



Fuseless motor starter Reversing operation 600VAC Size S0 2.8-4A 110/120VAC 50/60HZ 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	
<ul style="list-style-type: none"> <li>of the supplied contactor</li> <li>of the supplied circuit-breakers</li> <li>of the supplied RS assembly kit</li> <li>of the supplied busbar adapter</li> <li>of the supplied link module</li> </ul>	<a href="#">3RT2023-1AK60</a> <a href="#">3RV2011-1EA10</a> <a href="#">3RA2923-1DB1</a> <a href="#">8US1251-5NT10</a> <a href="#">3RA2921-1AA00</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
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Net Weight	1.73 kg
<b>Ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	-20 ... +60 °C -50 ... +80 °C -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	2.8 ... 4 A
operating voltage	
<ul style="list-style-type: none"> <li>rated value</li> <li>at AC-3 rated value maximum</li> </ul>	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	3.6 A
operating power at AC-3	
<ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul>	1 500 W

• at 500 V rated value	2 200 W
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	110 V
• at 50 Hz rated value	88 ... 121 V
• at 60 Hz rated value	120 V
• at 60 Hz rated value	96 ... 132 V
<b>apparent holding power of magnet coil at AC</b>	7.2 VA
<b>inductive power factor with the holding power of the coil</b>	0.28
<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>	52 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
• at 480 V rated value	3.95 A
• at 600 V rated value	4 A
<b>yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	0.13 hp
— at 230 V rated value	0.33 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.75 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	2 hp
— at 575/600 V rated value	3 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 (I<sub>q</sub>)</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>	155 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 stranded</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>

Safety related data	
proportion of dangerous failures with high demand rate according to SN 31920	73 %
<b>B10 value with high demand rate according to SN 31920</b>	1 000 000
Electrical Safety	
<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

#### Approvals Certificates

Environment	General Product Approval	For use in hazard-ous locations	other
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[Environmental Con-  
firmations](#)



other

[Confirmation](#)

#### 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=3RA2220-1ED23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1ED23-0AK6>

