

Fuseless motor starter Direct start 600VAC Size S0 1.4-2A 24V DC screw connection For snapping onto 60 mm busbar systems 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	
<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"> 3RT2023-1BB40 3RV2011-1BA10 8US1251-5NT10 3RA2921-1BA00

General technical data	
Size of the circuit-breaker	S00
Size of load feeder	S0
Product extension	
<ul style="list-style-type: none"> • Auxiliary switch 	Yes
Insulation voltage	
<ul style="list-style-type: none"> • with degree of pollution 3 at AC rated value 	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
<ul style="list-style-type: none"> • on the front 	IP20

• of the terminal	IP00
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

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	1.4 ... 2 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	1.9 A
Operating power	
• at AC-3	
— at 400 V rated value	750 W
— at 500 V rated value	750 W
— at 690 V rated value	1 100 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

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	26 A

UL/CSA ratings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	1.63 A
• at 600 V rated value	1.72 A
Yielded mechanical performance [hp]	

- for single-phase AC motor
 - at 230 V rated value 0.13 hp
- for three-phase AC motor
 - at 460/480 V rated value 0.75 hp
 - at 575/600 V rated value 1 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 	153 000 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 10 mm — Backwards 0 mm — upwards 30 mm — at the side 9 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 30 mm — downwards 10 mm — at the side 9 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 mm ²

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	other
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[Confirmation](#)

Further information

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=3RA2120-1BD23-0BB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1BD23-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1BD23-0BB4>

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

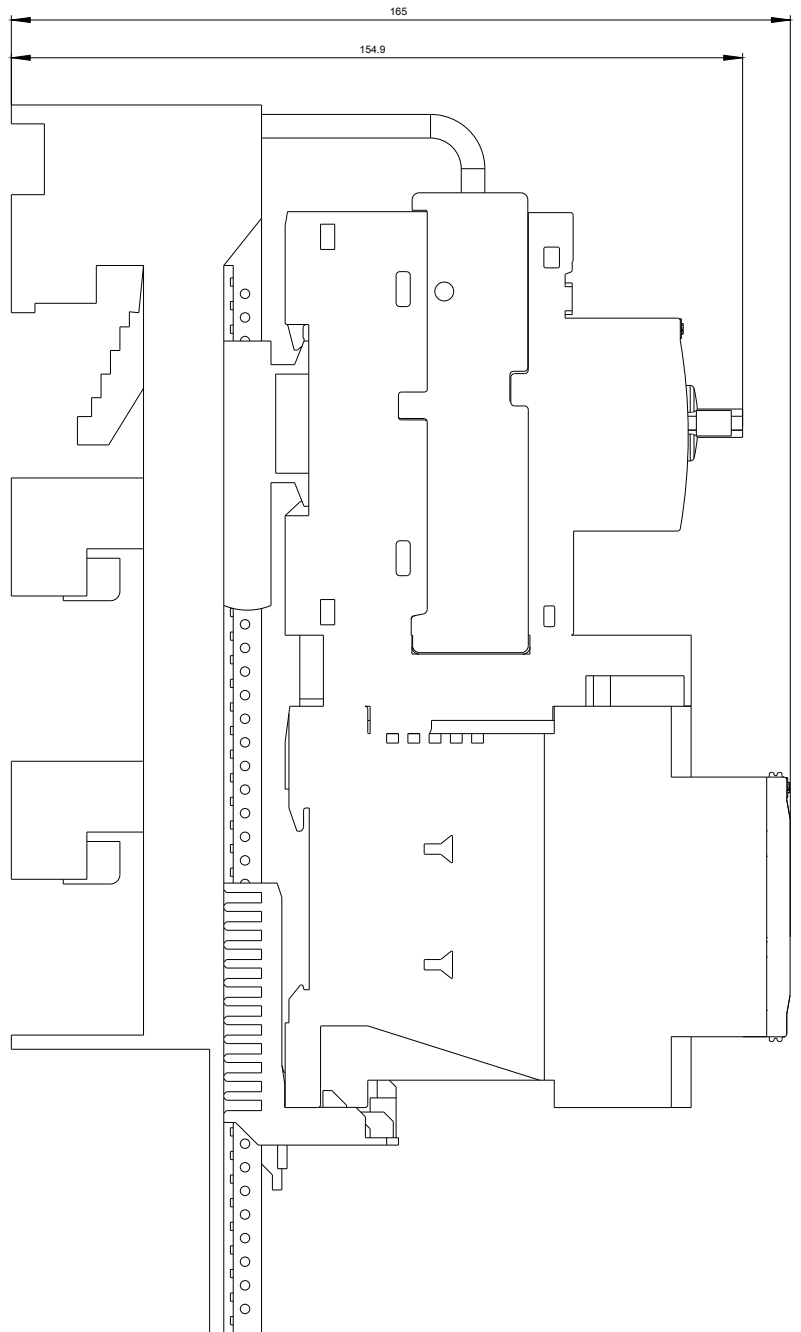
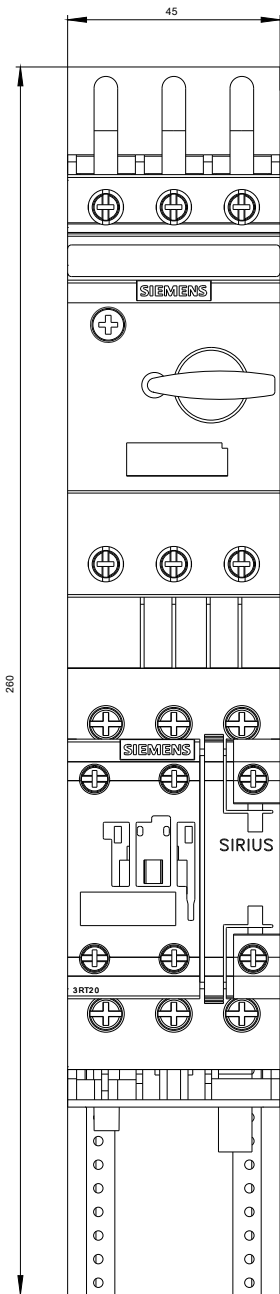
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1BD23-0BB4&lang=en

