# SIEMENS

## **Product data sheet**

### 3RV2021-1AA10



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-REL.21A SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name		SIRIUS		
product designation		3RV2 circuit breaker		
Size of the circuit-breaker		S0		
Number of poles / for main current circuit		3		
Product function				
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		No		
overload protection		Yes		
phase disturbance recognition		Yes		
short-circuit to earth recognition		No		
Product component				
auxiliary switch		No		
undervoltage release mechanism		No		
trip indicator		No		
Product extension				
auxiliary switch		Yes		
optional / motor drive		No		
Impulse voltage resistance / rated value	kV	6		
Protection class IP / on the front		IP20		
Protection against electrical shock		finger-safe		

Installation altitude / at a height over sea level / maximum	m	2,000
Resistance against shock		25g / 11 ms
Ambient temperature	-	
during transport	°C	-50 +80
during storage	°C	-50 +80
during operating	°C	-20 +60
Active power loss / total / typical	W	6
Main circuit:		
Operating voltage / rated value	V	690
Service power / at AC-3	-	
• at 400 V / rated value	W	550
• at 500 V / rated value	W	750
• at 690 V / rated value	W	1,100
Operational current / at AC-3 / at 400 V / rated value	А	1.6
Mechanical operating cycles as operating time / of the main contacts / typical		100,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	15
Auxiliary circuit:	_	
Number of change-over switches / for auxiliary contacts	_	0
Mechanical operating cycles as operating time / of the auxiliary contacts / typical		100,000
Protection function:		
Trip class		CLASS 10
Adjustable response current / of the current-dependent overload release	A	1.1 1.6
Breaking capacity limit short-circuit current (lcu)	-	
• at 400 V / rated value	А	100,000
• at 500 V / rated value	А	100,000
• at 690 V / rated value	А	100,000
Safety:		
Proportion of dangerous failures		
with high demand rate / according to SN 31920	%	40
with low demand rate / according to SN 31920	%	40
Failure rate (FIT value) / with low demand rate / according to SN 31920	FIT	50
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

Installation/mounting/dimensions:						
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715				
mounting position			any			
Depth		mm	96			
Height		mm	97			
Width		mm	45			
Connections:						
Arrangement of electrical connectors / for m	ain current circuit		Top and bottom			
Design of the electrical connection						
<ul> <li>for main current circuit</li> </ul>			screw-type terminals			
Type of the connectable conductor cross-se	ction					
• for main contacts						
• solid		2x (1 2.5 mm²), 2x (2.5 10 mm²)				
<ul> <li>finely stranded</li> </ul>						
<ul> <li>with conductor end processing</li> </ul>		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 1			6 mm²), 1x 10 mm²	
for AWG conductors / for main contacts		2x (16 12), 2x (14 8)				
UL/CSA ratings:						
yielded mechanical performance (hp)						
<ul> <li>for single-phase squirrel cage motors</li> </ul>						
• at 230 V / rated value		hp	0.1			
<ul> <li>for three-phase squirrel cage motors</li> </ul>						
• at 460/480 V / rated value		hp	0.75			
• at 575/600 V / rated value		hp	0.75	5		
Operating current (FLA) / for three-phase sq	uirrel cage motors					
• at 480 V / rated value		А	1.6			
• at 600 V / rated value		А	1.3			
Certificates/approvals:						
General Product Approval	For use in hazardous locations	Declaration of Conformity		Test Certificates		
	K ATEX	EG-Konf.		Special Test Certificate	<u>Type Test</u> Certificates/Test <u>Report</u>	
Shipping Approval other						
DNV DNV						

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

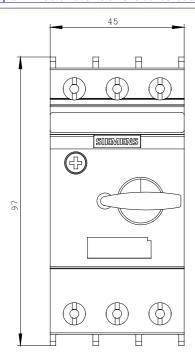
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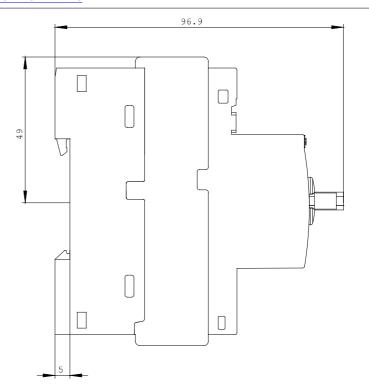
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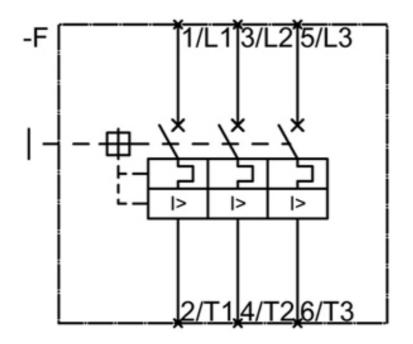
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2021-1AA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2021-1AA10







last change:

Feb 14, 2013