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

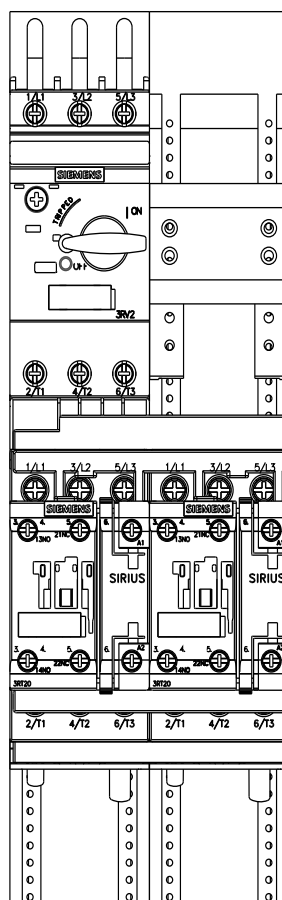
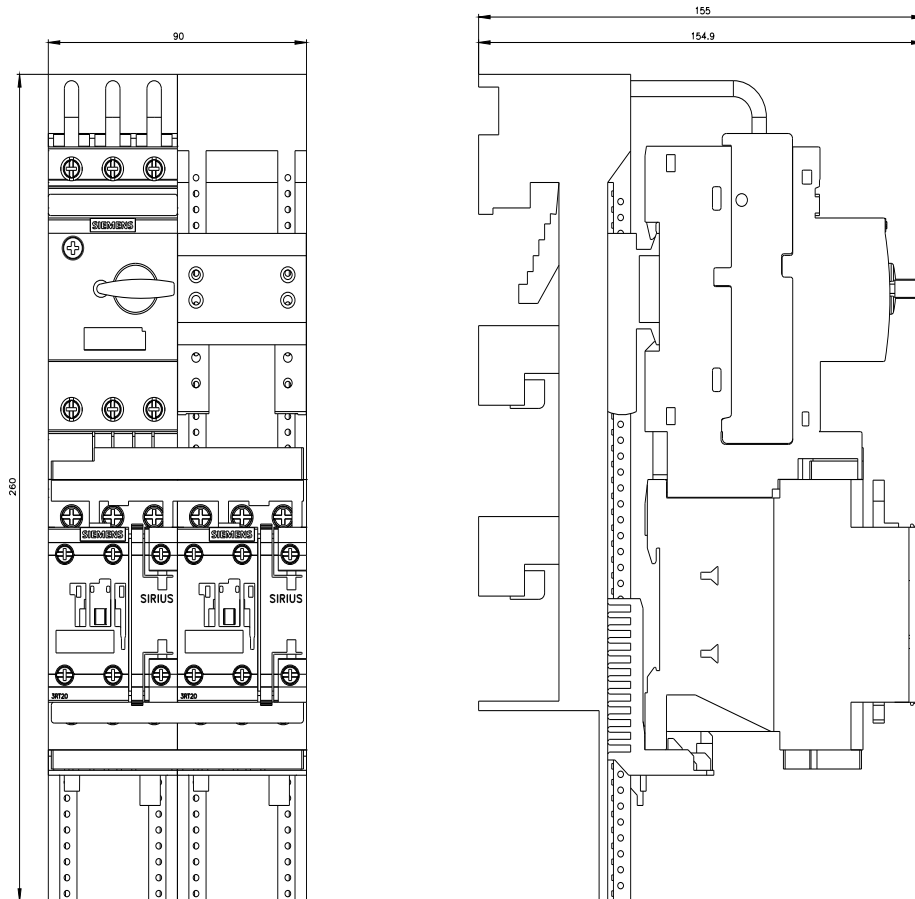
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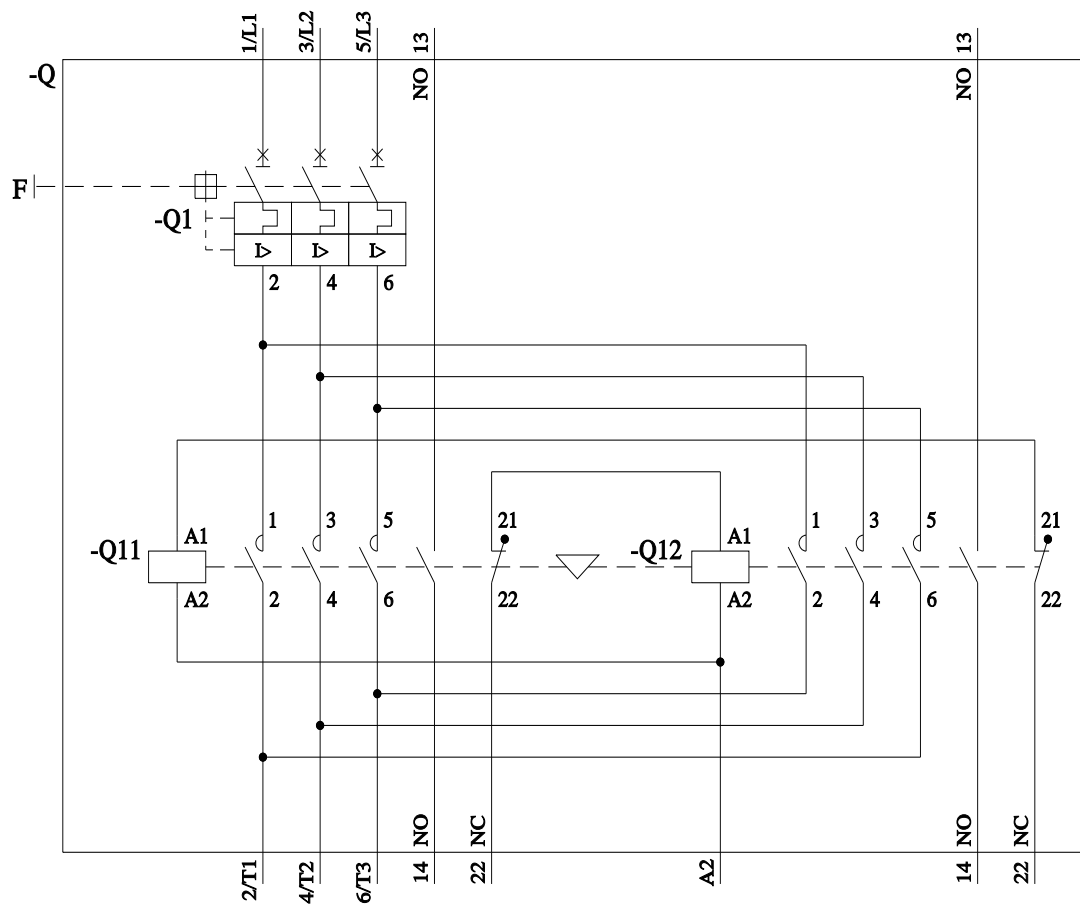
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1ED23-0AK6>

Characteristic curves

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





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