

## Data sheet

## 3RA2220-1AD23-0BB4



Fuseless motor starter Reversing operation 600VAC Size S0 1.1-1.6A 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 (per contactor)

product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	reversing starter
manufacturer's article number	
• of the supplied contactor	<a href="#">3RT2023-1BB40</a>
• of the supplied circuit-breakers	<a href="#">3RV2011-1AA10</a>
• of the supplied RS assembly kit	<a href="#">3RA2923-1DB1</a>
• of the supplied busbar adapter	<a href="#">8US1251-5NT10</a>
• of the supplied link module	<a href="#">3RA2921-1BA00</a>
<b>General technical data</b>	
size of the circuit-breaker	S00
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 coordination	2
Net Weight	2.12 kg
<b>Ambient conditions</b>	
ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-55 ... +80 °C
<b>Main circuit</b>	
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	1.1 ... 1.6 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	1.5 A
operating power at AC-3	
• at 400 V rated value	550 W
• at 500 V rated value	550 W
• at 690 V rated value	1 100 W

<b>Control circuit/ Control</b>			
<b>control supply voltage at DC rated value</b>			24 V
<b>holding power of magnet coil at DC</b>			5.9 W
<b>Auxiliary circuit</b>			
<b>number of NC contacts for auxiliary contacts</b>			2
<b>number of NO contacts for auxiliary contacts</b>			2
<b>Protective and monitoring functions</b>			
<b>trip class</b>			CLASS 10
<b>design of the overload release</b>			thermal (bimetallic)
<b>response value current of instantaneous short-circuit trip unit</b>			20.8 A
<b>UL/CSA ratings</b>			
<b>full-load current (FLA) for 3-phase AC motor</b>			
• at 480 V rated value			1.6 A
• at 600 V rated value			1.3 A
<b>yielded mechanical performance [hp]</b>			
• for single-phase AC motor			0.1 hp
— at 230 V rated value			
• for 3-phase AC motor			0.75 hp
— at 460/480 V rated value			
— at 575/600 V rated value			0.75 hp
<b>Short-circuit protection</b>			
<b>product function short circuit protection</b>			Yes
<b>design of the short-circuit trip</b>			magnetic
<b>conditional short-circuit current (Iq)</b>			
• at 400 V according to IEC 60947-4-1 rated value			153 000 A
<b>Installation/ mounting/ dimensions</b>			
<b>mounting position</b>			vertical
<b>fastening method</b>			for snapping onto 60 mm busbar systems
<b>height</b>			260 mm
<b>width</b>			90 mm
<b>depth</b>			165 mm
<b>required spacing</b>			
• 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
<b>Connections/ Terminals</b>			
<b>type of electrical connection for main current circuit</b>			screw-type terminals
<b>type of connectable conductor cross-sections for main contacts</b>			1 ... 10 mm <sup>2</sup> , 2x (2.5 ... 6 mm <sup>2</sup> )
<b>connectable conductor cross-section for main contacts finely stranded with core end processing</b>			1 ... 6 mm <sup>2</sup>
<b>Safety related data</b>			
<b>proportion of dangerous failures with high demand rate according to SN 31920</b>			73 %
<b>B10 value with high demand rate according to SN 31920</b>			1 000 000
<b>Electrical Safety</b>			
<b>protection class IP on the front according to IEC 60529</b>			IP20
<b>touch protection on the front according to IEC 60529</b>			finger-safe, for vertical contact from the front
<b>Approvals Certificates</b>			
<b>Environment</b>	<b>General Product Approval</b>		<b>For use in hazard-</b>
			<b>other</b>

[Environmental Confirmations](#)

other

Dangerous goods

[Confirmation](#)[Transport Information](#)

### Further information

#### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

#### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

#### 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=3RA2220-1AD23-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1AD23-0BB4>

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

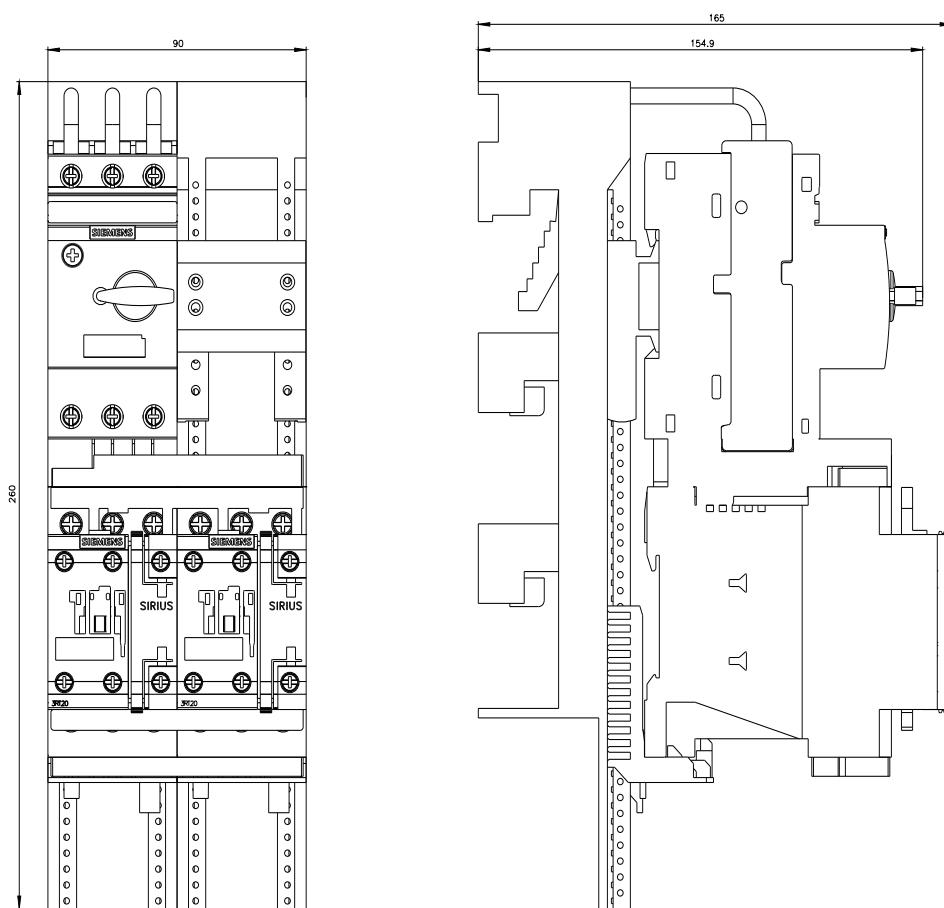
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2220-1AD23-0BB4&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1AD23-0BB4&lang=en)

