

Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0
 4.50...6.30 A 24 V DC Spring-type terminal for 60 mm busbar
 systems (also fulfills type of coordination 1) Type of coordination 2, Iq
 = 150 kA 1 NO+1 NC (contactor)



Product brand name	SIRIUS
Product designation	Direct (on-line) starter
Design of the product	for 60 mm busbars
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 busbar adapter • of the supplied link module 	<ul style="list-style-type: none"> 3RT2024-2BB40 3RV2021-1GA20 8US1251-5NT11 3RA2921-2AA00

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 • of the terminal 	IP20 IP20
Shock resistance	

• acc. to IEC 60068-2-27	6g / 11 ms
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
Type of assignment	2
Type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
Certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
Protection against electrical shock	finger-safe

Ambient conditions

Temperature compensation	-20 ... +60 °C
Relative humidity during operation	10 ... 95 %

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	4.5 ... 6.3 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	4.9 A
Operating power	
• at AC-3	
— at 400 V rated value	2 200 W

Control circuit/ Control

Type of voltage of the control supply voltage	DC
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
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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	4.8 A
Yielded mechanical performance [hp]	

- for three-phase AC motor
 - at 200/208 V rated value 1 hp
 - at 220/230 V rated value 1.5 hp
 - at 460/480 V rated value 3 hp
 - at 575/600 V rated value 5 hp

Short-circuit protection

Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic
Conditional short-circuit current (I_q) <ul style="list-style-type: none"> • at 400 V acc. to IEC 60947-4-1 rated value 	150 000 A

Installation/ mounting/ dimensions

Mounting position	vertical
Mounting type	for snapping onto 60 mm busbar systems
Height	260 mm
Width	45 mm
Depth	165 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 	spring-loaded terminals
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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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[Miscellaneous](#)

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

[Special Test Certificate](#)



Marine / Shipping	other	Railway
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[Confirmation](#)

[Vibration and Shock](#)

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2120-1GH24-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1GH24-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1GH24-0BB4>

