

LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S0, 16...22A, DC 24V SCREW CONNECTION FOR RAIL-MOUNTING, TYPE OF COORDINATION 2, IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1) 1NO+1NC (CONTACTOR)



Product brand name	SIRIUS
Product designation	Direct (on-line) starter
Design of the product	for standard rail or screw mounting
Product type designation	3RA21
Manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module 	3RT2027-1BB40 3RV2021-4CA10 3RA2921-1BA00

General technical data	
Size of the circuit-breaker	S0
Size of load feeder	S0
Insulation voltage	
<ul style="list-style-type: none"> • with degree of pollution 3 rated value 	690 V
Surge voltage resistance rated value	6 kV
Protection class IP	
<ul style="list-style-type: none"> • on the front 	IP20
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical 	10 000 000
Type of assignment	2

Protection against electrical shock	finger-safe
Ambient conditions	
Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
Temperature compensation	-20 ... +60 °C
Main circuit	
Number of poles for main current circuit	3
Design of the switching contact	electromechanical
Adjustable pick-up value current of the current-dependent overload release	17 ... 22 A
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 ... 60 Hz
Operating current	
• at AC-3	
— at 400 V rated value	22 A
Operating power	
• at AC-3	
— at 400 V rated value	11 000 W
Control circuit/ Control	
Control supply voltage at DC	
• rated value	24 V
Holding power of magnet coil at DC	5.9 W
Auxiliary circuit	
Product extension Auxiliary switch	Yes
Protective and monitoring functions	
Trip class	CLASS 10
Design of the overload release	thermal (bimetallic)
UL/CSA ratings	
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1.5 hp
— at 230 V rated value	3 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 acc. to IEC 60947-4-1 rated value

153 000 A

Installation/ mounting/ dimensions

Mounting position	vertical
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	193.1 mm
Width	45 mm
Depth	107 mm
Required spacing	
<ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards 20 mm — Backwards 0 mm — upwards 50 mm — at the side 20 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 20 mm — Backwards 0 mm — upwards 50 mm — downwards 10 mm — at the side 20 mm 	

Connections/Terminals

Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — stranded 1 ... 10 mm², 2x (2.5 ... 6 mm²) • at AWG conductors for main contacts 2x (16 ... 12), 2x (14 ... 8) 	
Connectable conductor cross-section for main contacts	
<ul style="list-style-type: none"> • finely stranded with core end processing 1 ... 6 mm² 	

Safety related data

B10 value	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 1 000 000 	
Proportion of dangerous failures	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 73 % 	

Certificates/approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity
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Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other	Railway
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[Environmental Confirmations](#)

[Confirmation](#)

[Vibration and Shock](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2120-4CA27-0BB4>

