# **SIEMENS**

Product data sheet 3RV2011-1AA10



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-RELEASE 21A, 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	6
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		F
according to DIN EN 61346-2		F

Mechanical operating cycles as operating time		
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
phase disturbance recognition		Yes
Product component		
auxiliary switch		No
undervoltage release mechanism		No
trip indicator		No
Product extension / optional / motor drive		No
Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at AC-3 / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	А	1.6
Service power / at AC-3		
at 400 V / rated value	W	550
at 500 V / rated value	W	750
• at 690 V / rated value	W	1,100
Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum	1/h	15
Arrangement of electrical connectors / for main current circuit		Top and bottom
Adjustable response current		
of the non-delayed short-circuit release	Α	21 21
of the current-dependent overload release	А	1.1 1.6
Service power / at AC-3 / at 230 V / rated value	W	250
Continuous current / rated value	Α	1.6
Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Number of change-over switches / for auxiliary contacts		0
Inputs/ Outputs:		
Number of digital inputs		0

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

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

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

- solid
- finely stranded
  - with conductor end processing
- for AWG conductors / for main contacts

2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (18 ... 14), 2x 12

### Certificates/approvals:

Verification of suitability

• für Staubexplosionsschutz für Zone 21/22

• for gas explosion protection for zone 1/2

CE/UL/CSA/CCC

no

no

#### **General Product Approval**

00

For use in hazardous locations

Declaration of Conformity













#### **Test Certificates**

other

Special Test Certificate Type Test
Certificates/Test
Report

#### **Shipping Approval**













#### other



other

## UL/CSA ratings

-		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 230 V / rated value	hp	0.1
• for three-phase squirrel cage motors		
• at 460/480 V / rated value	hp	0.75
• at 575/600 V / rated value	hp	0.75
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	1.6
• at 600 V / rated value	А	1.3

<b>Jaict</b> 1	40

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	а	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	%	40
• with high demand rate / according to SN 31920	%	40
Protection against electrical shock		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** 

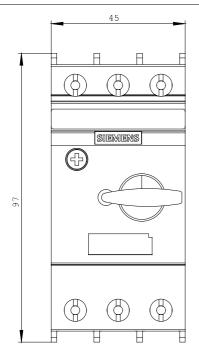
http://www.siemens.com/cax

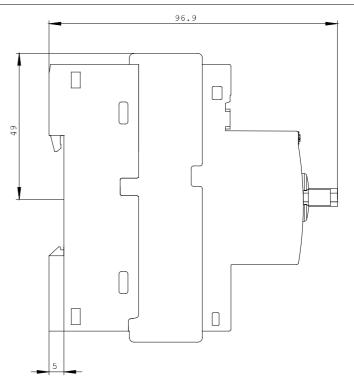
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

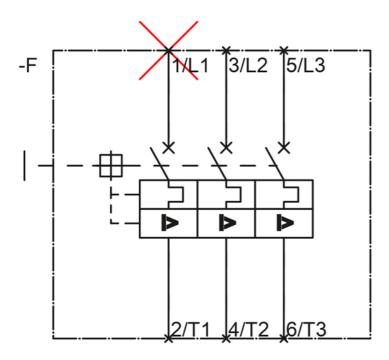
http://support.automation.siemens.com/WW/view/en/3RV2011-1AA10/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2011-1AA10}$ 







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