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

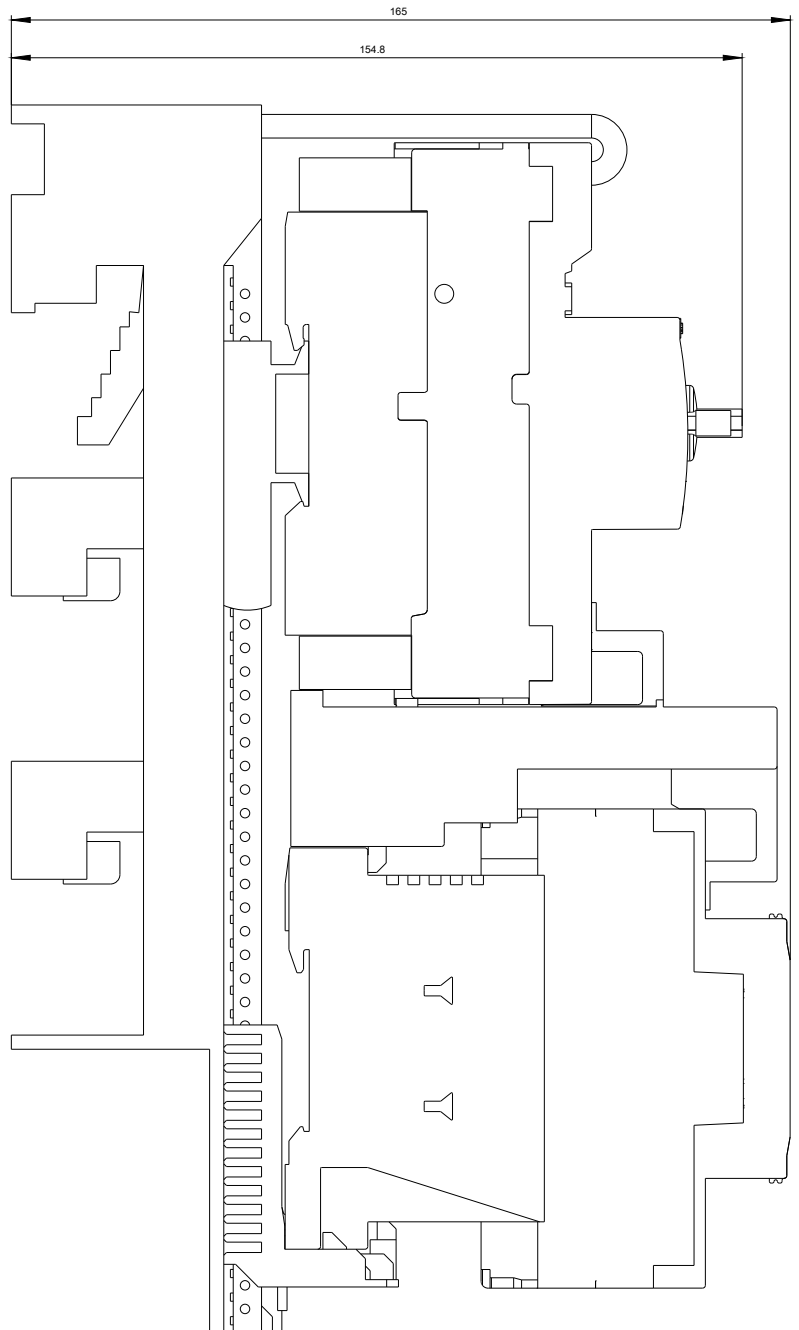
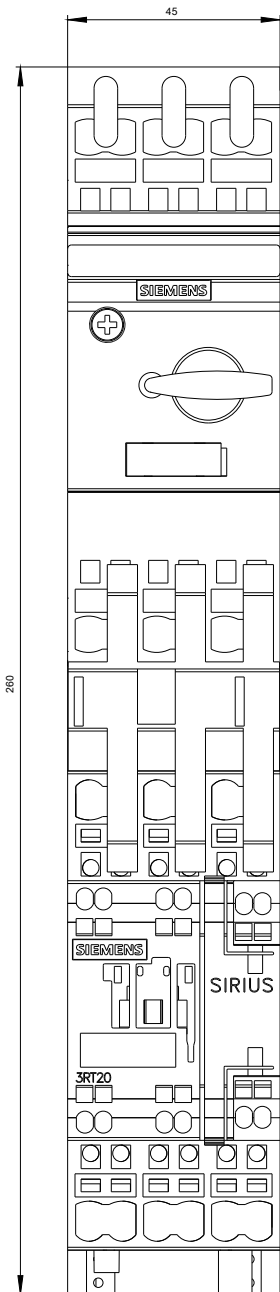
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1GH24-0BB4&lang=en

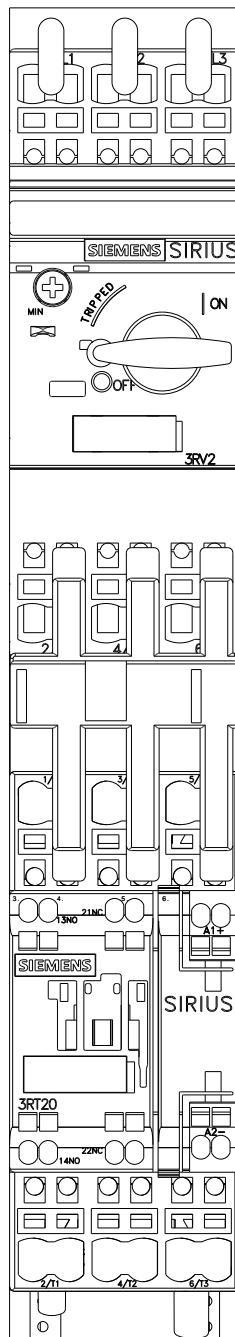
Characteristic: Tripping characteristics, I_t, Let-through current

