

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.9...1.25A, N-RELEASE16A, SCREW CONNECTION, STANDARD SW. CAPACITY



product brandname	SIRIUS
Product designation	Circuit breaker
Design of the product	For motor protection
Product type designation	3RV2

General technical data	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00, S0
Product extension	
• Auxiliary switch	Yes
Power loss [W] total typical	6 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V
Protection class IP	

<ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>	IP20 IP20
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of the main contacts typical</li> <li>• of auxiliary contacts typical</li> </ul>	100 000 100 000
<b>Electrical endurance (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	100 000
<b>Type of protection</b>	Increased safety
<b>Protection against electrical shock</b>	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q

#### Ambient conditions

<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

#### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Adjustable pick-up value current of the current-dependent overload release</b>	0.9 ... 1.25 A
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> </ul>	690 V 690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating current rated value</b>	1.25 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>	1.25 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 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> </li> </ul>	180 W 370 W 370 W 750 W
<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>Protective and monitoring functions</b>	
<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Ground fault detection</li> </ul>	No
<ul style="list-style-type: none"> <li>• Phase failure detection</li> </ul>	Yes
<b>Trip class</b>	CLASS 10
<b>Design of the overload release</b>	thermal
<b>Operational short-circuit current breaking capacity (Ics) at AC</b>	
<ul style="list-style-type: none"> <li>• at 240 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at 500 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>	100 kA
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 400 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 500 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 690 V rated value</li> </ul>	100 kA
<b>Breaking capacity short-circuit current (Icn)</b>	
<ul style="list-style-type: none"> <li>• at 1 current path at DC at 150 V rated value</li> </ul>	10 kA
<ul style="list-style-type: none"> <li>• with 2 current paths in series at DC at 300 V rated value</li> </ul>	10 kA
<ul style="list-style-type: none"> <li>• with 3 current paths in series at DC at 450 V rated value</li> </ul>	10 kA
<b>UL/CSA ratings</b>	
<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>	1.25 A
<ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>	1.25 A
<b>Yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>• for three-phase AC motor <ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> </ul> </li> </ul>	0.5 hp
<ul style="list-style-type: none"> <li>— at 575/600 V rated value</li> </ul>	0.5 hp
<b>Short-circuit protection</b>	
<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 16 A
<ul style="list-style-type: none"> <li>• at 690 V</li> </ul>	gL/gG 16 A
<b>Installation/ mounting/ dimensions</b>	

<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 <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>	<ul style="list-style-type: none"> <li>0 mm</li> <li>0 mm</li> <li>50 mm</li> <li>50 mm</li> <li>0 mm</li> <li>0 mm</li> <li>0 mm</li> <li>50 mm</li> <li>30 mm</li> <li>50 mm</li> <li>0 mm</li> <li>0 mm</li> <li>50 mm</li> <li>50 mm</li> <li>30 mm</li> </ul>

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-sections</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>• at AWG conductors for main contacts</li> </ul>	<ul style="list-style-type: none"> <li>2x (0,75 ... 2,5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup></li> <li>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> <li>2x (18 ... 14), 2x 12</li> </ul>
<b>Tightening torque</b>	
<ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul>	0.8 ... 1.2 N·m
<b>Design of screwdriver shaft</b>	Diameter 5 to 6 mm

### Safety related data

<b>B10 value</b>	
<ul style="list-style-type: none"> <li>with high demand rate acc. to SN 31920</li> </ul>	5 000
<b>Proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %
<ul style="list-style-type: none"> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
<b>Failure rate [FIT]</b>	
<ul style="list-style-type: none"> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	10 y
<b>Display version</b>	
<ul style="list-style-type: none"> <li>for switching status</li> </ul>	Handle

Certificates/approvals

<b>General Product Approval</b>	<b>For use in hazardous locations</b>
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[KC](#)



<b>For use in hazardous locations</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Shipping Approval</b>
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



<b>Shipping Approval</b>	<b>other</b>
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[Confirmation](#)

[Environmental Confirmations](#)

<b>other</b>	<b>Railway</b>
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[Miscellaneous](#)

[Vibration and Shock](#)

