



CIRCUIT-BREAKER SZ S00,  
FOR MOTOR PROTECTION, CLASS 10,  
A-RELEASE 5.5...8A, N-RELEASE 104A,  
SCREW CONNECTION, STANDARD SW. CAPACITY

**General technical data:**

product brand name	SIRIUS	
product designation	3RV2 circuit breaker	
Size of the circuit-breaker	S00	
Trip class	CLASS 10	
Protection class IP / on the front	IP20	
Degree of pollution	3	
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 ... +80
• during operating	°C	-20 ... +60
• during transport	°C	-50 ... +80
Resistance against shock	25g / 11 ms	
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Active power loss / total / typical	W	7.3
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F

<b>Mechanical operating cycles as operating time</b>		
• of the main contacts / typical		100,000
• of the auxiliary contacts / typical		100,000
<b>Type of the driving mechanism / motor drive</b>		No
<b>Design of the operating mechanism</b>		selector switch
<b>Product function</b>		
• overload protection		Yes
• phase disturbance recognition		Yes
<b>Product component</b>		
• auxiliary switch		No
• undervoltage release mechanism		No
• trip indicator		No
<b>Product extension / optional / motor drive</b>		No

#### Main circuit:

<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at AC-3 / rated value / maximum</b>	V	690
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	6.5
<b>Service power / at AC-3</b>		
• at 400 V / rated value	W	3,000
• at 500 V / rated value	W	4,000
• at 690 V / rated value	W	5,500
<b>Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum</b>	1/h	15
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Adjustable response current</b>		
• of the non-delayed short-circuit release	A	104 ... 104
• of the current-dependent overload release	A	5.5 ... 8
<b>Service power / at AC-3 / at 230 V / rated value</b>	W	1,500
<b>Continuous current / rated value</b>	A	8

#### Auxiliary circuit:

<b>Product extension / auxiliary switch</b>		Yes
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of change-over switches / for auxiliary contacts</b>		0

#### Inputs/ Outputs:

<b>Number of digital inputs</b>		0
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<b>Short-circuit:</b>		
<b>Breaking capacity limit short-circuit current (Icu)</b>		
• at 400 V / rated value	A	100,000
• at 500 V / rated value	A	42,000
• at 690 V / rated value	A	6,000
<b>Design of the overcurrent release and short-circuit release</b>		thermomagnetic

<b>Installation/mounting/dimensions:</b>		
<b>Built in orientation</b>		any
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>Width</b>	mm	45
<b>Height</b>	mm	97
<b>Depth</b>	mm	91
<b>Distance, to be maintained, to the ranks assembly</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	0
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• sideways	mm	30
• downwards	mm	50
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	30

<b>Connections:</b>		
<b>Product function</b>		
• removable terminal for main circuit		No
• removable terminal for auxiliary and control circuit		No
<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		

• solid	2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• finely stranded	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• with conductor end processing	
• for AWG conductors / for main contacts	2x (18 ... 14), 2x 12

### Certificates/approvals:

<b>Verification of suitability</b>	CE / UL / CSA
• für Staubexplosionsschutz für Zone 21/22	no
• for gas explosion protection for zone 1/2	no

### General Product Approval



### For use in hazardous locations

### Test Certificates

<a href="#">other</a>	<a href="#">Special Test Certificate</a>	<a href="#">Type Test Certificates/Test Report</a>
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### Shipping Approval



### other



[Declaration of Conformity](#)

[other](#)

### UL/CSA ratings

<b>yielded mechanical performance (hp)</b>		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.333
• at 230 V / rated value	hp	1
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	2
• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	5
<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
• at 480 V / rated value	A	7.6
• at 600 V / rated value	A	6.1

### Safety:

#### B10 value / with high demand rate

• according to SN 31920		50,000
<b>T1 value / for proof test interval or service life</b>		
• according to IEC 61508	a	10
<b>Failure rate (FIT value) / with low demand rate</b>		
• according to SN 31920	FIT	50
<b>Proportion of dangerous failures</b>		
• with low demand rate / according to SN 31920	%	40
• with high demand rate / according to SN 31920	%	40
<b>Protection against electrical shock</b>		finger-safe

#### Further information:

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

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

##### Industry Mall (Online ordering system)

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

##### CAx-Online-Generator

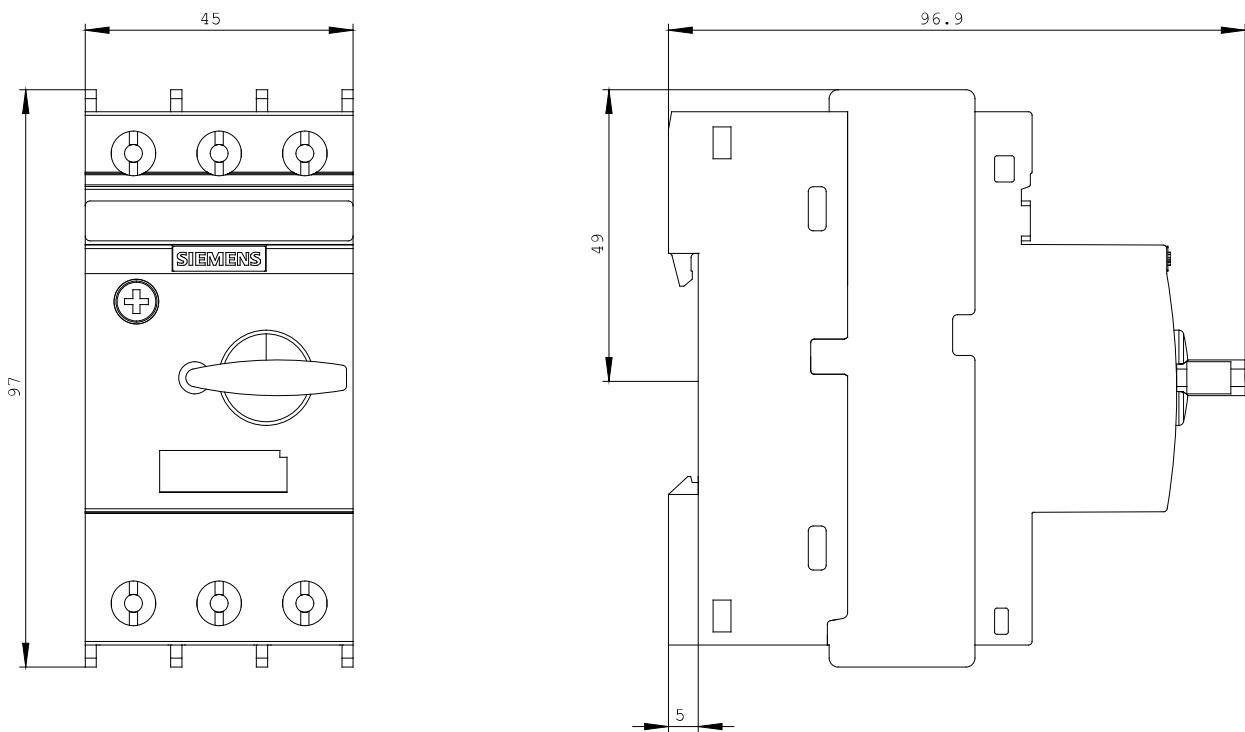
<http://www.siemens.com/cax>

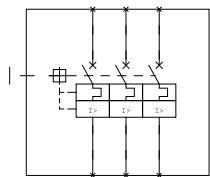
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2011-1HA10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2011-1HA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1HA10)





**last change:**

Mar 27, 2012