# **SIEMENS**

Data sheet 3RV2011-0EA40



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.28...0.4A, N-RELEASE5.2A RING CABLE LUG 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 +60	
Size of contactor can be combined company-specific		S0	
Protection class IP			
• on the front		IP00	
<ul><li>of the terminal</li></ul>		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-	Α	0.28 0.4
dependent overload release	^	0.20 0.4
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	0.4
Operating current		
• at AC-3		
— at 400 V Rated value	Α	0.4
Operating power		
• at AC-3		
— at 230 V Rated value	W	60
— at 400 V Rated value	W	90
— at 500 V Rated value	W	120
— at 690 V Rated value	W	180
Operating frequency		
• at AC-3 maximum	1/h	15
Auxiliary 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
Protective and monitoring functions:		
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     at 400 V Rated value	kA	100
• at 500 V Rated value	kA	100
at 690 V Rated value     at 690 V Rated value	kA	100
Maximum short-circuit current breaking capacity (Icu)	TV t	
• with AC at 240 V Rated value	kA	100
with AC at 400 V Rated value	kA	100
with AC at 500 V Rated value     with AC at 500 V Rated value	kA	100
with AC at 690 V Rated value     with AC at 690 V Rated value	kA	100
Breaking capacity short-circuit current (Icn)	IVA	
with 1 current path for DC at 150 V Rated value	kA	10
p		

<ul> <li>with 2 current paths in series for DC at 300 V</li> </ul>	kA	10
Rated value	10 (	
<ul> <li>with 3 current paths in series for DC at 450 V</li> <li>Rated value</li> </ul>	kA	10
Response value current of the instantaneous short-	Α	5.2
circuit release		
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	0.4
● at 600 V Rated value	Α	0.4
Short-circuit:		
Product function Short circuit protection		Yes
Design of the short-circuit trip		magnetic
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	97
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
• 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
O		
Connections/ Terminals:		

Type of electrical connection

for main current circuit		ring cable connection
<ul> <li>for auxiliary and control current circuit</li> </ul>		ring cable connection
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
Tightening torque		
• for ring cable lug		
— for main contacts	N·m	1.2 0.8
<ul><li>for auxiliary contacts</li></ul>	N·m	1.2 0.8
Outer diameter of the usable ring cable lug maximum	mm	7.5
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
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	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 maximum	m	2 000
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-20 +60
during storage	°C	-50 <b>+80</b>
during transport	°C	-50 <b>+80</b>
Relative humidity during operation	%	10 95
Display:		
Display version		
• for switching status		Handle
Certificates/ approvals:		

## **General Product Approval**

## **Declaration of** Conformity

#### **Test Certificates**









**Special Test** Certificate

Type Test Certificates/Test Report

# **Shipping Approval**













## **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

## Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20110EA40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV20110EA40/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=3RV20110EA40&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV20110EA40&lang=en</a>



