

LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ. S0, 7. .
 .10A, DC 24V SCREW CONNECTION FOR RAIL MOUNTING,
 TYPE OF COORD. 2,IQ = 150KA (ALSO ACHIEVES 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 	3RT2024-1BB40 3RV2021-1JA10 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	7 ... 10 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	8.5 A
Operating power	
• at AC-3	
— at 400 V rated value	4 000 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	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	7.6 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	1.5 hp
• for three-phase AC motor	
— at 200/208 V rated value	2 hp

— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 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	
• for grounded parts	
— forwards	20 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	20 mm
— downwards	10 mm
• for live parts	
— forwards	20 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	10 mm
— at the side	20 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)
• at AWG conductors for main contacts	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 acc. to SN 31920	1 000 000
Proportion of dangerous failures	

• 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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CSA



UL



ATEX



IECEX



EG-Konf.

Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS



LRS



PRS

Marine / Shipping	other	Railway
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RINA



RMRS



DNVGL.COM/AF

[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=3RA2120-1JA24-0BB4>

Cax online generator

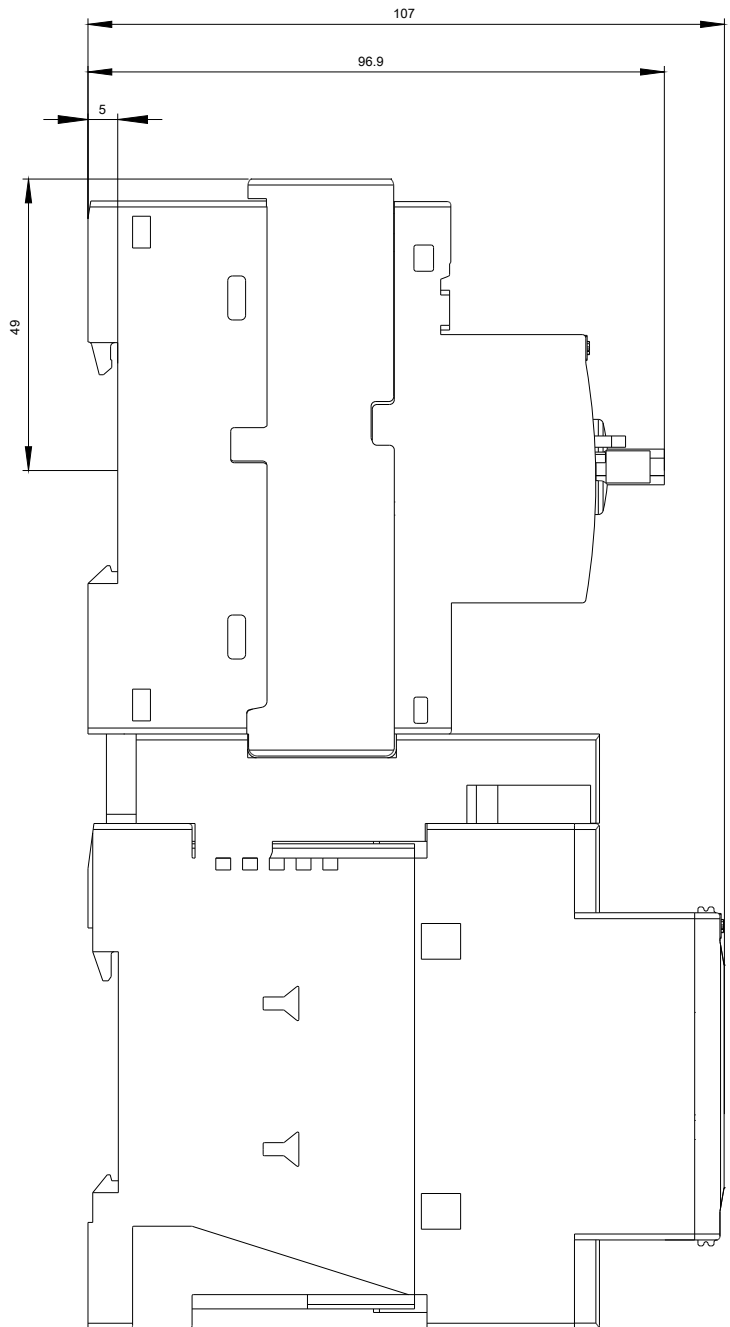
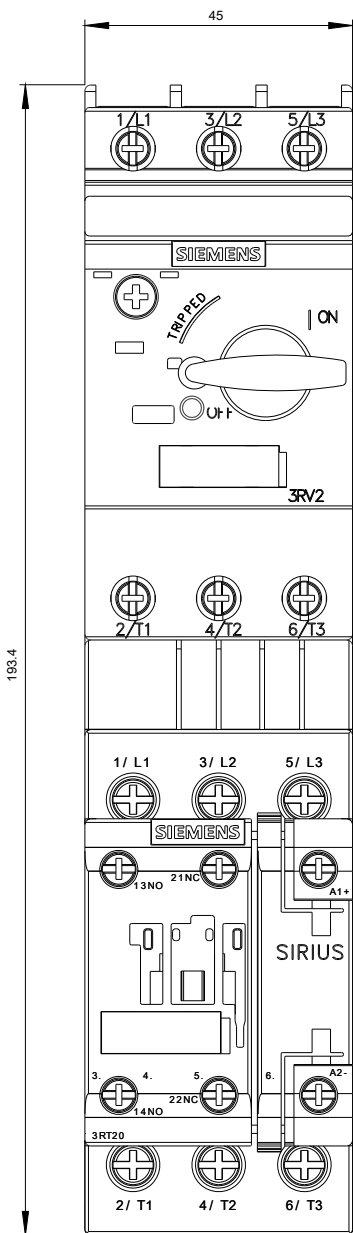
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1JA24-0BB4>

