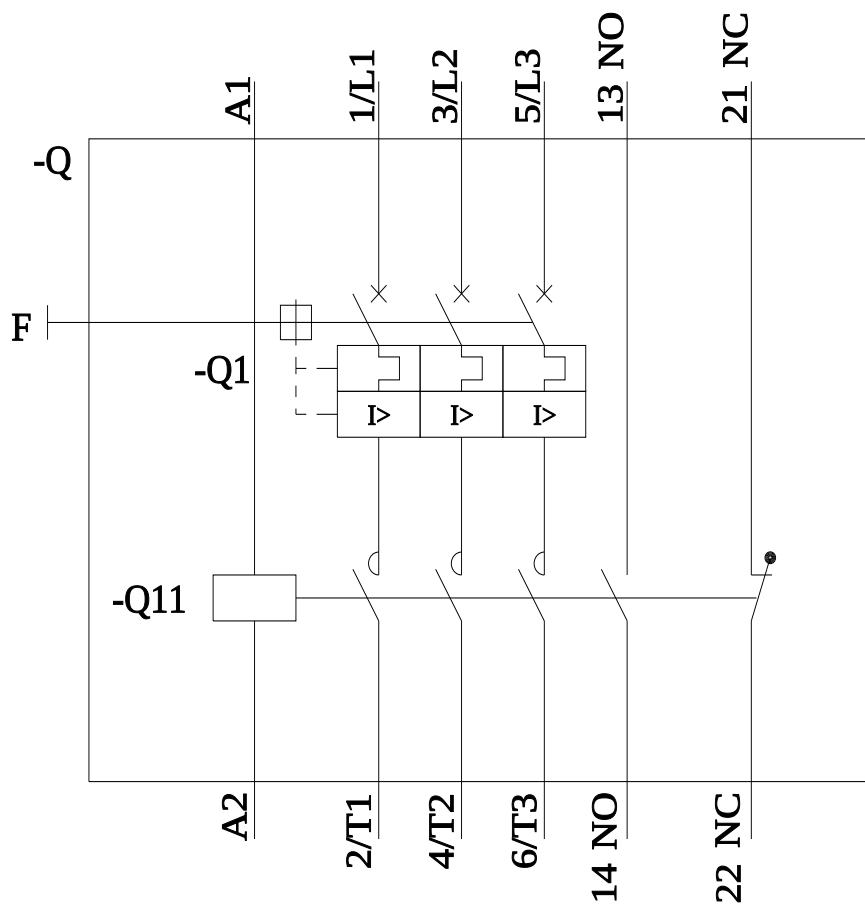
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4EA27-0AP6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4EA27-0AP6&objecttype=14&gridview=view1>





last modified:

12/15/2020