

CIRCUIT-BREAKER SZ S00, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 3.2 A, N-RELEASE 42 A, SCREW CONNECTION, STANDARD SW. CAPACITY



Product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For system protection according to UL 489/CSA C22.2 No. 5
Product type designation	3RV2

General technical data	
Size of the circuit-breaker	S00
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	
• on the front	IP20

• of the terminal	IP00
<b>Mechanical service life (switching cycles)</b>	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
<b>Electrical endurance (switching cycles)</b>	
• typical	100 000
<b>Protection against electrical shock</b>	finger-safe when touched vertically from front acc. to IEC 60529
Equipment marking acc. to DIN EN 81346-2	Q

#### Ambient conditions

<b>Ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
<b>Temperature compensation</b>	-20 ... +60 °C

#### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating power</b>	
• at AC-3	
— at 230 V rated value	550 W
— at 400 V rated value	1 100 W
— at 500 V rated value	1 500 W
— at 690 V rated value	2 200 W
<b>Operating frequency</b>	
• at AC-3 maximum	15 1/h

#### 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

#### Protective and monitoring functions

<b>Product function</b>	
• Ground fault detection	No
• Phase failure detection	No
<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> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>10 kA</p>
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> <li>• at AC at 400 V rated value</li> <li>• at AC at 500 V rated value</li> <li>• at AC at 690 V rated value</li> <li>• at 480 AC Y/277 V acc. to UL 489 rated value</li> </ul>	<p>100 kA</p> <p>100 kA</p> <p>100 kA</p> <p>10 kA</p> <p>65 000 A</p>
<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> <li>• with 2 current paths in series at DC at 300 V rated value</li> <li>• with 3 current paths in series at DC at 450 V rated value</li> </ul>	<p>10 kA</p> <p>10 kA</p> <p>10 kA</p>

<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 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	<p>gL/gG 25 A</p> <p>gL/gG 32 A</p> <p>gL/gG 25 A</p>

<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>	144 mm
<b>Width</b>	45 mm
<b>Depth</b>	97 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> </ul> </li> </ul>	<p>0 mm</p> <p>0 mm</p> <p>50 mm</p> <p>50 mm</p> <p>0 mm</p> <p>0 mm</p>

— Backwards	0 mm
— upwards	50 mm
— at the side	30 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	30 mm

## Connections/Terminals

<b>Product function</b>	
• removable terminal for auxiliary and control circuit	No
<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
<b>Arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>Type of connectable conductor cross-sections</b>	
• for main contacts	
— single or multi-stranded	1 ... 10 mm <sup>2</sup> , max. 2x 10 mm <sup>2</sup>
— finely stranded with core end processing	1 ... 16 mm <sup>2</sup> , max. 6 + 16 mm <sup>2</sup>
• at AWG conductors for main contacts	2x 14
<b>Tightening torque</b>	
• for main contacts with screw-type terminals	2.5 ... 3 N·m
<b>Design of screwdriver shaft</b>	Diameter 5 to 6 mm
<b>Size of the screwdriver tip</b>	Pozidriv 2



## Safety related data

<b>B10 value</b>	
• with high demand rate acc. to SN 31920	5 000
<b>Proportion of dangerous failures</b>	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	50 %
<b>Failure rate [FIT]</b>	
• with low demand rate acc. to SN 31920	50 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	10 y
<b>Display version</b>	
• for switching status	Handle

## Certificates/approvals

General Product Approval				Declaration of Conformity	Test Certificates
 CSA	 UL	 KC		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

Test Certificates	Marine / Shipping				
<a href="#">Special Test Certificate</a>	 ABS	 BUREAU VERITAS	 LRS	 PRS	 RINA

Marine / Shipping	other			Railway	
 RMRS	<a href="#">Confirmation</a>	<a href="#">Environmental Confirmations</a>	 VDE	<a href="#">Miscellaneous</a>	<a href="#">Vibration and Shock</a>

