# **SIEMENS**

### Data sheet

## 3RV2321-4DC20



CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION, RATED CURRENT 25A, N-RELEASE 325A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY

product brand name	_	SIRIUS				
	_					
Product designation		3RV2 circuit breaker				
General technical data:						
Active power loss total typical	W	8				
Insulation voltage						
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690				
Shock resistance						
• acc. to IEC 60068-2-27		25g / 11 ms				
Surge voltage resistance Rated value	kV	6				
Mechanical service life (switching cycles)	_					
<ul> <li>of the main contacts typical</li> </ul>		100 000				
<ul> <li>of the auxiliary contacts typical</li> </ul>		100 000				
Electrical endurance (switching cycles)						
• typical		100 000				
Protection class IP						
• on the front		IP20				
• of the terminal		IP20				
Equipment marking						
• acc. to DIN EN 81346-2		Q				
Main circuit:						
Number of poles for main current circuit		3				
Operating voltage						
Rated value	V	690				
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690				

Operating frequency Rated value	Hz	50 60
Operating current Rated value	A	25
Operating current	_	
• at AC-3		
— at 400 V Rated value	А	25
Operating power		
• at AC-3		
— at 230 V Rated value	W	5 500
— at 400 V Rated value	W	11 000 15 000
— at 500 V Rated value	W	
— at 690 V Rated value	W	22 000
Operating frequency		
● at AC-3 maximum	1/h	15
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		0
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		0
Number of CO contacts		
for auxiliary contacts		0
Product expansion Auxiliary switch		Yes
Protective and monitoring functions:		
Operational short-circuit current breaking capacity (Ics) with AC		
• at 240 V Rated value	kA	100
• at 400 V Rated value	kA	25
• at 500 V Rated value	kA	5
• at 690 V Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
<ul> <li>with AC at 240 V Rated value</li> </ul>	kA	100
<ul> <li>with AC at 400 V Rated value</li> </ul>	kA	55
<ul> <li>with AC at 500 V Rated value</li> </ul>	kA	10
<ul> <li>with AC at 690 V Rated value</li> </ul>	kA	4
Breaking capacity short-circuit current (Icn)		
<ul> <li>with 1 current path for DC at 150 V Rated value</li> </ul>	kA	10
<ul> <li>with 2 current paths in series for DC at 300 V</li> <li>Rated value</li> </ul>	kA	10
<ul> <li>with 3 current paths in series for DC at 450 V Rated value</li> </ul>	kA	10
Response value current of the instantaneous short-	A	325

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	25
• at 600 V Rated value	А	25
yielded mechanical performance [hp]	-	
<ul> <li>for single-phase AC motor at 110/120 V Rated value</li> </ul>	metric hp	2
<ul> <li>for single-phase AC motor at 230 V Rated value</li> </ul>	metric hp	3
<ul> <li>for three-phase AC motor at 200/208 V Rated value</li> </ul>	metric hp	5
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	7.5
<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	15

Short-circuit:	
Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic
Design of the fuse link for IT network for short-circuit	
protection of the main circuit	
● at 400 V	gL/gG 63 A
• at 500 V	gL/gG 50 A
● at 690 V	gL/gG 50 A

Installation/ mounting/ dimensions:		
mounting position		any
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	mm	119
Width	mm	45
Depth	mm	96
Required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	0
<ul> <li>for grounded parts</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— at the side	mm	30

— downwards	mm	50
<ul> <li>for live parts</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	30

Connections/ Terminals:	
Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	spring-loaded terminals
Arrangement of electrical connectors for main current circuit	 Top and bottom
Product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
Type of connectable conductor cross-section	
<ul> <li>for main contacts</li> </ul>	
— single or multi-stranded	2x (1 10 mm²)
— finely stranded with core end processing	2x (1 6 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (1 6 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>	2x (18 8)
Design of screwdriver shaft	 Diameter 5 to 6 mm

Safety related data:					
B10 value with high demand rate acc. to SN 31920		50 000			
Proportion of dangerous failures					
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	40			
• with high demand rate acc. to SN 31920	%	40			
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	50			
T1 value for proof test interval or service life acc. to IEC 61508	У	10			
Protection against electrical shock		finger-safe			
Mechanical data:					
Mechanical data:					
Mechanical data: Size of the circuit-breaker		S0			
		SO			
Size of the circuit-breaker	m	S0 2 000			
Size of the circuit-breaker Ambient conditions:	m				
Size of the circuit-breaker Ambient conditions: Installation altitude at height above sea level	m				
Size of the circuit-breaker Ambient conditions: Installation altitude at height above sea level maximum	m				

<ul> <li>during transport</li> </ul>	rt		°C	-50 +80		
Relative humidity du	ring operation		%	10 95		
Display:						
Display version						
<ul> <li>for switching st</li> </ul>	tatus			Handle		
Certificates/ approv	als:					
General Product	t Approval			Declaration of Conformity	Test Certificates	5
	CSA	EHC		CE EG-Konf.	Special Test Certificate	Declaration of the Compliance with the order
Test Certificates	Shipping Ap	proval				
<u>Type Test</u> Certificates/Test <u>Report</u>	ABS	B U R E A U VERITAS			GL GL	Lloyd's Register LRS
Shipping Approv	/al			other		
PRS	RINA	RMRS		Environmental Confirmations	<u>Confirmation</u>	
other						
other						

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

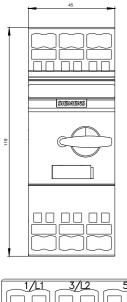
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

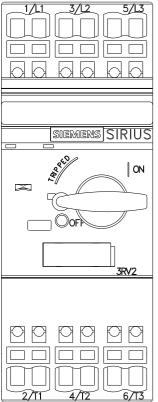
#### Cax online generator

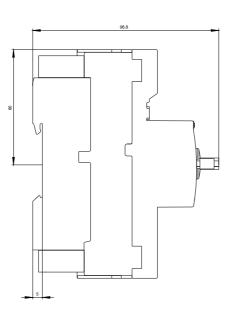
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV23214DC20

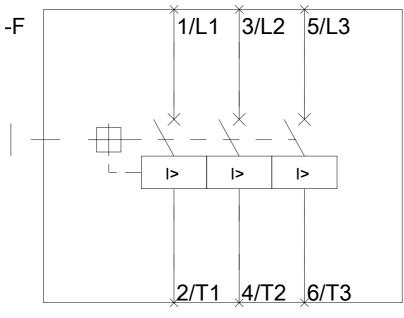
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV23214DC20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV23214DC20&lang=en









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