SIEMENS

Data sheet

3RV2311-1DC10

Circuit breaker size S00 for starter combination Rated current 3.2 A N release 42 A screw terminal Standard switching capacity



Product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For starter combinations
Product type designation	3RV2
General technical data	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00, S0
Product extension	
Auxiliary switch	Yes
Power loss [W] total typical	6 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
Protection class IP	

• on the front	IP20
• of the terminal	IP20
Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Certificate of suitability ATEX	No
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Relative humidity during operation	10 95 %
Main circuit	
Number of poles for main current circuit	3
Operating voltage	200.14
rated value	690 V
at AC-3 rated value maximum	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	3.2 A
Operating current	
• at AC-3	
— at 400 V rated value	3.2 A
Operating power	
• at AC-3	
— at 230 V rated value	550 W
— at 400 V rated value	1 100 W
— at 500 V rated value	1 500 W
— at 690 V rated value	2 200 W
Operating frequency	
• at AC-3 maximum	15 1/h
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
-	
Protective and monitoring functions	
Product function	

 Ground fault detection 	No
Phase failure detection	No
Operational short-circuit current breaking capacity	
(Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	100 kA
• at 500 V rated value	100 kA
• at 690 V rated value	10 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
 at AC at 500 V rated value 	100 kA
• at AC at 690 V rated value	10 kA
Breaking capacity short-circuit current (Icn)	
• at 1 current path at DC at 150 V rated value	10 kA
• with 2 current paths in series at DC at 300 V	10 kA
rated value	
 with 3 current paths in series at DC at 450 V 	10 kA
rated value	
Response value current	
 of instantaneous short-circuit trip unit 	42 A
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	3.2 A
	3.2 A 3.2 A
• at 480 V rated value	
 at 480 V rated value at 600 V rated value	
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp]	
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor 	3.2 A
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 	3.2 A 0.1 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value 	3.2 A 0.1 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor 	3.2 A 0.1 hp 0.25 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value 	3.2 A 0.1 hp 0.25 hp 0.5 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp 2 hp
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value for three-phase AC motor at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp 2 hp Yes
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit protection of the main circuit 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp 2 hp Yes magnetic
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit protection of the main circuit at 400 ∨ 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp 2 hp Yes magnetic gL/gG 25 A
 at 480 V rated value at 600 V rated value Yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for three-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit protection of the main circuit 	3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 1.5 hp 2 hp Yes magnetic

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	97 mm		
Width	45 mm		
Depth	97 mm		
Required spacing			
 with side-by-side mounting 			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	0 mm		
 for grounded parts 			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— at the side	30 mm		
— downwards	50 mm		
 for live parts 			
— forwards	0 mm		
— Backwards	0 mm		
— upwards	50 mm		
— downwards	50 mm		
— at the side	30 mm		
Connections/Terminals			
Product function			
 removable terminal for auxiliary and control circuit 	No		
Type of electrical connection			
• for main current circuit	screw-type terminals		
Arrangement of electrical connectors for main current circuit	Top and bottom		
Type of connectable conductor cross-sections			
• for main contacts			
— single or multi-stranded	2x (0,75 2,5 mm²), 2x 4 mm²		
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
• at AWG conductors for main contacts	2x (18 14), 2x 12		
Tightening torque			
 for main contacts with screw-type terminals 	0.8 1.2 N·m		
Design of screwdriver shaft	Diameter 5 to 6 mm		

Size of the screwdriver tip		Pozidriv 2		
Design of the thread of the connection	screw			
 for main contacts 		M3		
afety related data				
B10 value				
 with high demand rate acc. to St 	N 31920	5 000		
Proportion of dangerous failures				
 with low demand rate acc. to SN 	31920	50 %		
 with high demand rate acc. to St 	N 31920	50 %		
Failure rate [FIT]				
 with low demand rate acc. to SN 	1 31920	50 FIT		
Γ1 value for proof test interval or servi EC 61508	ce life acc. to	10 y		
Display version				
 for switching status 		Handle		
General Product Approval		гпг	((Miscellaneous
		EHC	EG-Konf.	Miscellaneous
CCC CSA	Marine / S	6116	EG-Konf.	Miscellaneous
	Marine / S	6116	EG-Konf.	Miscellaneous PRS
CCC Image: Constraint of the second seco	Marine / S	hipping	Lloyd's Kegister	Miscellaneous Prs Railway
Test Certificates Type Test Certific- ates/Test Report Special Test Certific- ficate	Marine / S	hipping	Lloyd's Kegister	PRS
Test Certificates Type Test Certific- ates/Test Report Special Test Certific- ficate	Marine / S	hipping UREAU VERITAS Other Confirmation	LRS	PRS

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2311-1DC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1DC10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1DC10 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1DC10&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1DC10/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1DC10&objecttype=14&gridview=view1







