



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-RELEASE 21A, SCREW CONNECTION, STANDARD SW. CAPACITY, W. TRANSVERSE AUX. SWITCH 1NO+1NC

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

**General technical data:**

Active power loss total typical	6 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	S0
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

**Main circuit:**

Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	1.1 ... 1.6 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>	1.6 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V Rated value</li> </ul>	1.6 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>	1
<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	1
<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
<b>Design of the auxiliary switch</b>	transverse
<b>Operating current of the auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 120 V</li> <li>• at 125 V</li> <li>• at 230 V</li> </ul>	2 A 0.5 A 0.5 A 0.5 A
<b>Operating current of the auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 60 V</li> </ul>	1 A 0.15 A

#### 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 100 kA 100 kA 100 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 100 kA 100 kA 100 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> </ul>	10 kA
<ul style="list-style-type: none"> <li>• with 2 current paths in series for DC at 300 V Rated value</li> </ul>	10 kA
<ul style="list-style-type: none"> <li>• with 3 current paths in series for DC at 450 V Rated value</li> </ul>	10 kA
<b>Response value current of the instantaneous short-circuit release</b>	21 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>	1.6 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	1.6 A
<b>Contact rating of the auxiliary contacts acc. to UL</b>	C300 / R300

#### Short-circuit:

<b>Design of the short-circuit trip</b>	magnetic
<b>Design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A)
<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 20 A
<ul style="list-style-type: none"> <li>• at 690 V</li> </ul>	gL/gG 16 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> <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</li> </ul>	0 mm 0 mm 50 mm 50 mm 0 mm  0 mm 0 mm 50 mm 30 mm 50 mm

— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	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> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals 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> <li>for auxiliary 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 auxiliary 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 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) 2x (20 ... 16), 2x (18 ... 14)
<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> <li>of the auxiliary and control contacts</li> </ul>	M3 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>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>	S00
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	

- during operation
- during storage
- during transport

-20 ... +60 °C

-50 ... +80 °C

-50 ... +80 °C

Relative humidity during operation

10 ... 95 %

#### Display:

Display version

- for switching status

Handle

#### Certificates/ approvals:

General Product Approval

For use in hazardous locations



CCC



CSA



UL

[KTL](#)



ATEX

Declaration of Conformity

Test Certificates

Shipping Approval



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

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



ABS



BUREAU VERITAS

#### Shipping Approval



DNV



GL



LRS



PRS



RINA



RMRS

#### other

[Environmental Confirmations](#)

[Confirmation](#)



VDE

[other](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

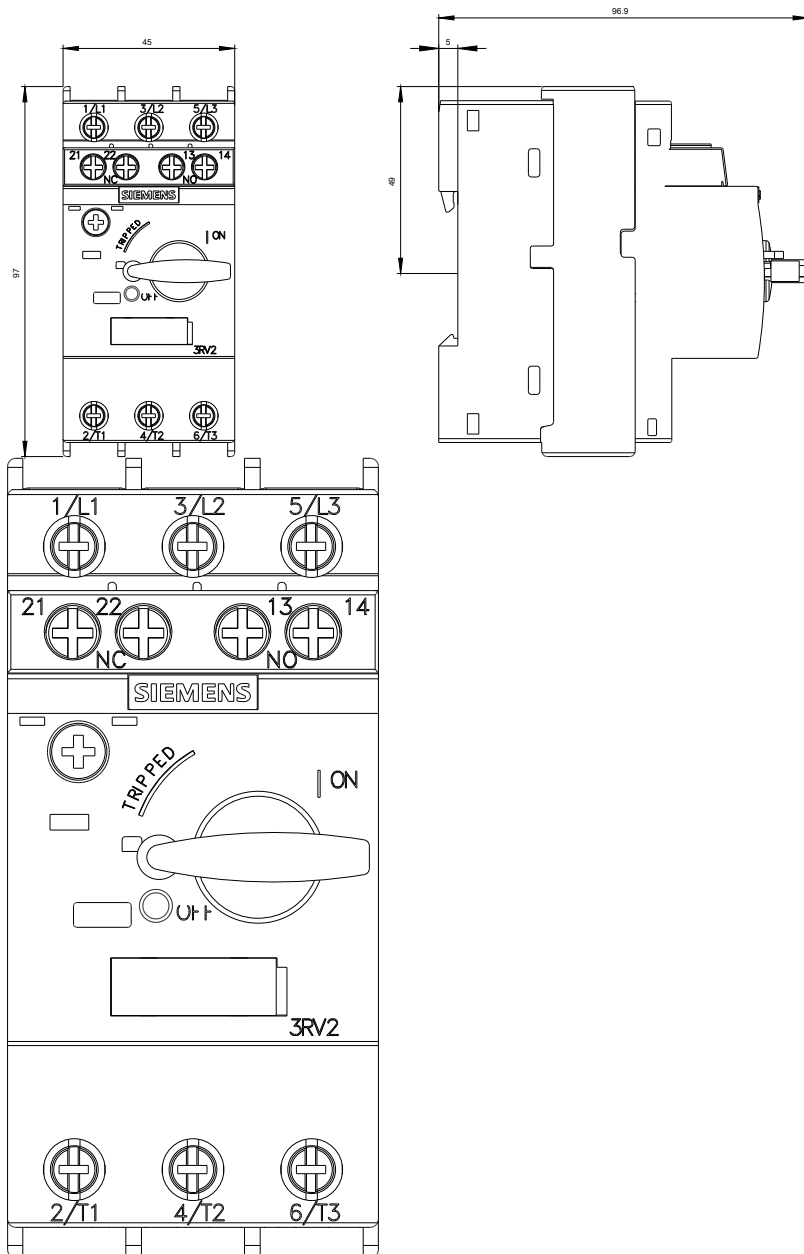
<http://www.siemens.com/industrial-controls/catalogs>

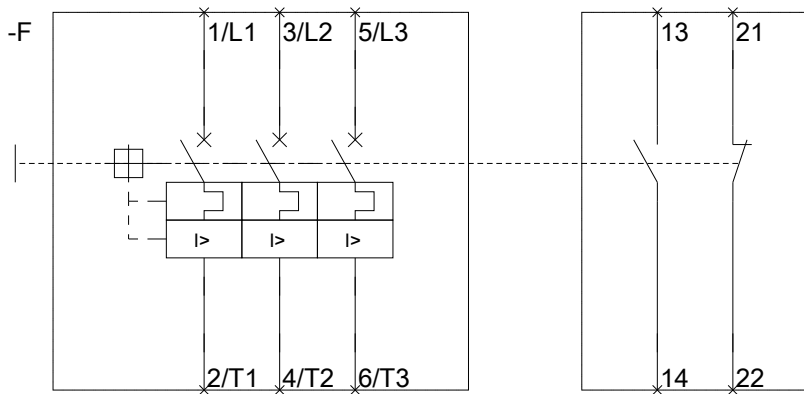
Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20111AA15>





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