# **SIEMENS**

Data sheet 3RV2111-0FA10



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, W. OVERLOAD RELAY FUNCTION A-RELEASE0.35...0.5A, N-RELEASE6.5A SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:			
Active power loss total typical	W	5	
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	
Temperature compensation	°C	-20 <b>+</b> 60	
Size of contactor can be combined company-specific		S00	
Protection class IP			
• on the front		IP20	
• of the terminal		IP20	
Type of protection		Increased safety	
Equipment marking			
• acc. to DIN EN 81346-2		Q	

Main circuit:	
Number of poles for main current circuit	3

Adjustable response value current of the current-	A	0.35 0.5
dependent overload release	, ,	5.55 5.5
Operating voltage		
Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating current Rated value	Α	0.5
Operating current		
• at AC-3		
— at 400 V Rated value	Α	0.5
Operating power		
• at AC-3		
— at 230 V Rated value	W	60
— at 400 V Rated value	W	120
— at 500 V Rated value	W	120
— at 690 V Rated value	W	180
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
Design of the auxiliary switch		laterally
Operating current of the auxiliary contacts at AC-15		
• at 24 V	Α	1.5

Trip class		CLASS 10
Design of the overload circuit breaker		thermal
Operational short-circuit current breaking capacity (Ics) with AC		
• at 240 V Rated value	kA	100
• at 400 V Rated value	kA	100
• at 500 V Rated value	kA	100
• at 690 V Rated value	kA	100

Α

Α

1.5

• at 230 V

• at 24 V

Operating current of the auxiliary contacts at DC-13

<ul> <li>with AC at 240 V Rated value</li> </ul>	kA	100
• with AC at 400 V Rated value	kA	100
• with AC at 500 V Rated value	kA	100
• with AC at 690 V Rated value	kA	100
Breaking capacity short-circuit current (Icn)		
• with 1 current path for DC at 150 V Rated value	kA	10
<ul> <li>with 2 current paths in series for DC at 300 V</li> <li>Rated value</li> </ul>	kA	10
• with 3 current paths in series for DC at 450 V Rated value	kA	10
Response value current of the instantaneous short- circuit release	A	6.5
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	0.5
• at 600 V Rated value	Α	0.5
Contact rating of the auxiliary contacts acc. to UL		C600 / R300
Short-circuit:		
Product function Short circuit protection		Yes
Design of the short-circuit trip		magnetic
Design of the fuse link		•
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gL/gG: 6 A, quick: 10 A
Design of the fuse link for IT network for short-circuit protection of the main circuit		
● at 690 V		gL/gG 4 A
nstallation/ 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	97
Width	mm	65
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
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		screw-type terminals		
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type 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				
• for main contacts				
<ul> <li>single or multi-stranded</li> </ul>		2x (0,75 2,5 mm²), 2x 4 mm²		
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 14), 2x 12		
<ul> <li>for auxiliary contacts</li> </ul>				
<ul> <li>single or multi-stranded</li> </ul>		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)		
Tightening torque				
<ul> <li>for main contacts with screw-type terminals</li> </ul>	N·m	0.8 1.2		
Design of screwdriver shaft		Diameter 5 to 6 mm		
Design of the thread of the connection screw				
• for main contacts		M3		
<ul> <li>of the auxiliary and control contacts</li> </ul>		M3		

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:		
Size of the circuit-breaker		S00
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-20 <b>+</b> 60
during storage	°C	-50 <b>+</b> 80
during transport	°C	-50 <b>+</b> 80
Relative humidity during operation	%	10 95
Display:		

		Ui		M	
J	•	_		_	

Display version

• for switching status

## Certificates/ approvals:

**General Product Approval** 

Declaration of Conformity

Handle

**Test Certificates** 









Type Test
Certificates/Test
Report

Special Test Certificate

## **Shipping Approval**









GL





## **Shipping Approval**

## other





Environmental Confirmations

Confirmation



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

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV21110FA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV21110FA10&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV21110FA10&lang=en</a>