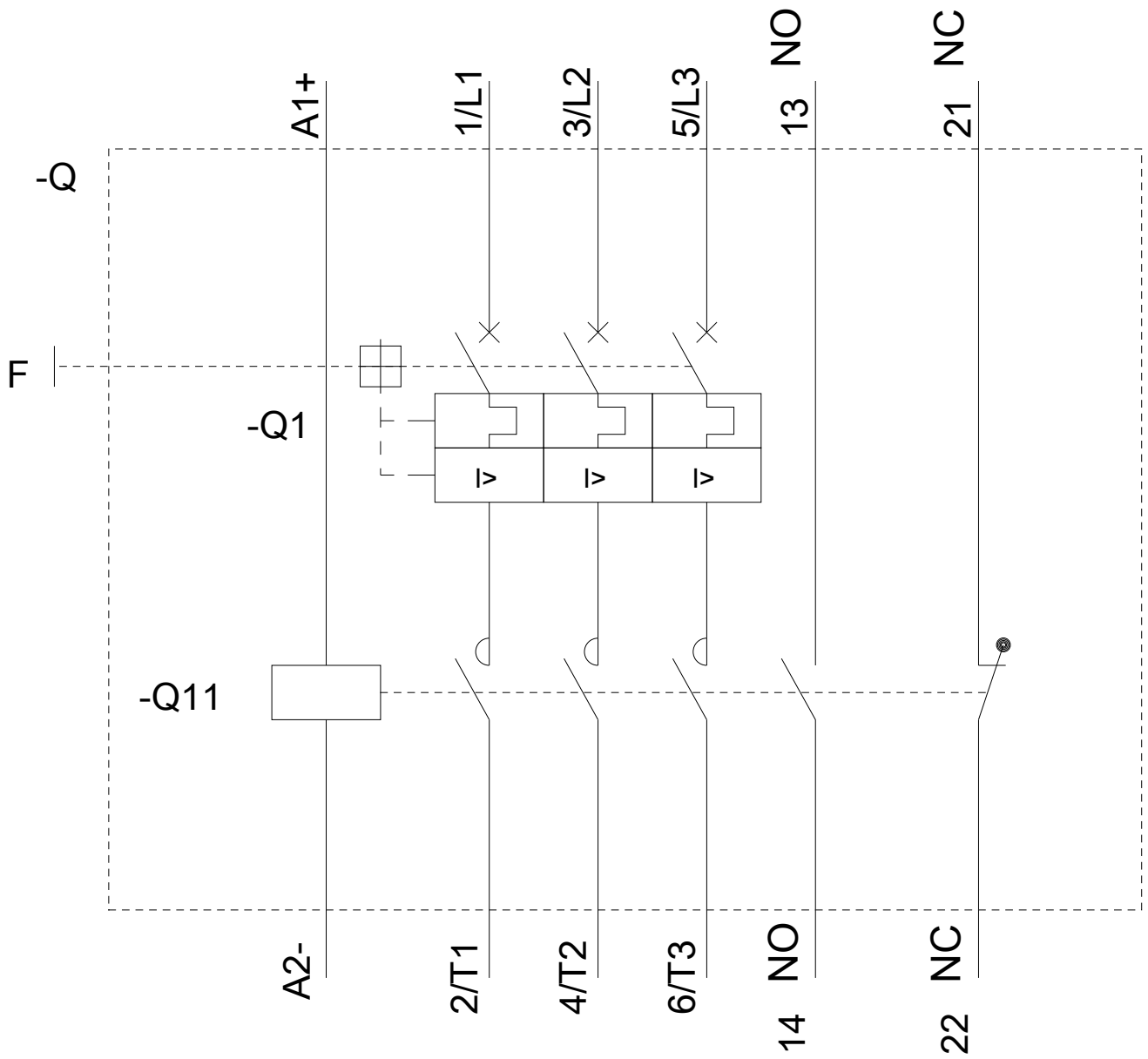
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1GH24-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1GH24-0BB4&objecttype=14&gridview=view1>







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