Further information

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

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

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-0KA10>

**Cax online generator**

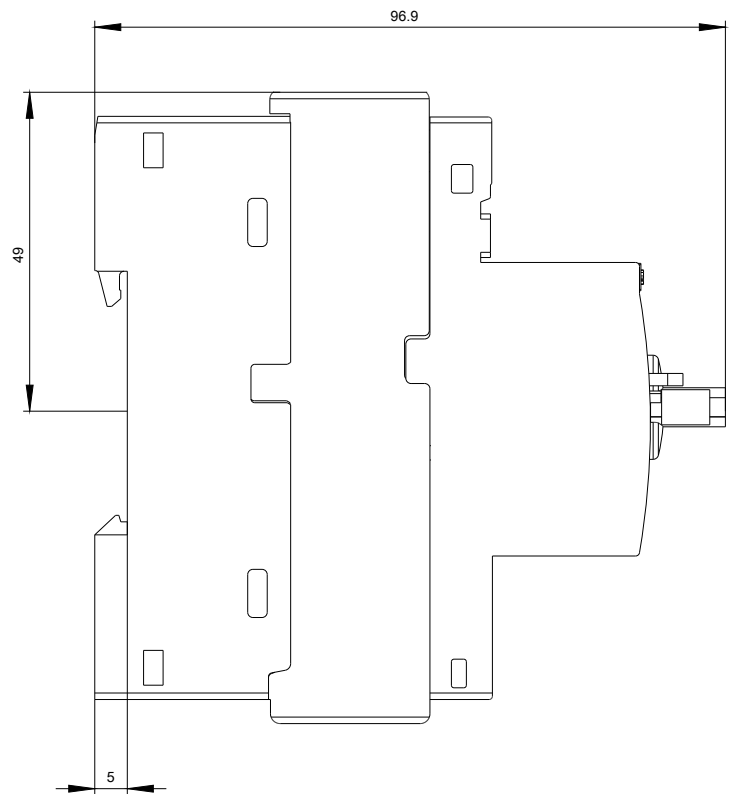
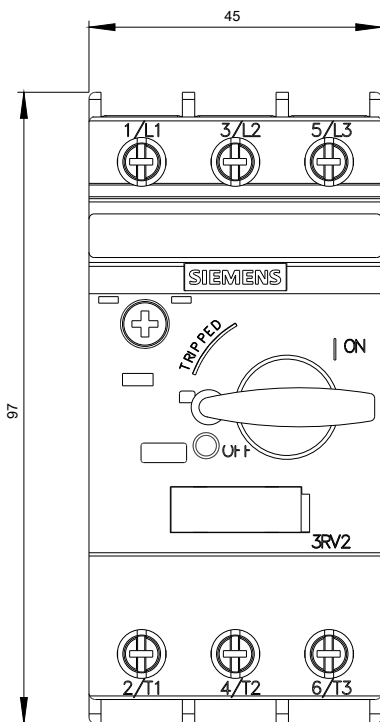
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0KA10>

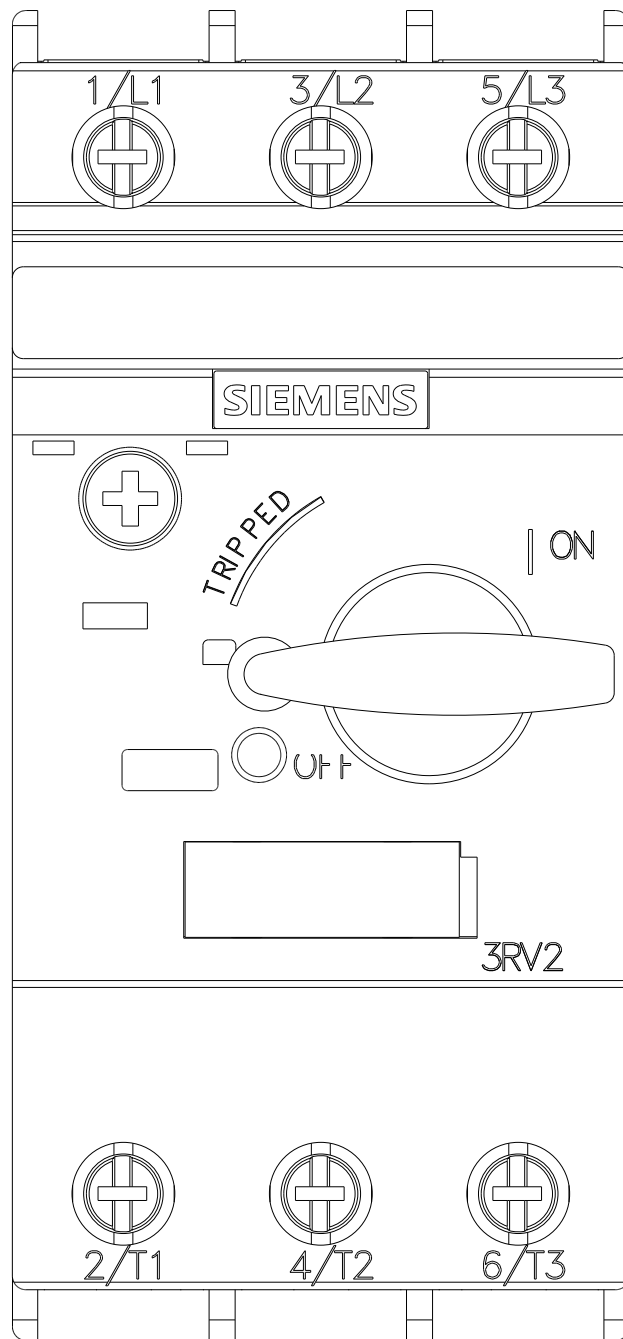
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