Cax online generator

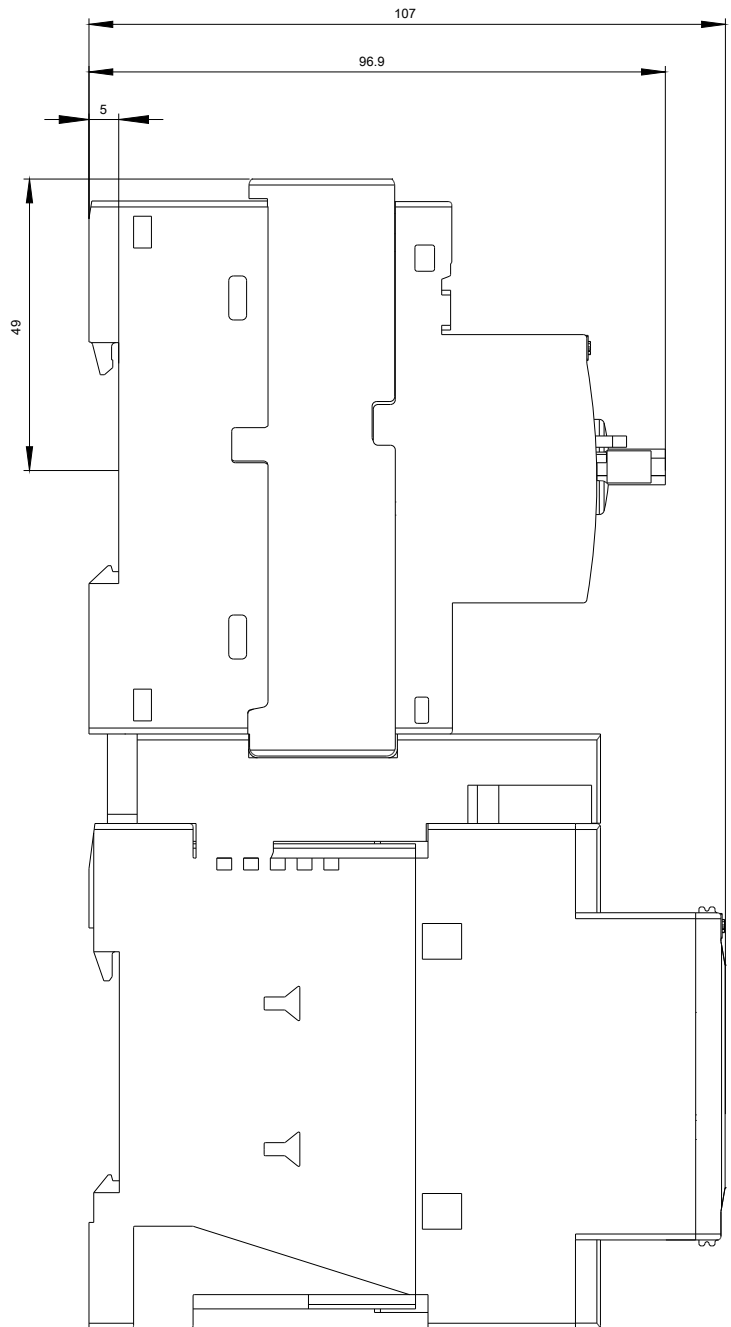
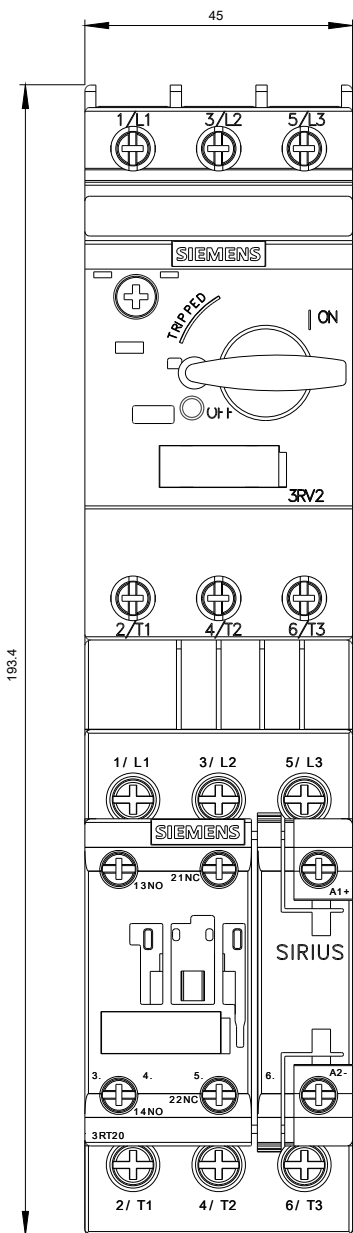
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4CA27-0BB4>

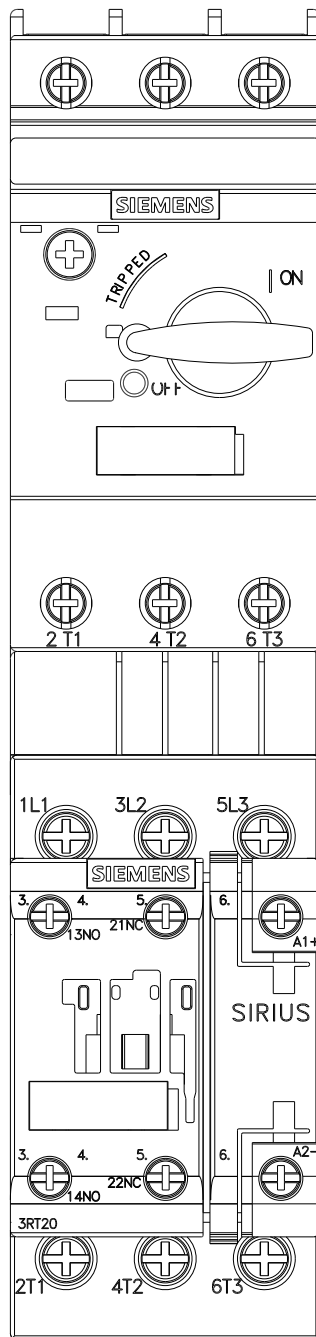
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

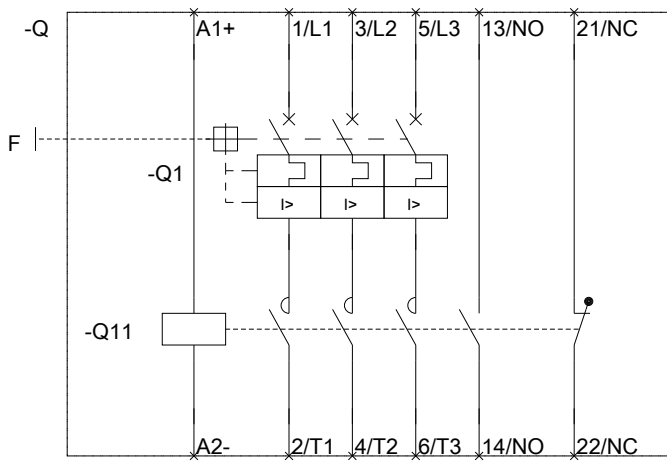
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4CA27-0BB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4CA27-0BB4&lang=en







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07/14/2017