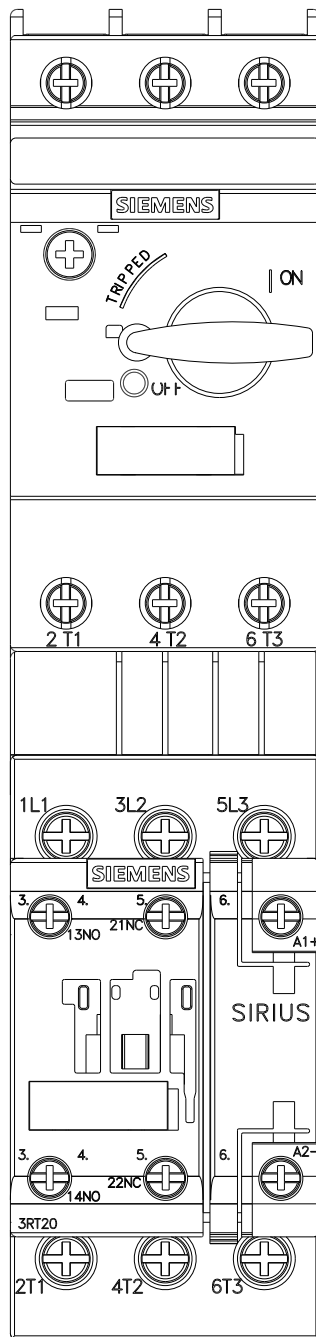
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

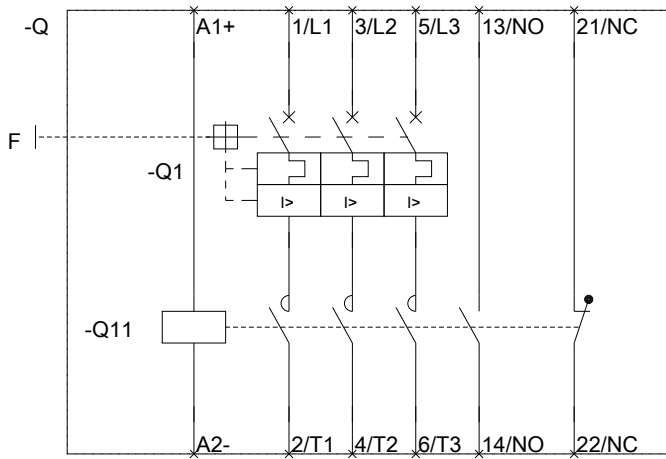
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JA24-0BB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1JA24-0BB4&lang=en







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07/14/2017