



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER  
 PROT. A-RELEASE 0.7...1 A, N-RELEASE 21A,  
 SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name		SIRIUS
Product designation		3RV2 circuit breaker

General technical data:		
<b>Active power loss total typical</b>	W	6
<b>Insulation voltage</b>		
• with degree of pollution 3 Rated value	V	690
<b>Shock resistance</b>		
• acc. to IEC 60068-2-27		25g / 11 ms
<b>Surge voltage resistance Rated value</b>	kV	6
<b>Mechanical service life (switching cycles)</b>		
• of the main contacts typical		100 000
• of the auxiliary contacts typical		100 000
<b>Electrical endurance (switching cycles)</b>		
• typical		100 000
<b>Temperature compensation</b>	°C	-20 ... +60
<b>Protection class IP</b>		
• on the front		IP20
• of the terminal		IP20
<b>Equipment marking</b>		
• acc. to DIN EN 81346-2		Q

Main circuit:		
<b>Number of poles for main current circuit</b>		3
<b>Adjustable response value current of the current-dependent overload release</b>	A	0.7 ... 1
<b>Operating voltage</b>		

• Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
<b>Operating current Rated value</b>	A	1
<b>Operating current</b>		
• at AC-3		
— at 400 V Rated value	A	1
<b>Operating power</b>		
• at AC-3		
— at 230 V Rated value	W	180
— at 400 V Rated value	W	250
— at 500 V Rated value	W	370
— at 690 V Rated value	W	550
<b>Operating frequency</b>		
• at AC-3 maximum	1/h	15

#### Auxiliary circuit:

<b>Number of NC contacts</b>		
• for auxiliary contacts		0
<b>Number of NO contacts</b>		
• for auxiliary contacts		0
<b>Number of CO contacts</b>		
• for auxiliary contacts		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>		
• at 240 V Rated value	kA	100
• at 400 V Rated value	kA	100
• at 500 V Rated value	kA	100
• at 690 V Rated value	kA	100
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• with AC at 240 V Rated value	kA	100
• with AC at 400 V Rated value	kA	100
• with AC at 500 V Rated value	kA	100
• with AC at 690 V Rated value	kA	100
<b>Breaking capacity short-circuit current (Icn)</b>		
• with 1 current path for DC at 150 V Rated value	kA	10
• with 2 current paths in series for DC at 300 V Rated value	kA	10

<ul style="list-style-type: none"> <li>with 3 current paths in series for DC at 450 V Rated value</li> </ul>	kA	10
<b>Response value current of the instantaneous short-circuit release</b>	A	21

#### 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>	A	1
<ul style="list-style-type: none"> <li>at 600 V Rated value</li> </ul>	A	1
<b>yielded mechanical performance [hp]</b>		
<ul style="list-style-type: none"> <li>for three-phase AC motor at 575/600 V Rated value</li> </ul>	metric hp	0.5

#### Short-circuit:

<b>Product function Short circuit protection</b>		Yes
<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 500 V</li> </ul>		gL/gG 10 A
<ul style="list-style-type: none"> <li>at 690 V</li> </ul>		gL/gG 10 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>	mm	97
<b>Width</b>	mm	45
<b>Depth</b>	mm	96
<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> <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> </ul> </li> </ul>	mm	0 0 50 50 0  0 0 50 30 50  0 0 50

- downwards
- at the side

mm	50
mm	30

#### Connections/ Terminals:

<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>Product function</b>		
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>		No
<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 (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (18 ... 14), 2x 12
<b>Tightening torque</b>		
<ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul>	N·m	0.8 ... 1.2
<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>		M3

#### 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>Failure rate [FIT] with low demand rate acc. to SN 31920</b>	FIT	50
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	y	10
<b>Protection against electrical shock</b>		finger-safe

#### Mechanical data:

<b>Size of the circuit-breaker</b>		S00
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Ambient temperature</b>		
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	°C	-20 ... +60 -50 ... +80 -50 ... +80
<b>Relative humidity during operation</b>	%	10 ... 95

#### Display:

## Display version

- for switching status

Handle

## Certificates/ approvals:

### General Product Approval



CCC



CSA



EG-Konf.

### Declaration of Conformity

### Test Certificates

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

### Test Certificates

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



ABS



BUREAU VERITAS



DNV



GL



LRS

### Shipping Approval

### Shipping Approval

### other



PRS



RINA



RMRS

[Confirmation](#)

[Environmental Confirmations](#)



VDE

### other

[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

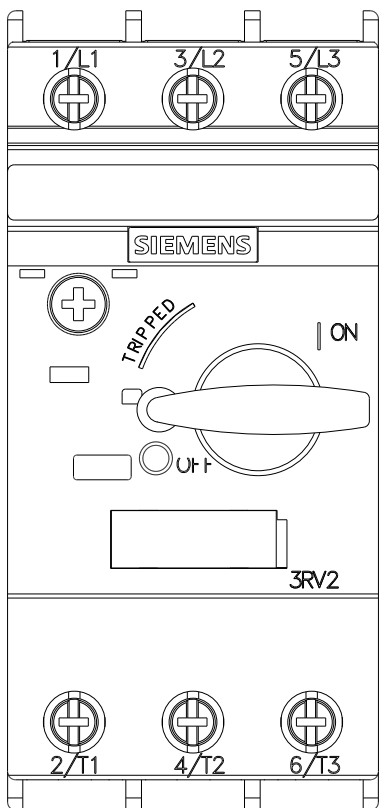
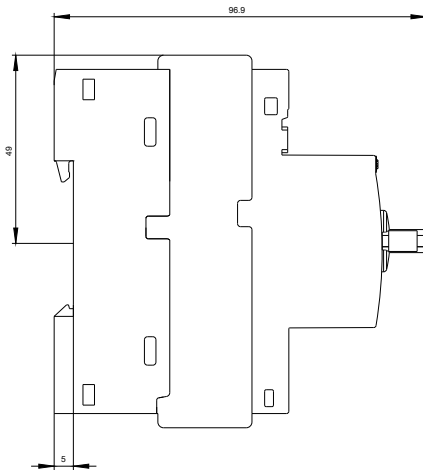
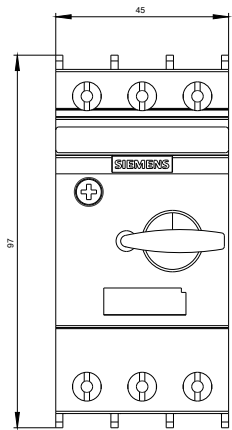
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV24110JA10>

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

<http://support.automation.siemens.com/WW/view/en/3RV24110JA10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV24110JA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV24110JA10&lang=en)





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