



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.9...1.25A, N-REL. 16A SCREW CONNECTION, STANDARD SW. CAPACITY

Figure similar

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>	V	690
<ul style="list-style-type: none"> <li>with degree of pollution 3 Rated value</li> </ul>		
<b>Shock resistance</b>		25g / 11 ms
<ul style="list-style-type: none"> <li>acc. to IEC 60068-2-27</li> </ul>		
<b>Surge voltage resistance Rated value</b>	kV	6
<b>Mechanical service life (switching cycles)</b>		
<ul style="list-style-type: none"> <li>of the main contacts typical</li> </ul>		100 000
<ul style="list-style-type: none"> <li>of the auxiliary contacts typical</li> </ul>		100 000
<b>Electrical endurance (switching cycles)</b>		
<ul style="list-style-type: none"> <li>typical</li> </ul>		100 000
<b>Temperature compensation</b>	°C	-20 ... +60
<b>Size of contactor can be combined company-specific</b>		S2
<b>Protection class IP</b>		
<ul style="list-style-type: none"> <li>on the front</li> </ul>		IP20
<ul style="list-style-type: none"> <li>of the terminal</li> </ul>		IP20
<b>Type of protection</b>		Increased safety
<b>Reference code</b>		
<ul style="list-style-type: none"> <li>acc. to DIN EN 81346-2</li> </ul>		Q

### Main circuit:

<b>Number of poles for main current circuit</b>	3
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<b>Adjustable response value current of the current-dependent overload release</b>	A	0.9 ... 1.25
<b>Operating voltage</b>		
• Rated value	V	690
• at AC-3 Rated value maximum	V	690
<b>Operating frequency</b>		
• Rated value	Hz	50 ... 60
<b>Operating current Rated value</b>	A	1.25
<b>Operating current</b>		
• at AC-3		
— at 400 V Rated value	A	1.25
<b>Operating power</b>		
• at AC-3		
— at 230 V Rated value	W	180
— at 400 V Rated value	W	370
— at 500 V Rated value	W	370
— at 690 V Rated value	W	750
<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>		

<ul style="list-style-type: none"> <li>• with 1 current path for DC at 150 V Rated value</li> </ul>	kA	10
<ul style="list-style-type: none"> <li>• with 2 current paths in series for DC at 300 V Rated value</li> </ul>	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	16

#### 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	1.25
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	A	1.25
<b>yielded mechanical performance [hp]</b>		
<ul style="list-style-type: none"> <li>• for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	0.5
<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

#### 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>Spacing required</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> </ul> </li> </ul>	mm	0 0 50 50 0  0 0 50 30 50  0 0

— upwards	mm	50
— downwards	mm	50
— at the side	mm	30

#### Connections/ Terminals:

<b>Design of the electrical connection</b>		screw-type terminals
• for main current circuit		
<b>Arrangement of electrical connectors for main current circuit</b>		Top and bottom
<b>Product function</b>		No
• removable terminal for auxiliary and control circuit		
<b>Type of connectable conductor cross-section</b>		
• for main contacts		
— single or multi-stranded		2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 10 mm <sup>2</sup> )
— finely stranded with core end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
• for AWG conductors for main contacts		2x (16 ... 12), 2x (14 ... 8)
<b>Tightening torque</b>		
• for main contacts with screw-type terminals	N·m	2 ... 2.5
<b>Design of screwdriver shaft</b>		Diameter 5 to 6 mm
<b>Design of the thread of the connection screw</b>		
• for main contacts		M4

#### Safety related data:

<b>B10 value with high demand rate acc. to SN 31920</b>		50 000
<b>Proportion of dangerous failures</b>		
• with low demand rate acc. to SN 31920	%	40
• with high demand rate acc. to SN 31920	%	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>		S0
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Ambient temperature</b>		
• during operation	°C	-20 ... +60
• during storage	°C	-50 ... +80
• during transport	°C	-50 ... +80
<b>Relative humidity during operation</b>	%	10 ... 95

## Display:

### Display version

- for switching status

Handle

## Certificates/ approvals:

General Product Approval	Declaration of Conformity	Test Certificates
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CCC



CSA



UL



EG-Konf.

