



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 16...22A, N-RELEASE 286A, SCREW CONNECTION, STANDARD SW. CAPACITY,

product brand name	SIRIUS
Product designation	3RV2 circuit breaker
<b>General technical data:</b>	
Active power loss total typical	8 W
Insulation voltage	690 V
• with degree of pollution 3 Rated value	
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of the auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Temperature compensation	-20 ... +60 °C
Size of contactor can be combined company-specific	S00
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Type of protection	Increased safety
Equipment marking	
• acc. to DIN EN 81346-2	Q
<b>Main circuit:</b>	
Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	16 ... 22 A
Operating voltage	

<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
<b>Operating frequency Rated value</b>	50 ... 60 Hz
<b>Operating current Rated value</b>	22 A
<b>Operating current</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>	22 A
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	15 1/h

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0
<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0
<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0
<b>Product expansion Auxiliary switch</b>	Yes

#### Protective and monitoring functions:

<b>Trip class</b>	CLASS 10
<b>Design of the overload circuit breaker</b>	thermal
<b>Operational short-circuit current breaking capacity (Ics) with AC</b>	
<ul style="list-style-type: none"> <li>• at 240 V Rated value</li> <li>• at 400 V Rated value</li> <li>• at 500 V Rated value</li> <li>• at 690 V Rated value</li> </ul>	100 kA 25 kA 5 kA 2 kA
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• with AC at 240 V Rated value</li> <li>• with AC at 400 V Rated value</li> <li>• with AC at 500 V Rated value</li> <li>• with AC at 690 V Rated value</li> </ul>	100 kA 55 kA 10 kA 4 kA
<b>Breaking capacity short-circuit current (Icn)</b>	
<ul style="list-style-type: none"> <li>• with 1 current path for DC at 150 V Rated value</li> <li>• with 2 current paths in series for DC at 300 V Rated value</li> <li>• with 3 current paths in series for DC at 450 V Rated value</li> </ul>	10 kA 10 kA 10 kA
<b>Response value current of the instantaneous short-circuit release</b>	286 A

#### UL/CSA ratings:

<b>Full-load current (FLA) for three-phase AC motor</b>	
<ul style="list-style-type: none"> <li>• at 480 V Rated value</li> </ul>	22 A

- at 600 V Rated value

22 A

### Short-circuit:

<b>Design of the short-circuit trip</b>	magnetic
<b>Design of the fuse link for IT network for short-circuit protection of the main circuit</b>	
<ul style="list-style-type: none"> <li>• at 400 V</li> </ul>	gL/gG 63 A
<ul style="list-style-type: none"> <li>• at 500 V</li> </ul>	gL/gG 50 A
<ul style="list-style-type: none"> <li>• at 690 V</li> </ul>	gL/gG 50 A

### Installation/ mounting/ dimensions:

<b>mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>Height</b>	97 mm
<b>Width</b>	45 mm
<b>Depth</b>	96 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting           <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>	0 mm 0 mm 50 mm 50 mm 0 mm
<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> </ul>	0 mm 0 mm 50 mm 30 mm 50 mm
<ul style="list-style-type: none"> <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>	0 mm 0 mm 50 mm 50 mm 30 mm

### Connections/ Terminals:

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	No
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	screw-type terminals

<b>Arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>Type of connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> </ul>	2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 10 mm <sup>2</sup> ) 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> 2x (16 ... 12), 2x (14 ... 8)
<b>Design of screwdriver shaft</b>	Diameter 5 to 6 mm
<b>Design of the thread of the connection screw</b>	
<ul style="list-style-type: none"> <li>• for main contacts</li> </ul>	M4

#### Safety related data:

<b>B10 value with high demand rate acc. to SN 31920</b>	50 000
<b>Proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	40 % 40 %
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	10 y
<b>Protection against electrical shock</b>	finger-safe

#### Mechanical data:

<b>Size of the circuit-breaker</b>	S0
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<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>Relative humidity during operation</b>	10 ... 95 %

#### Display:

<b>Display version</b>	
<ul style="list-style-type: none"> <li>• for switching status</li> </ul>	Handle

#### Certificates/ approvals:

General Product Approval	For use in hazardous locations
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[KTL](#)



