# **SIEMENS**

Product data sheet 3RV2321-4BC10



CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION, RATED CURRENT 20A, N-RELEASE 260A, SCREW CONNECTION, STANDARD SW. CAPACITY

General technical data:		
Product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
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	9.6
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		No
phase disturbance recognition		No
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	20
Service power / at AC-3		
• at 400 V / rated value	W	7,500
at 500 V / rated value	W	11,000
at 690 V / rated value	W	15,000
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	260 260
Service power / at AC-3 / at 230 V / rated value	W	5,500
Continuous current / rated value	Α	20
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	55,000
• at 500 V / rated value	Α	10,000
• at 690 V / rated value	Α	4,000
Design of the overcurrent release and short-circuit release		thermomagnetic

Built in exicutation		001
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

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 (1 2.5 mm2), 2x (2.5 10 mm2)
• stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)

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

2x (1 ... 2.5 mm2), 2x (2.5 ... 6 mm2), 1x 10 mm2 2x (16 ... 12), 2x (14 ... 8)

## 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**





**ROSTEST** 



Test Certificates

Manufacturer

### **Shipping Approval**





GL









other

Manufacturer

other



UL/CSA ratings		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1.5
• at 230 V / rated value	hp	3
for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	5
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	14

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		

Protection against electrical shock		finger-safe
• with high demand rate / according to SN 31920	%	40
<ul> <li>with low demand rate / according to SN 31920</li> </ul>	%	40

## **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**

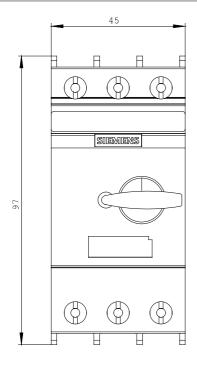
http://www.siemens.com/cax

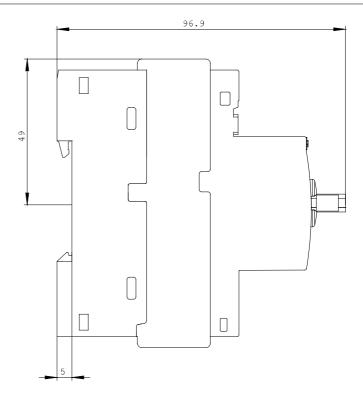
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

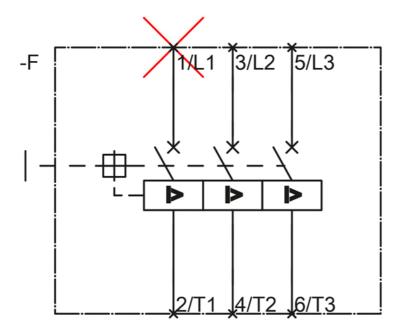
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RV2321-4BC10/all}}$ 

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2321-4BC10







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