



Load feeder fuseless, Direct-on-line starting 400 V AC, Size S0 13...20 A 24 V DC screw terminal for installation on standard mounting rail (also fulfills type of coordination 1) Type of coordination 2, I<sub>q</sub> = 150 kA 1 NO+1 NC (contactor) with diode combination plugged in at the front

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Direct (on-line) starter
<b>design of the product</b>	for DIN-rail or screw mounting
<b>product type designation</b>	3RA21
<b>manufacturer's article number</b>	
• of the supplied contactor	<a href="#">3RT2027-1FB40</a>
• of the supplied circuit-breakers	<a href="#">3RV2021-4BA10</a>
• of the supplied link module	<a href="#">3RA2921-1BA00</a>
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S0
<b>size of load feeder</b>	S0
<b>power loss [W] for rated value of the current</b>	
• at AC in hot operating state per pole	5.8 W
• without load current share typical	5.9 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<b>degree of protection NEMA rating</b>	other
<b>shock resistance according to IEC 60068-2-27</b>	6g / 11 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
<b>type of coordination</b>	2
<b>reference code according to IEC 81346-2:2019</b>	Q
<b>SVHC substance name</b>	Lead - 7439-92-1
<b>Weight</b>	1.037 kg
<b>Ambient conditions</b>	
<b>ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
<b>temperature compensation</b>	-20 ... +60 °C
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>design of the switching contact</b>	electromechanical
<b>adjustable current response value current of the current-dependent overload release</b>	13 ... 20 A
<b>operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz

<b>operational current</b>	
<ul style="list-style-type: none"> <li>at AC-3 at 400 V rated value</li> <li>at AC-3e at 400 V rated value</li> </ul>	<p>20 A</p> <p>20 A</p>
<b>operating power</b>	
<ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul> </li> <li>at AC-3e <ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul> </li> </ul>	<p>7 500 W</p> <p>7 500 W</p>
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
<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>product extension auxiliary switch</b>	Yes
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	260 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
<ul style="list-style-type: none"> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul>	<p>20 A</p> <p>20 A</p>
<b>yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>for single-phase AC motor <ul style="list-style-type: none"> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> </ul> </li> <li>for 3-phase AC motor <ul style="list-style-type: none"> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 460/480 V rated value</li> </ul> </li> </ul>	<p>1.5 hp</p> <p>3 hp</p> <p>7.5 hp</p> <p>7.5 hp</p> <p>15 hp</p>
<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>	
<ul style="list-style-type: none"> <li>at 400 V according to IEC 60947-4-1 rated value</li> </ul>	150 000 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	vertical
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail
<b>height</b>	193 mm
<b>width</b>	45 mm
<b>depth</b>	107 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>for grounded parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> </li> <li>for live parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> </ul>	<p>20 mm</p> <p>0 mm</p> <p>50 mm</p> <p>20 mm</p> <p>10 mm</p> <p>20 mm</p> <p>0 mm</p> <p>50 mm</p> <p>10 mm</p> <p>20 mm</p>
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul>	<p>screw-type terminals</p> <p>screw-type terminals</p>
<b>Safety related data</b>	
product function suitable for safety function	Yes

**Electrical Safety**

**touch protection on the front according to IEC 60529**      finger-safe, for vertical contact from the front

**Communication/ Protocol**

<b>protocol is supported</b>	
• PROFINET IO protocol	No
• PROFIsafe protocol	No
protocol is supported AS-Interface protocol	No

**Approvals Certificates**

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Test Certificates</b>
    		<a href="#">Type Test Certificates/Test Report</a>

**Test Certificates**      **Maritime application**

<a href="#">Special Test Certificate</a>					
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**Maritime application**      **other**      **Railway**      **Dangerous goods**