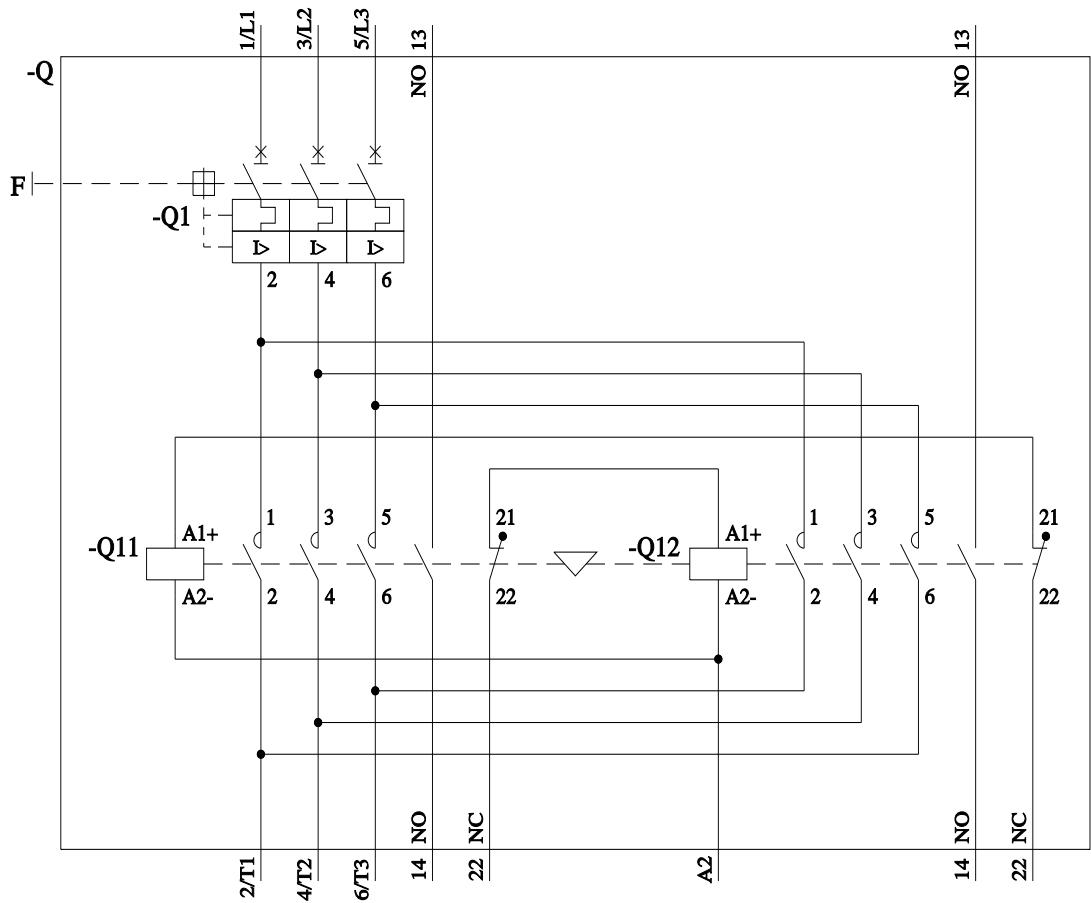
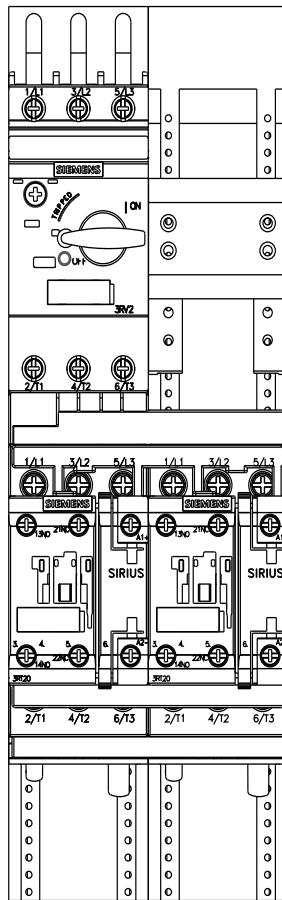
#### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1AD23-0BB4>

#### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="Haupt"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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