Declaration of Conformity	Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Declaration of the Compliance with the order](#)



### Shipping Approval



### other

[Confirmation](#)

[Environmental Confirmations](#)



[other](#)

### Further information

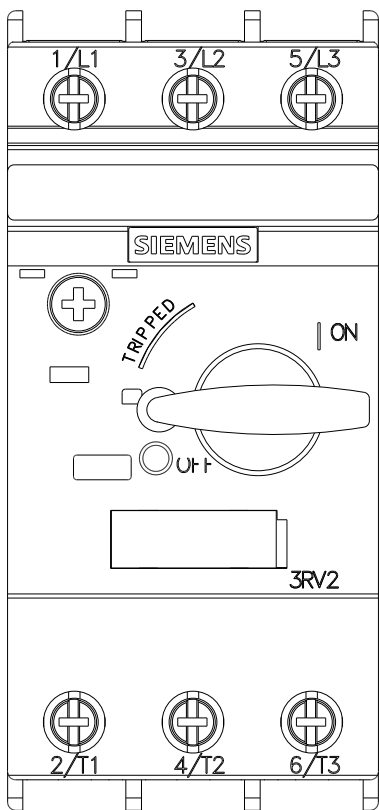
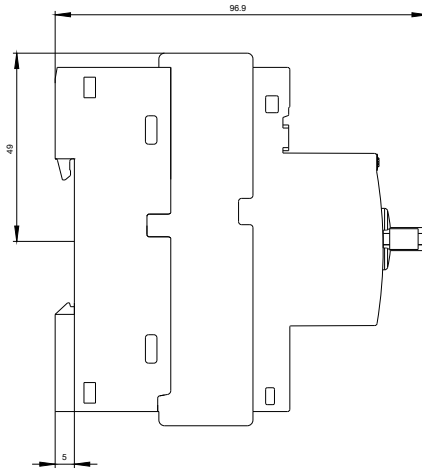
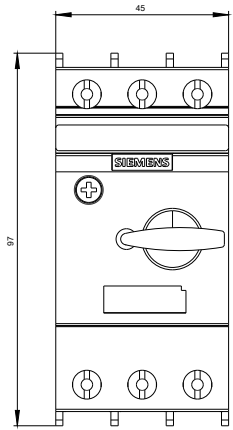
**Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>

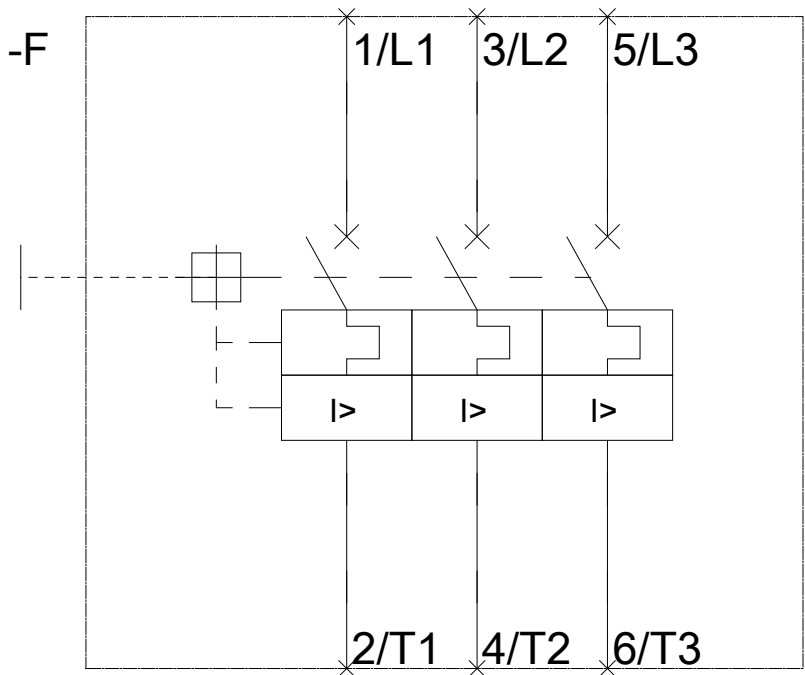
**Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrymall>

**Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20214CA10>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RV20214CA10>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV20214CA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20214CA10&lang=en)





last modified:

27.04.2015