



CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION, RATED CURRENT 28A, N-RELEASE 364A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY

product brand name		SIRIUS
Product designation		3RV2 circuit breaker

**General technical data:**

<b>Active power loss total typical</b>	W	11
<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>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>Equipment marking</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
<b>Operating voltage</b>		
<ul style="list-style-type: none"> <li>Rated value</li> </ul>	V	690
<ul style="list-style-type: none"> <li>at AC-3 Rated value maximum</li> </ul>	V	690

Operating frequency Rated value	Hz	50 ... 60
<b>Operating current Rated value</b>	A	28
<b>Operating current</b>		
• at AC-3		
— at 400 V Rated value	A	28
<b>Operating power</b>		
• at AC-3		
— at 230 V Rated value	W	7 500
— at 400 V Rated value	W	11 000
— at 500 V Rated value	W	18 500
— at 690 V Rated value	W	22 000
<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>Operational short-circuit current breaking capacity (Ics) with AC</b>		
• at 240 V Rated value	kA	100
• at 400 V Rated value	kA	25
• at 500 V Rated value	kA	5
• at 690 V Rated value	kA	2
<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	55
• with AC at 500 V Rated value	kA	10
• with AC at 690 V Rated value	kA	4
<b>Breaking capacity short-circuit current (Icn)</b>		
• with 1 current path for DC at 150 V Rated value	kA	10
• with 2 current paths in series for DC at 300 V Rated value	kA	10
• with 3 current paths in series for DC at 450 V Rated value	kA	10
<b>Response value current of the instantaneous short-circuit release</b>	A	400

### UL/CSA ratings:

<b>Full-load current (FLA) for three-phase AC motor</b>		
• at 480 V Rated value	A	28
• at 600 V Rated value	A	28
<b>yielded mechanical performance [hp]</b>		
• for single-phase AC motor at 110/120 V Rated value	metric hp	2
• for single-phase AC motor at 230 V Rated value	metric hp	5
• for three-phase AC motor at 200/208 V Rated value	metric hp	7.5
• for three-phase AC motor at 220/230 V Rated value	metric hp	10
• for three-phase AC motor at 460/480 V Rated value	metric hp	20

### Short-circuit:

<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>		
• at 400 V		gL/gG 63 A
• at 500 V		gL/gG 63 A
• at 690 V		gL/gG 63 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>	mm	119
<b>Width</b>	mm	45
<b>Depth</b>	mm	96
<b>Required spacing</b>		
• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— at the side	mm	30

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

#### Connections/ Terminals:

<b>Type of electrical connection</b>		
• for main current circuit		spring-loaded terminals
<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 ... 10 mm <sup>2</sup> )
— finely stranded with core end processing		2x (1 ... 6 mm <sup>2</sup> )
— finely stranded without core end processing		2x (1 ... 6 mm <sup>2</sup> )
• for AWG conductors for main contacts		2x (18 ... 8)
<b>Design of screwdriver shaft</b>		Diameter 5 to 6 mm

#### 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
%	10 ... 95

Display:

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




Certificates/ approvals:

General Product Approval			Test Certificates		
 CCC	 CSA		<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Special Test Certificate</a>	<a href="#">Declaration of the Compliance with the order</a>

Shipping Approval

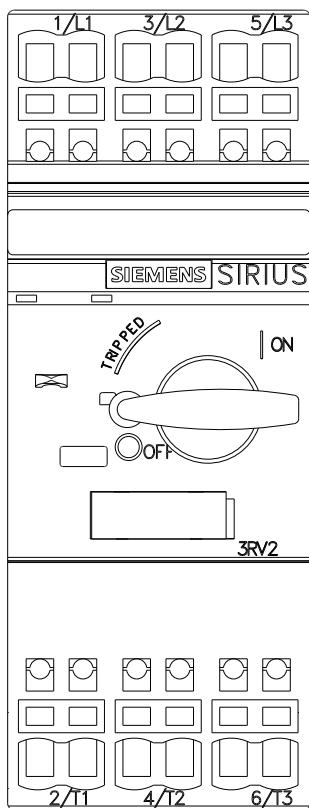
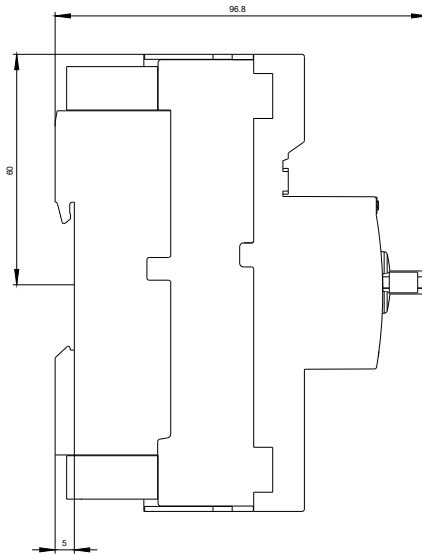
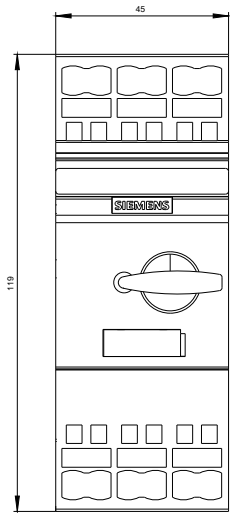
 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS
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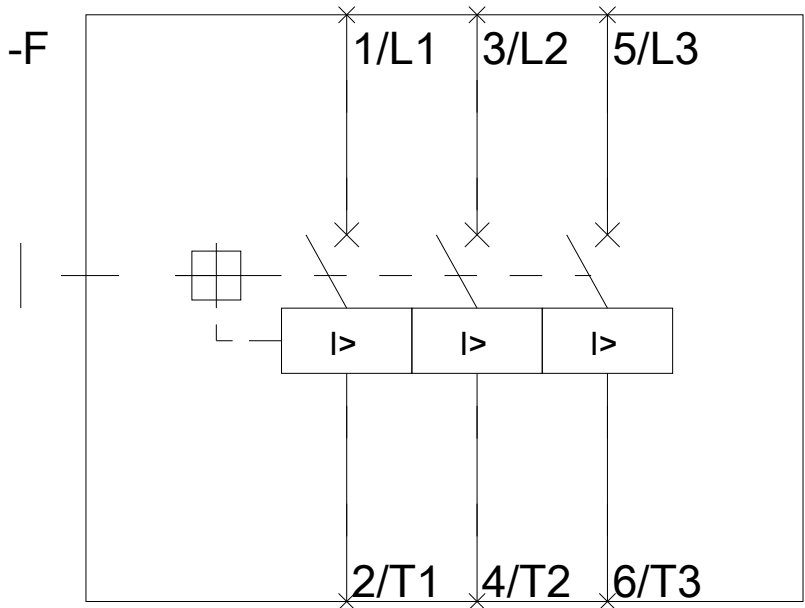
Shipping Approval      other

 RINA	 RMRS	<a href="#">Environmental Confirmations</a>	<a href="#">Confirmation</a>	 VDE	<a href="#">other</a>
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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=3RV23214NC20>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3RV23214NC20/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=3RV23214NC20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV23214NC20&lang=en)





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