SIEMENS

Data sheet 3RV2321-4FC10



CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION, RATED CURRENT 40A, N-RELEASE 480A, SCREW CONNECTION, STANDARD SW. CAPACITY

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:			
Active power loss total typical	W	14	
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	
Protection class IP	_		
• on the front		IP20	
of the terminal		IP20	
Equipment marking			
• acc. to DIN EN 81346-2		Q	

Main circuit:				
Number of poles for main current circuit		3		
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	40
Operating current		
• at AC-3		
— at 400 V Rated value	Α	40
Operating power		
• at AC-3		
— at 230 V Rated value	W	11 000
— at 400 V Rated value	W	18 500
— at 500 V Rated value	W	22 000
— at 690 V Rated value	W	39 000
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:		
Operational short-circuit current breaking capacity (Ics) with AC		
• at 240 V Rated value	kA	100
at 400 V Rated value	kA	10
at 500 V Rated value	kA	3
at 690 V Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)	IV V	
• with AC at 240 V Rated value	kA	100
with AC at 400 V Rated value	kA	20
with AC at 500 V Rated value with AC at 500 V Rated value	kA	6
with AC at 690 V Rated value with AC at 690 V Rated value	kA	3
Breaking capacity short-circuit current (Icn)	IV (
• with 1 current path for DC at 150 V Rated value	kA	10
·	kA	10
 with 2 current paths in series for DC at 300 V Rated value 	IV-1	
• with 3 current paths in series for DC at 450 V	kA	10
Rated value	Δ.	490
Response value current of the instantaneous short-	Α	480

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	40
• at 600 V Rated value	Α	40
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	3
 for single-phase AC motor at 230 V Rated value 	metric hp	7.5
 for three-phase AC motor at 200/208 V Rated value 	metric hp	10
 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	30
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
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	97
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

 $-- \, {\rm upwards} \,$

— at the side

50

30

mm

mm

— 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		screw-type 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 2,5 mm²), 2x (2,5 10 mm²)
 finely stranded with core end processing 		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 for AWG conductors for main contacts 		2x (16 12), 2x (14 8)
Tightening torque		
 for main contacts with screw-type terminals 	N·m	2 2.5
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw		
• for main contacts		M4

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	
T1 value for proof test interval or service life acc. to	У	10	
IEC 61508			
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









Type Test
Certificates/Test
Report

Special Test Certificate

Shipping Approval

















Shipping Approval

other





Confirmation

Environmental Confirmations



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=3RV23214FC10

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

http://support.automation.siemens.com/WW/view/en/3RV23214FC10/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=3RV23214FC10&lang=en



