

CIRCUIT-BREAKER SZ S00,  
FOR MOTOR PROTECTION, CLASS 10,  
A-REL.1.1...1.6A, N-RELEASE 21A,  
SPRING-L. CONNECTION

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 / frontal/front side		IP20
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 ... 80
• during the operating phase	°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
Real loss power / total / typical	W	6
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Mechanical switching cycle as operating period		
• of the main contacts / typical		100,000
• of the auxiliary contacts / typical		100,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
• Overload protection		Yes
• Short-circuit to earth recognition		No
• Phase disturbance recognition		Yes
Product component		
• 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 3 AC / rated value / maximum</b>	V	690
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	1.5
<b>Service power / at AC-3</b>		
• at 400 V / rated value	W	550
• at 500 V / rated value	W	750
• at 690 V / rated value	W	1,100
<b>Switching frequency / 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 current-dependent overload release	A	1.1 ... 1.6
<b>Service power / at AC-3 / at 230 V / rated value</b>	W	250
<b>Continuous current / rated value</b>	A	1.6

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 contact</b>		0

Inputs/ Outputs:		
<b>Number of digital inputs</b>		0

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

Installation/mounting/dimensions:		
<b>built in orientation</b>		any
<b>Type of fixing/fixation</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	109
<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

#### Connections:

<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		spring-loaded terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• unifilar		2x (0.5 ... 4 mm <sup>2</sup> )
• stranded wire		2x (0.5 ... 4 mm <sup>2</sup> )
• stranded wire		
• with conductor end processing		2 x (0.5 ... 2.5 mm <sup>2</sup> )
• without conductor final cutting		2x (0.5 ... 2.5 mm <sup>2</sup> )
• at AWG-conductors / for main contacts		2x (20 ... 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

## Safety:

### B10 value / with high demand rate

- according to SN 31920

50,000

### T1 value / for proof test interval or service life

- according to IEC 61508

a

10

### Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT

50

### Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

40

### Protection against electrical shock

finger-safe

## Further information:

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

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

### Global Industry Mall (Online ordering system)

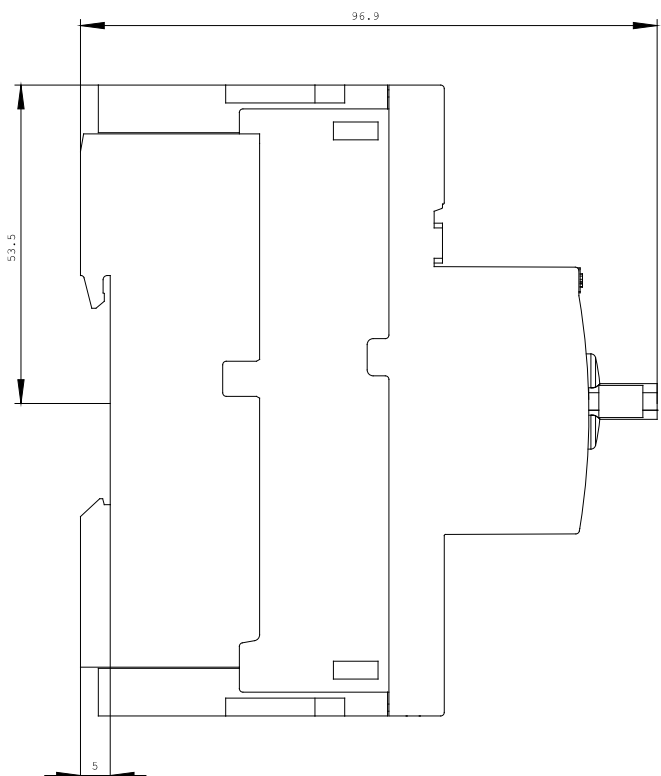
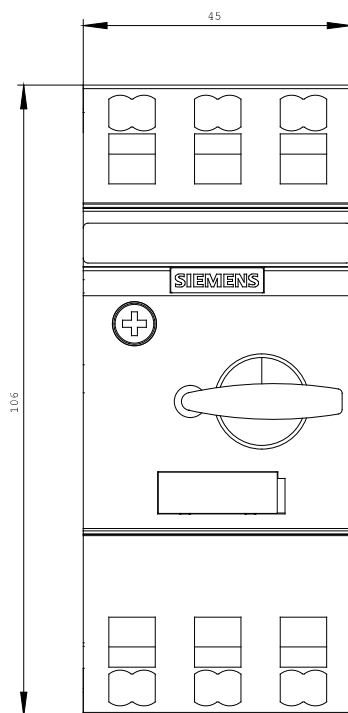
<http://www.siemens.com/industrial-controls/mall>

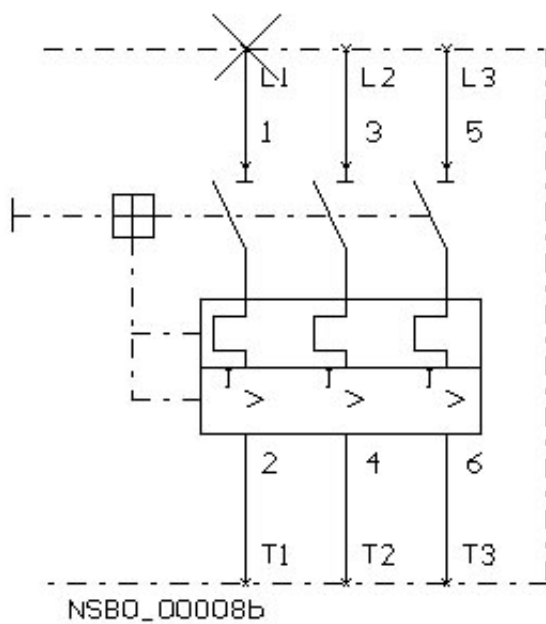
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2011-1AA20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2011-1AA20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1AA20)





last change:

Apr 26, 2010