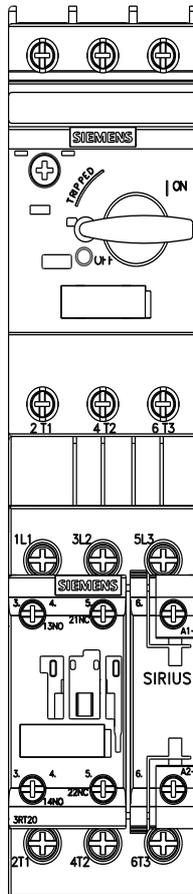
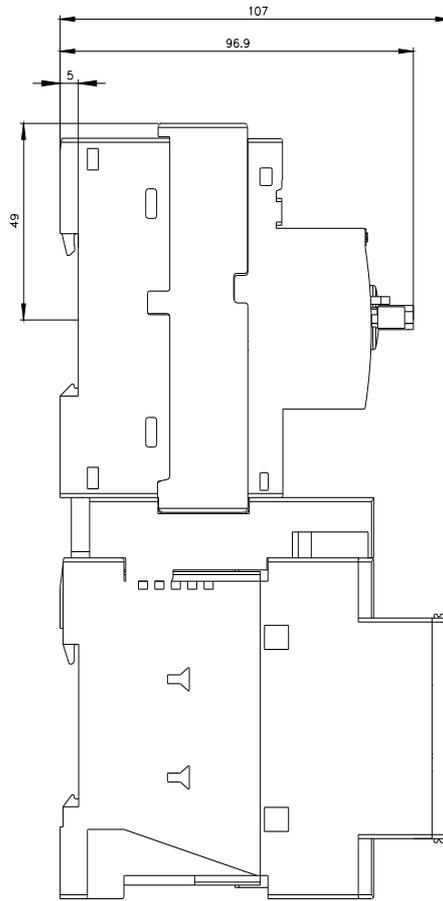
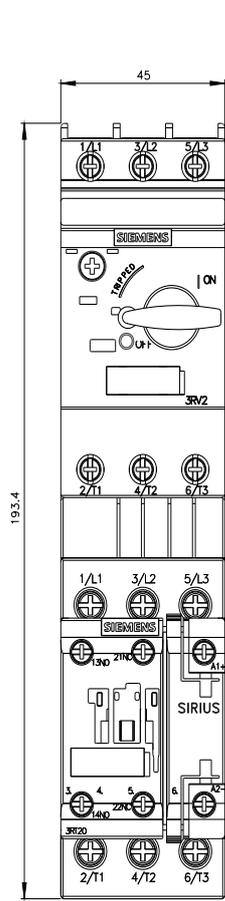
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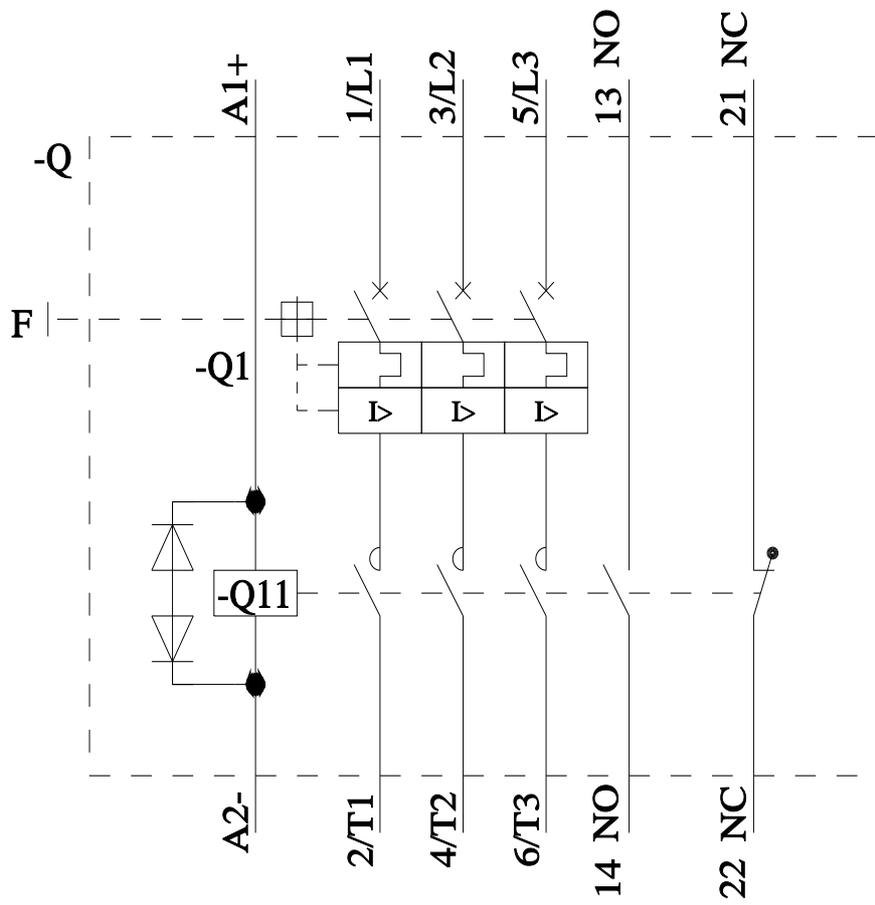
**Environment**

[Environmental Conformations](#)

**Further information**

**Information on the packaging**  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>  
**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=3RA2120-4BA27-0FB4>  
**Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-4BA27-0FB4>  
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4BA27-0FB4>  
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-4BA27-0FB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-4BA27-0FB4&lang=en)  
**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-4BA27-0FB4/char>  
**Further characteristics (e.g. electrical endurance, switching frequency)**  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-4BA27-0FB4&objecttype=14&gridview=view1>





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