#### 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=3RV2711-1DD10>

**Cax online generator**

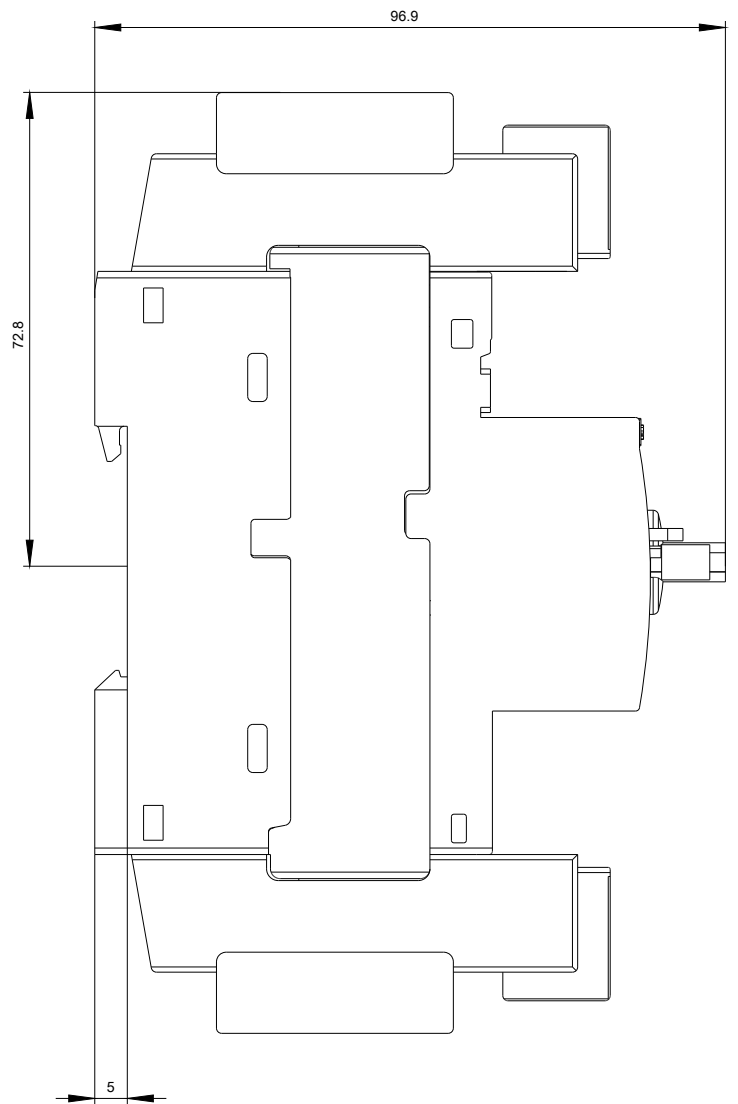
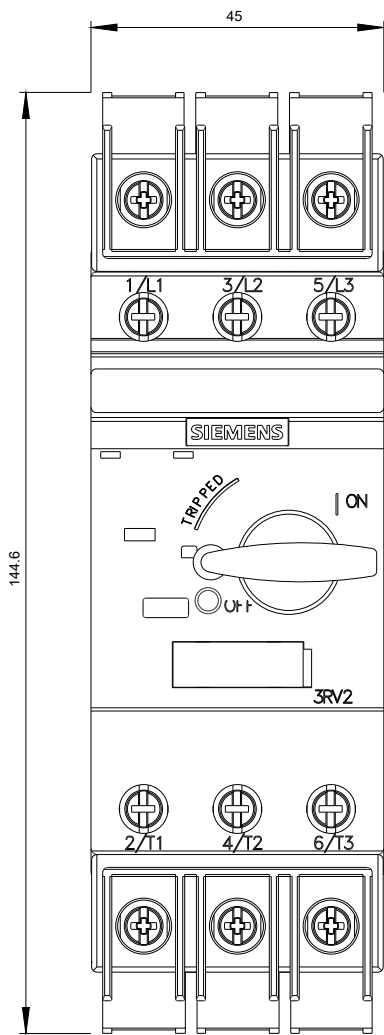
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2711-1DD10>

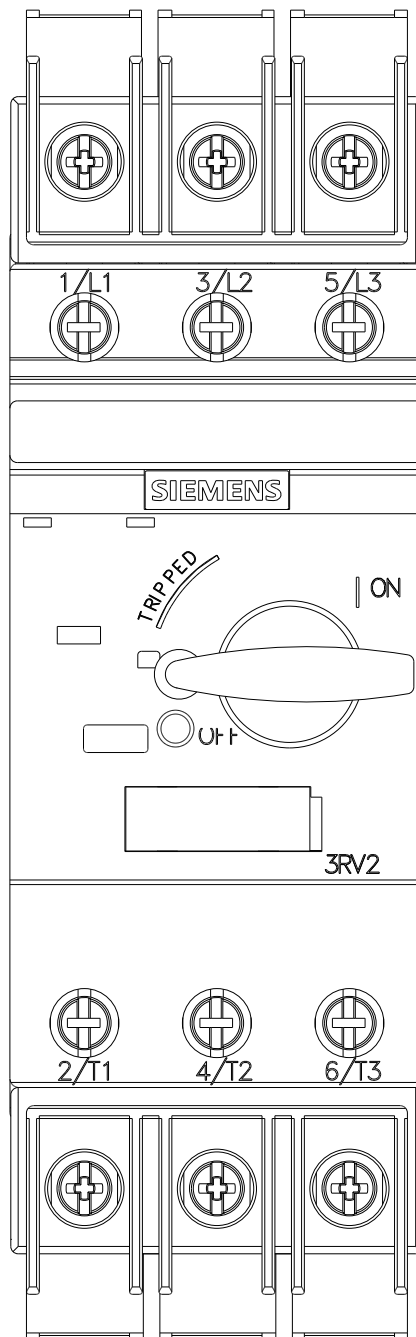
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

