SIEMENS

Data sheet 3RV2311-1EC20



CIRCUIT-BREAKER SZ S00, FOR STARTER COMBINATION, RATED CURRENT 4A, N-RELEASE 52A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:			
Active power loss total typical	W	6	
Insulation voltage			
 with degree of pollution 3 Rated value 	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)			
 of the main contacts typical 		100 000	
 of the auxiliary contacts typical 		100 000	
Electrical endurance (switching cycles)			
• typical		100 000	
Size of contactor can be combined company-specific		S00	
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	

■ at AC-3 Rated value maximum	V	090
Operating frequency Rated value	Hz	50 60
Operating current Rated value	Α	4
Operating current		
● at AC-3		
— at 400 V Rated value	Α	4
Operating power		
• at AC-3		
— at 230 V Rated value	W	750
— at 400 V Rated value	W	1 500
— at 500 V Rated value	W	2 200
— at 690 V Rated value	W	3 000
Operating frequency		
• at AC-3 maximum	1/h	15
uxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		0
Number of NO contacts		
• for auxiliary contacts		0
Number of CO contacts		
• for auxiliary contacts		0
Product expansion Auxiliary switch		Yes
rotective and monitoring functions:		
Operational short-circuit current breaking capacity		
(Ics) with AC	LΛ	400
at 240 V Rated value	kA L-A	100
at 400 V Rated value	kA IsA	100
• at 500 V Rated value	kA	100
at 690 V Rated value	kA	4
Maximum short-circuit current breaking capacity (Icu)	LΑ	400
• with AC at 240 V Rated value	kA kA	100
• with AC at 400 V Rated value	kA Is A	100
• with AC at 500 V Rated value	kA IsA	100
with AC at 690 V Rated value	kA	6
Breaking capacity short-circuit current (Icn)	LΑ	40
with 1 current path for DC at 150 V Rated value	kA Is A	10
 with 2 current paths in series for DC at 300 V Rated value 	kA	10
 with 3 current paths in series for DC at 450 V Rated value 	kA	10
Response value current of the instantaneous short-	Α	52

690

• at AC-3 Rated value maximum

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	Α	4
• at 600 V Rated value	Α	4
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	0.125
 for single-phase AC motor at 230 V Rated value 	metric hp	0.333
 for three-phase AC motor at 200/208 V Rated value 	metric hp	0.75
 for three-phase AC motor at 220/230 V Rated value 	metric hp	0.75
 for three-phase AC motor at 460/480 V Rated value 	metric hp	2
• for three-phase AC motor at 575/600 V Rated value	metric hp	3
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 32 A
● at 500 V		gL/gG 32 A
● at 690 V		gL/gG 25 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	106
Width	mm	45
Depth	mm	96
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0

— upwards	mm	50
— at the side	mm	30
— downwards	mm	50
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	30

Connections/ Terminals:	
Type of electrical connection	
for main current circuit	spring-loaded terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Product function	
 removable terminal for auxiliary and control 	No
circuit	
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end 	2x (0.5 2.5 mm²)
processing	
 for AWG conductors for main contacts 	2x (20 12)
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			
 with low demand rate acc. to SN 31920 	%	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:				
Size of the circuit-breaker		S00		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				

during operation	°C	-20 +60
during storage	°C	-50 + 80
 during transport 	°C	-50 + 80
Relative humidity during operation	%	10 95

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Display version

for switching status

Handle

Certificates/ approvals:

General Product Approval

Declaration of Conformity

Test Certificates









Special Test Certificate

Test Certificates

Declaration of the Compliance with the order

Type Test
Certificates/Test
Report



KTL

Shipping Approval







GL

Shipping Approval



LRS







Environmental Confirmations

other

Confirmation

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/industrymal

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV23111EC20

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

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RV23111EC20/all}}$

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV23111EC20&lang=en