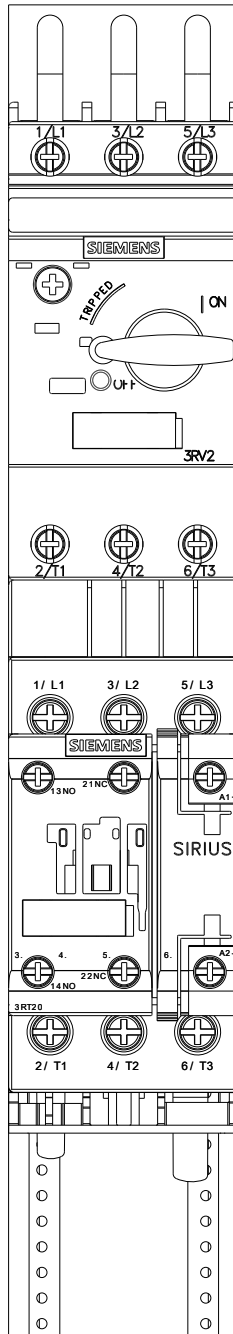
Characteristic: Tripping characteristics, I²t, Let-through current

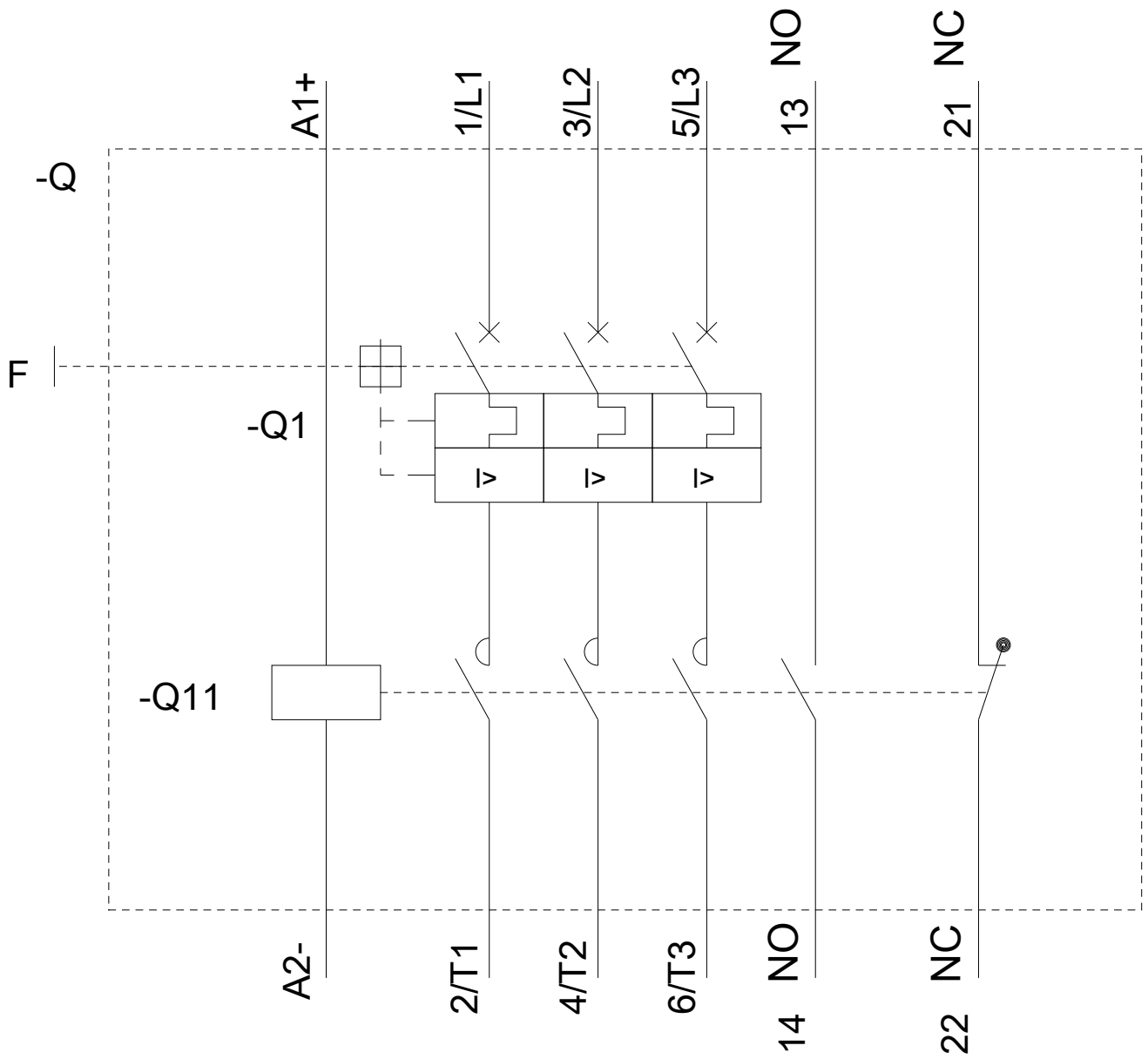
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1BD23-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1BD23-0BB4&objecttype=14&gridview=view1>







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03/30/2020