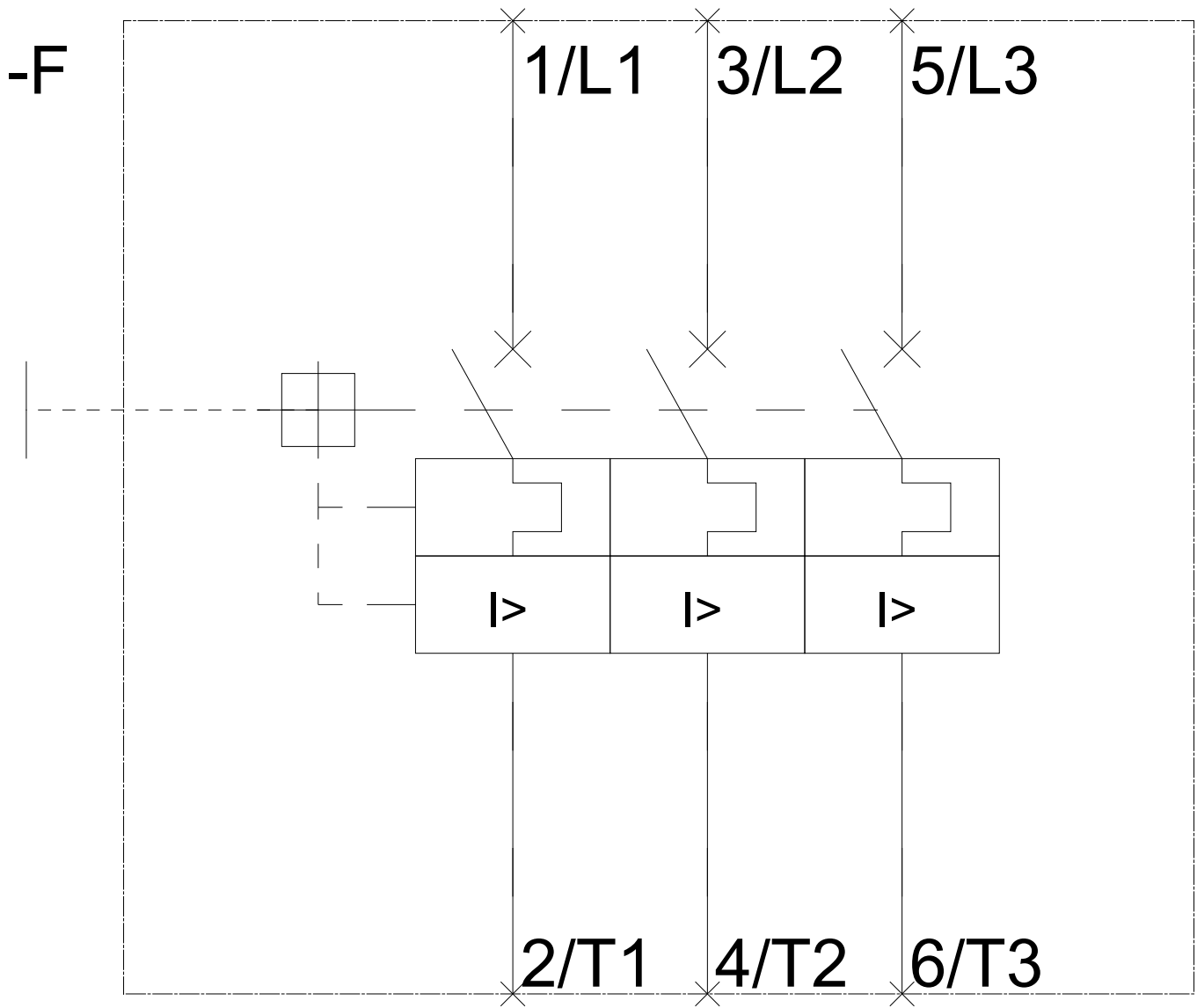
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2711-1DD10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2711-1DD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2711-1DD10&lang=en)







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