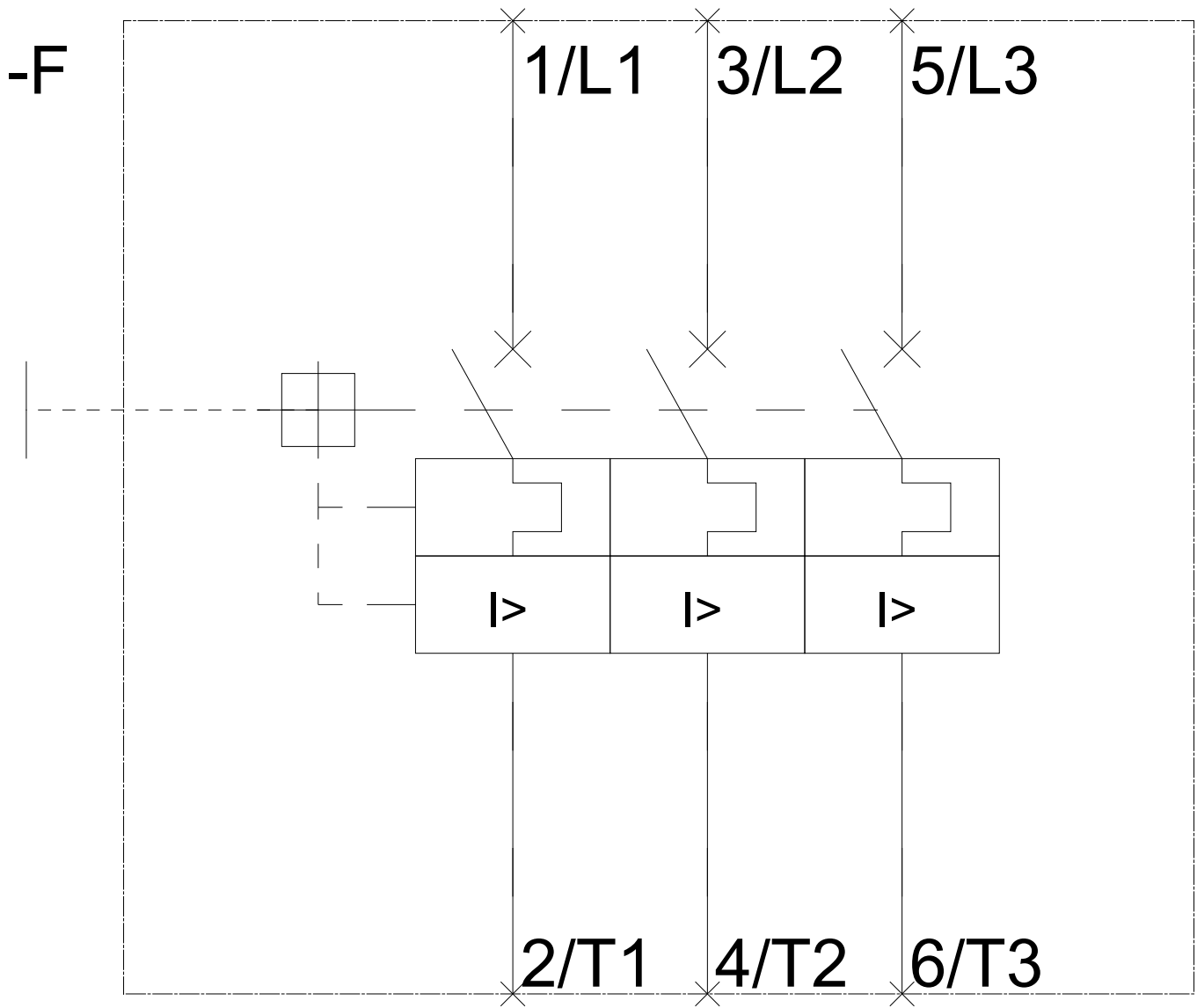
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0KA10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2011-0KA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0KA10&lang=en)







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