# **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	A	1.5
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	Α	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:		
Built in orientation		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)

For use in hazardous locations

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

no

no

### **General Product Approval**











#### **Test Certificates**

other

Special Test Certificate Type Test
Certificates/Test
Report

### **Shipping Approval**





GL









other



Declaration of Conformity

other

#### **UL/CSA** ratings

OL/OOA 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	Α	1.3

# 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

Safety:

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** 

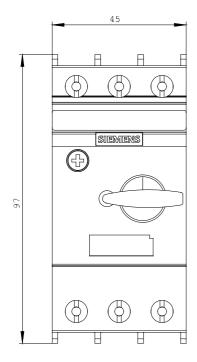
http://www.siemens.com/cax

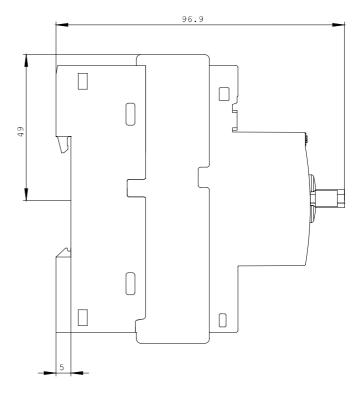
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

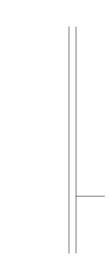
http://support.automation.siemens.com/WW/view/en/3RV2011-1AA10/all

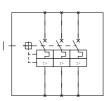
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

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









last change: Mar 27, 2012