



Load feeder fuseless, Reversing duty 400 V AC, Size S0 9.00...12.5 A 230 V AC  
Spring-type terminal for installation on standard mounting rail with standard mounting rail adapter (also fulfills type of coordination 1) Type of coordination 2, I<sub>q</sub> = 150 kA 1 NO+1 NC (contactor)

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Reversing starter
<b>design of the product</b>	for DIN-rail or screw mounting
<b>product type designation</b>	3RA22
<b>manufacturer's article number</b>	
<ul style="list-style-type: none"> <li>• of the supplied contactor</li> <li>• of the supplied circuit-breakers</li> <li>• of the supplied RH assembly kit</li> <li>• of the supplied link module</li> <li>• of the supplied DIN-rail adapter</li> </ul>	<a href="#">3RT2024-2AP00</a> <a href="#">3RV2021-1KA20</a> <a href="#">3RA2923-1BB2</a> <a href="#">3RA2921-2AA00</a> <a href="#">3RA2922-1AA00</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>	
<ul style="list-style-type: none"> <li>• at AC in hot operating state per pole</li> <li>• without load current share typical</li> </ul>	3.4 W 7.6 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>Substance Prohibition (Date)</b>	03/01/2017
<b>SVHC substance name</b>	Lead - 7439-92-1
<b>Weight</b>	2.066 kg
<b>Ambient conditions</b>	
<b>ambient temperature</b>	
<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 -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>	9 ... 12.5 A
<b>operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	690 V

<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at AC-3e rated value maximum</li> </ul>	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> </ul>	12 A
<ul style="list-style-type: none"> <li>• at AC-3e at 400 V rated value</li> </ul>	12 A
<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> </ul>	5 500 W
<ul style="list-style-type: none"> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	5 500 W
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	230 V
<b>apparent holding power of magnet coil at AC</b>	7.6 VA
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	7.6 VA
<b>inductive power factor with the holding power of the coil</b>	0.25
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.25
<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)
<b>response value current of instantaneous short-circuit trip unit</b>	163 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> </ul>	11 A
<ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>	10 A
<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> </ul> </li> </ul>	0.75 hp
<ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul>	2 hp
<ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> </ul> </li> </ul>	3 hp
<ul style="list-style-type: none"> <li>— at 220/230 V rated value</li> </ul>	3 hp
<ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> </ul>	7.5 hp
<ul style="list-style-type: none"> <li>— at 575/600 V rated value</li> </ul>	10 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>	
<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>	On adapter for screw and snap-on mounting on 35 mm DIN rail
<b>height</b>	269 mm
<b>width</b>	90 mm
<b>depth</b>	130 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>	32 mm
<ul style="list-style-type: none"> <li>— backwards</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>— upwards</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>— at the side</li> </ul>	10 mm
<ul style="list-style-type: none"> <li>— downwards</li> </ul>	10 mm
<ul style="list-style-type: none"> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> </ul> </li> </ul>	32 mm
<ul style="list-style-type: none"> <li>— backwards</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>— upwards</li> </ul>	50 mm

— downwards	10 mm
— at the side	10 mm

### Connections/ Terminals

<b>type of electrical connection</b>	
• for main current circuit	spring-loaded terminals
• for auxiliary and control circuit	spring-loaded terminals

### Safety related data

product function suitable for safety function	Yes
Electrical Safety	
<b>touch protection on the front according to IEC 60529</b>	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

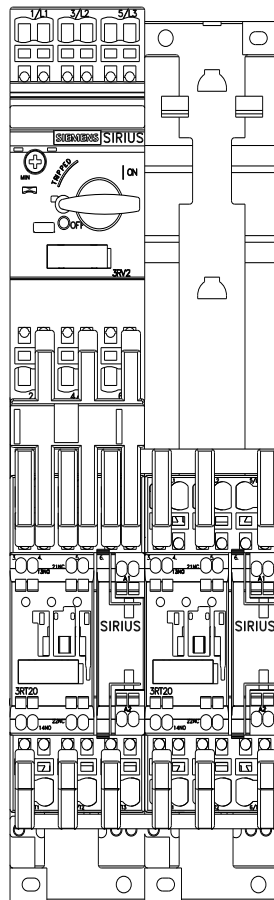
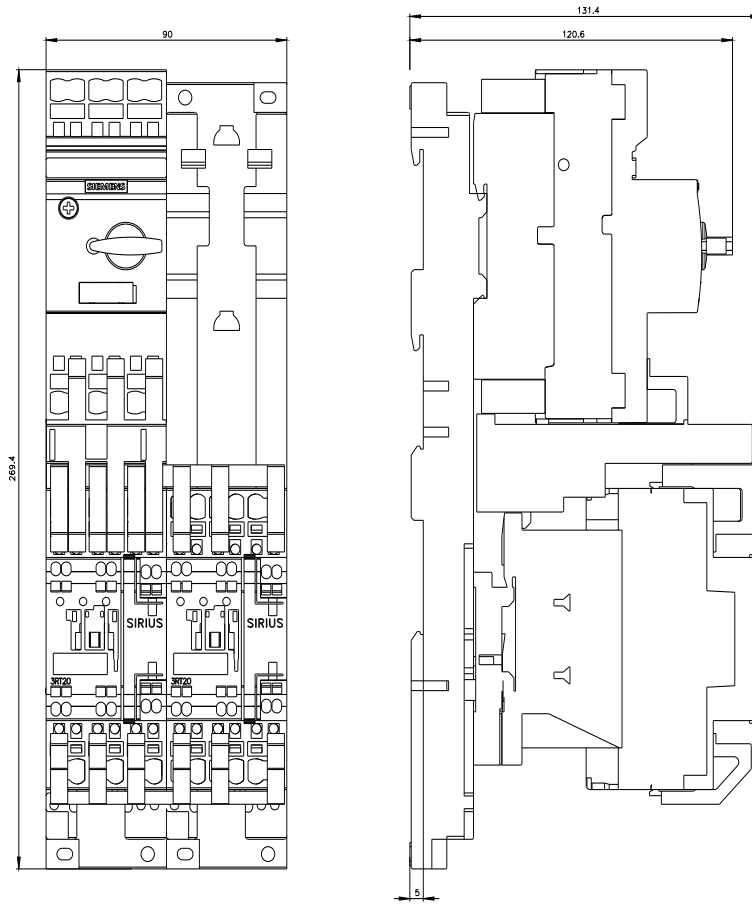
General Product Approval	For use in hazardous locations	Test Certificates
    		<a href="#">Special Test Certificate</a>

Test Certificates	Maritime application
<a href="#">Type Test Certificates/Test Report</a>	    

Maritime application	other	Railway	Environment
 		<a href="#">Confirmation</a>	<a href="#">Special Test Certificate</a> <a href="#">Environmental Confirmations</a>

### 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=3RA2220-1KF24-0AP0>  
**Cax online generator**  
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1KF24-0AP0>  
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KF24-0AP0>  
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2220-1KF24-0AP0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1KF24-0AP0&lang=en)  
**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KF24-0AP0/char>  
**Further characteristics (e.g. electrical endurance, switching frequency)**  
<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1KF24-0AP0&objecttype=14&gridview=view1>





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