SIEMENS

Product data sheet 3RV2021-1FA20



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 3.5...5A, N-REL. 65A SPRING-L. CONNECTION, STANDARD SW. CAPACITY

General technical data:			
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			
 removable terminal for auxiliary and control circuit 		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	7
Main circuit:		
Operating voltage / rated value	V	690
Service power / at AC-3		
• at 400 V / rated value	W	2,200
• at 500 V / rated value	W	2,200
• at 690 V / rated value	W	4,000
Operational current / at AC-3 / at 400 V / rated value	Α	5
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	Α	3.5 5
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	Α	100,000
• at 500 V / rated value	Α	100,000
• at 690 V / rated value	Α	6,000
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	109	
Width	mm	45	

Connections:	
Arrangement of electrical connectors / for main current circuit	Top and bottom
Design of the electrical connection	
for main current circuit	spring-loaded terminals
Type of the connectable conductor cross-section	
for main contacts	
• solid	2x (1 10 mm²)
• finely stranded	
 without conductor final cutting 	2x (1 6 mm²)
 with conductor end processing 	2x (1 6 mm²)
• for AWG conductors / for main contacts	2x (18 8)

UL/CSA ratings:		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.167
• at 230 V / rated value	hp	0.5
for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	1
• at 220/230 V / rated value	hp	1
• at 460/480 V / rated value	hp	3
• at 575/600 V / rated value	hp	3
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	4.8
• at 600 V / rated value	Α	3.9

Certificates/approvals:

General Product Approval

For use in hazardous locations

Declaration of Conformity

Test Certificates









Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval

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/industrial-controls/mall

Cax online generator:

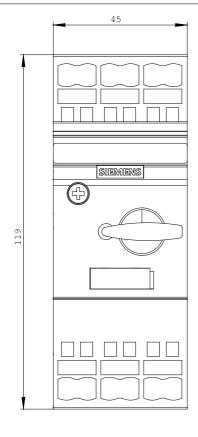
http://www.siemens.com/cax

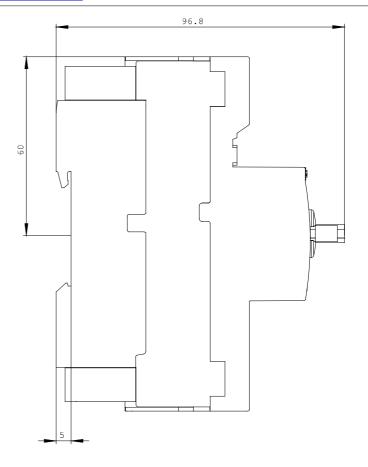
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RV2021-1FA20/all}}$

 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-1FA20





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