



CIRCUIT-BREAKER SZ S0, FOR PLANT PROTECTION, WITH APPROBATION CIRCUIT-BREAKER UL 489. CSA C22.2 NO.5-02. A-RELEASE 22 A, N-RELEASE 286 A, SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

**General technical data:**

<b>Product expansion</b>	
• Auxiliary switch	Yes
<b>Active power loss total typical</b>	8 W
<b>Insulation voltage</b>	
• with degree of pollution 3 Rated value	690 V
<b>Surge voltage resistance Rated value</b>	6 kV
<b>Protection class IP</b>	
• on the front	IP20
• of the terminal	IP00
<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>	-20 ... +60 °C

**Ambient conditions:**

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

<b>Relative humidity during operation</b>	10 ... 95 %
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### Main circuit:

<b>Adjustable response value current of the current-dependent overload release</b>	22 ... 22 A
<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	5 500 W
— at 400 V Rated value	11 000 W
— at 500 V Rated value	11 000 W
— at 690 V Rated value	18 500 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>Design of the overload circuit breaker</b>	thermal
<b>Operational short-circuit current breaking capacity (Ics) at AC</b>	
• at 240 V Rated value	100 kA
• at 400 V Rated value	25 kA
• at 500 V Rated value	5 kA
• at 690 V Rated value	2 kA
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
• at AC at 240 V Rated value	100 kA
• with AC at 400 V Rated value	55 kA
• at AC at 500 V Rated value	10 kA
• at AC at 690 V Rated value	4 kA
• at 480 AC Y/277 V acc. to UL 489 Rated value	50 000 A
<b>Breaking capacity short-circuit current (Icn)</b>	
• with 1 current path at DC at 150 V Rated value	10 kA
• with 2 current paths in series at DC at 300 V Rated value	10 kA

<ul style="list-style-type: none"> <li>with 3 current paths in series at DC at 450 V</li> </ul> Rated value	10 kA
<b>Response value current of the instantaneous short-circuit release</b>	286 A

### UL/CSA ratings:

<b>yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>for single-phase AC motor           <ul style="list-style-type: none"> <li>at 110/120 V Rated value</li> <li>at 230 V Rated value</li> </ul> </li> <li>for three-phase AC motor           <ul style="list-style-type: none"> <li>at 200/208 V Rated value</li> <li>at 220/230 V Rated value</li> <li>at 460/480 V Rated value</li> </ul> </li> </ul>	1.5 hp 3 hp 5 hp 7.5 hp 15 hp

### Short-circuit:

<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>	gL/gG 63 A gL/gG 50 A gL/gG 50 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>	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> <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> </ul>	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> </ul>	1 ... 10 mm <sup>2</sup> , max. 2x 10 mm <sup>2</sup> 1 ... 16 mm <sup>2</sup> , max. 6 + 16 mm <sup>2</sup> 2x 10
<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>	M4

#### 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

#### Mechanical data:

<b>Size of the circuit-breaker</b>	S0
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#### Display:

<b>Display version</b>	
<ul style="list-style-type: none"> <li>for switching status</li> </ul>	Handle

#### Certificates/ approvals:

General Product Approval	Declaration of Conformity
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[KTL](#)



Test Certificates	Shipping Approval
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[spezielle Prüfbescheinigungen](#)

[Typprüfbescheinigung/Werkszeugnis](#)



Shipping Approval	other
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[Umweltbestätigung](#)

[Bestätigungen](#)



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**

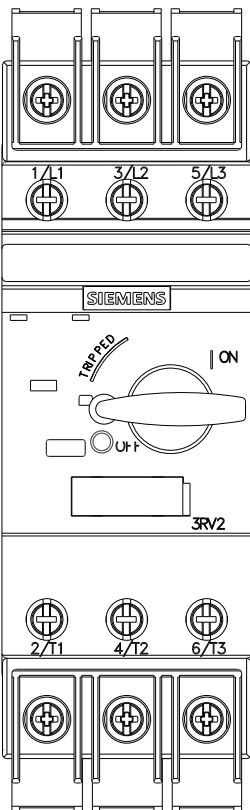
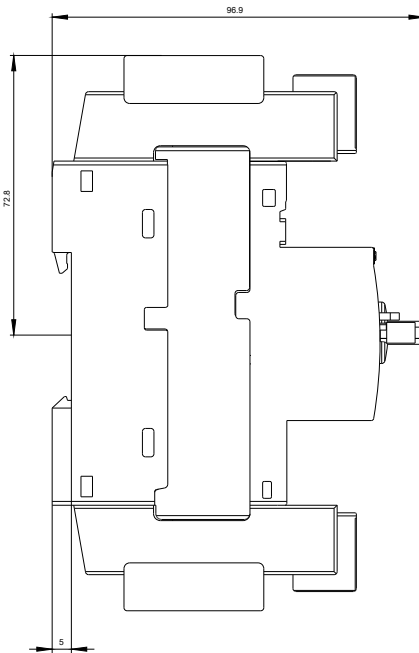
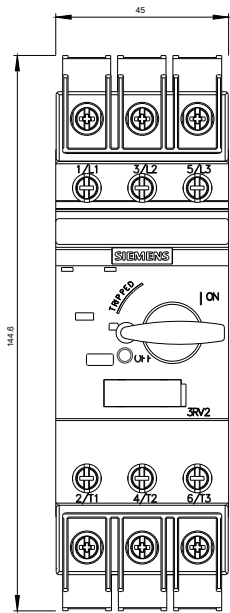
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV27214CD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV27214CD10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RV27214CD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV27214CD10&lang=en)





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