SIEMENS

Data sheet 3RV2021-0GA20



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.45...0.63A, N-REL.8.2A SPRING-L. CONNECTION STANDARD SW. CAPACITY

Figure similar

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
Temperature compensation	°C	-20 +60
Size of contactor can be combined company-specific		S2
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

dependent overload release		
Operating voltage		
Rated value	V	690
at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating requertly Nated Value Operating current Rated value	A	0.63
Operating current	,	0.00
• at AC-3		
— at 400 V Rated value	Α	0.63
Operating power	, ,	0.00
• at AC-3		
— at 230 V Rated value	W	90
— at 400 V Rated value	W	180
— at 500 V Rated value	W	180
— at 690 V Rated value	W	250
Operating frequency		
• at AC-3 maximum	1/h	15
at to o maximum		
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		100
● 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
Maximum short-circuit current breaking capacity (Icu)		400
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 	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

0.45 ... 0.63

Adjustable response value current of the current-

• with 2 overest notice in coving for DC at 200 V	kA	10
 with 2 current paths in series for DC at 300 V Rated value 	NA.	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	Α	8.2
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	0.63
• at 600 V Rated value	Α	0.63
Short-circuit:		
Product function Short circuit protection		Yes
Design of the short-circuit trip		magnetic
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	109
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		Top and bottom
circuit		
Product function		
 removable terminal for auxiliary and control circuit 		No
Type of connectable conductor cross-section		
• for main contacts		
		2x (1 10 mm²)
— single or multi-stranded		
— finely stranded with core end processing		2x (1 6 mm²)
 finely stranded without core end processing 		2x (1 6 mm²)
 for AWG conductors for main contacts 		2x (18 8)
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		S0
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
Display:		
Display version		
• for switching status		Handle
Certificates/ approvals:		

General Product Approval

Declaration of Conformity

Test

Certificates











Special Test Certificate

Test Certificates

Shipping Approval

Declaration of the Compliance with the order

Type Test
Certificates/Test
Report









GL

Shipping Approval

other









Environmental Confirmations

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/industrymall

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV20210GA20}\\$

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

http://support.automation.siemens.com/WW/view/en/3RV20210GA20/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=3RV20210GA20&lang=en





