# **SIEMENS**

Product data sheet 3RV2011-1EA10



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 2.8...4A, N-RELEASE 52A, 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	6.3
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	3.6
Service power / at AC-3		
at 400 V / rated value	W	1,500
at 500 V / rated value	W	2,200
• at 690 V / rated value	W	3,000
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	52 52
of the current-dependent overload release	Α	2.8 4
Service power / at AC-3 / at 230 V / rated value	W	750
Continuous current / rated value	Α	4
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 (Icu)		
• at 400 V / rated value	Α	100,000
• at 500 V / rated value	Α	100,000
• at 690 V / rated value	Α	6,000
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	2x (0.75 2.5 mm²), 2x (1 4 mm²)
• stranded	2x (0.75 2.5 mm²), 2x 4 mm²
• finely stranded	
with conductor end processing	2x (0.5 1.5 mm²). 2x (0.75 2.5 mm²)

Certificates/approvals:		
Verification of suitability	CE / UL / CSA	

für Staubexplosionsschutz für Zone 21/22
for gas explosion protection for zone 1/2
no

## General Product Approval

• for AWG conductors / for main contacts

For use in hazardous locations





ROSTEST



DEKRA EXAM,

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

#### **Test Certificates**

<u>Manufacturer</u> <u>other</u>

## **Shipping Approval**













other

Manufacturer

other



UL/CSA ratings		
yielded mechanical performance (hp)		
for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.125
• at 230 V / rated value	hp	0.333
for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	0.75
• at 220/230 V / rated value	hp	0.75
• at 460/480 V / rated value	hp	2
• at 575/600 V / rated value	hp	3
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	3.4
at 600 V / rated value	Α	3.9

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	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** 

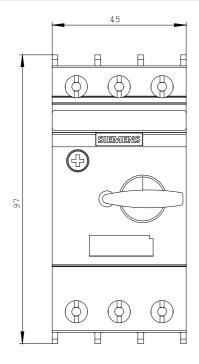
http://www.siemens.com/cax

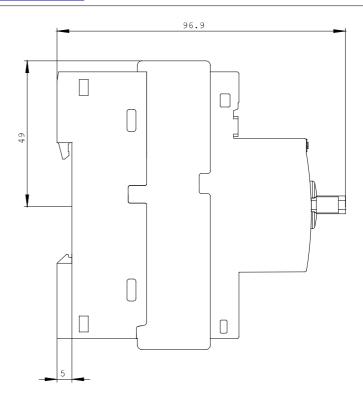
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

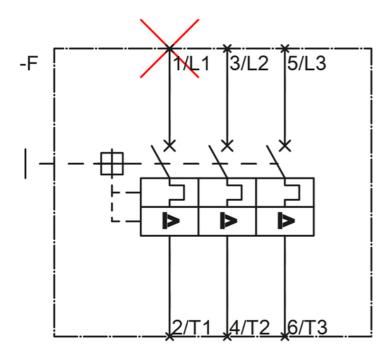
http://support.automation.siemens.com/WW/view/en/3RV2011-1EA10/all

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

 $http://www.automation.siemen\underline{s.com/bilddb/cax\_en.aspx?mlfb=3RV2011-1EA10}$ 







last change: Oct 24, 2011