[Special Test Certificate](#)

Test Certificates	Shipping Approval
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[Declaration of the Compliance with the order](#)

[Type Test Certificates/Test Report](#)



ABS



BUREAU VERITAS



DNV



GL

Shipping Approval	other
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LRS



PRS



RINA



RMRS

[Confirmation](#)

[Environmental Confirmations](#)

other
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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=3RV20210KA10>

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

<http://support.automation.siemens.com/WW/view/en/3RV20210KA10/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=3RV20210KA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20210KA10&lang=en)

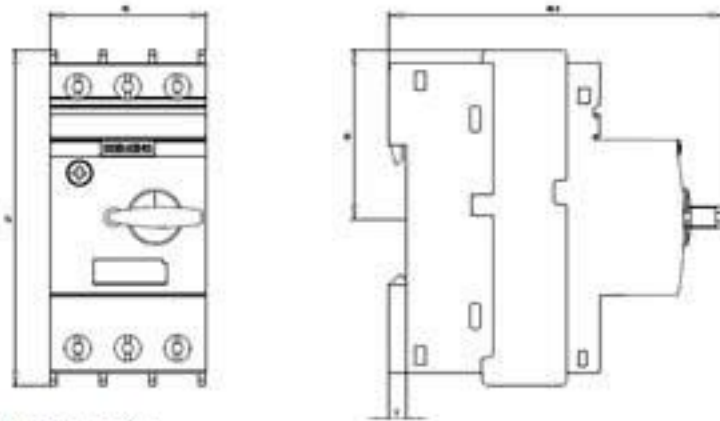


Figure similar

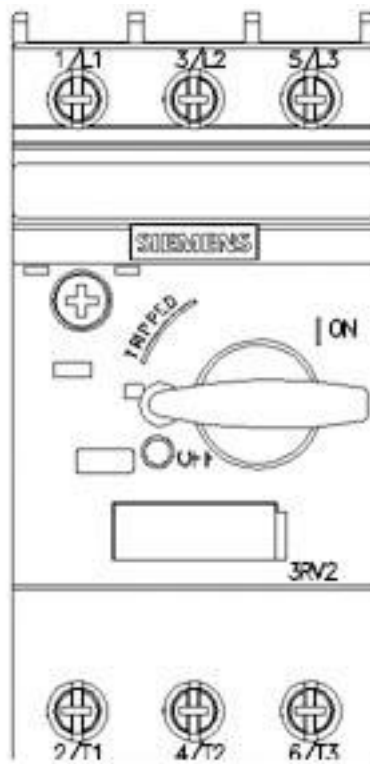


Figure similar

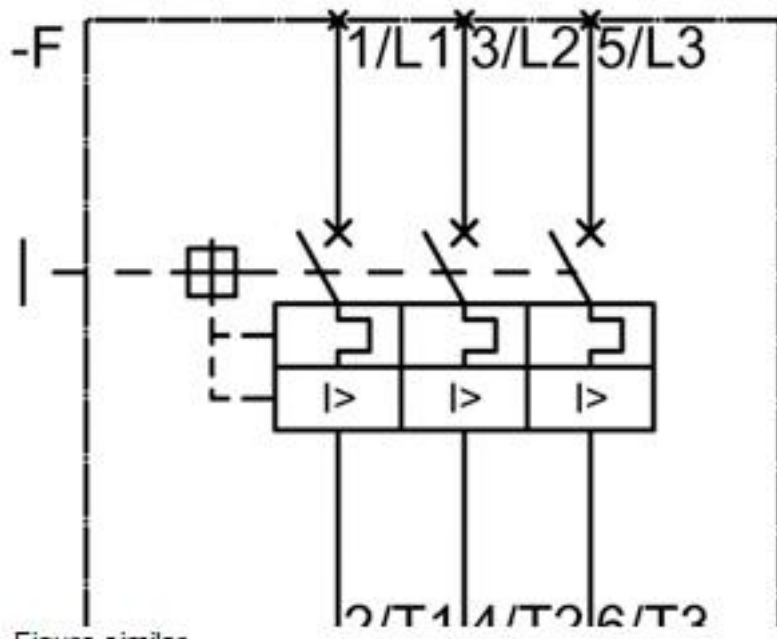


Figure similar

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