SIEMENS

Data sheet 3RV2021-4EA20



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 27...32A, N-RELEASE 400A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY,

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:		
Active power loss total typical	W	11
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		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

690 690 50 60 32
690 50 60 32
690 50 60 32
50 60 32
32
22
22
22
32
7 500
15 000
18 500
30 000
15
0
0
0
Yes
CLASS 10
thermal
100
25
5
2
100
55
10
4
10

 with 2 current paths in series for DC at 300 V Rated value 	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	А	400
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
● at 480 V Rated value	Α	32
● at 600 V Rated value	Α	32
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	2
 for single-phase AC motor at 230 V Rated value 	metric hp	5
 for three-phase AC motor at 200/208 V Rated value 	metric hp	7.5
 for three-phase AC motor at 220/230 V Rated value 	metric hp	10
• for three-phase AC motor at 460/480 V Rated value	metric hp	20
Short-circuit:		
Product function Short circuit protection		Yes
Design of the short-circuit trip		magnetic
Design of the fuse link for IT network for short-circuit protection of the main circuit		
• at 400 V		gL/gG 63 A
• at 500 V		gL/gG 63 A
● at 690 V		gL/gG 63 A
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	119
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 circuit	Top and bottom
Product function	
 removable terminal for auxiliary and control circuit 	No
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	2x (1 10 mm²)
— 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 maximum	m	2 000
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

General Product Approval

Declaration of Conformity

Test Certificates











Special Test Certificate

Test Certificates

Shipping Approval

Type Test Certificates/Test Report

Declaration of the Compliance with the order









GL

Shipping Approval



LRS







other

Environmental Confirmations

Confirmation

other



other

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=3RV20214EA20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20214EA20&lang=en





