SIEMENS

Data sheet

3RV2331-4VC10



CIRCUIT BREAKER, SIZE S2, FOR STARTER COMBINATION, RATED CURRENT 45A, N-RELEASE 650A, SCREW TERMINAL, STANDARD BREAKING CAPACITY

Figure similar		
product brand name		SIRIUS
Product designation		3RV2 circuit breaker
General technical data:		
Active power loss total typical	W	17
Insulation voltage	_	
 with degree of pollution 3 Rated value 	V	690
Shock resistance		
• acc. to IEC 60068-2-27		25g / 11 ms Sinus
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)	-	
 of the main contacts typical 		50 000
 of the auxiliary contacts typical 		50 000
Electrical endurance (switching cycles)	-	
• typical		50 000
Size of contactor can be combined company-specific	-	S2
Protection class IP	_	
• on the front		IP20
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 81346-2		Q
Main circuit:		
Number of poles for main current circuit		3
Operating voltage		

at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating current Rated value	A	45
Operating current		
• at AC-3		45
— at 400 V Rated value	A	45
Operating power		
• at AC-3		44.000
— at 230 V Rated value	W	11 000
— at 400 V Rated value	W	22 000
— at 500 V Rated value	W	30 000
— at 690 V Rated value	W	37 000
Operating frequency		
● at AC-3 maximum	1/h	15
Auxiliary circuit:		
Product expansion Auxiliary switch		Yes
Protective and monitoring functions:		
Operational short-circuit current breaking capacity		
(Ics) with AC		
• at 240 V Rated value	А	100
• at 400 V Rated value	kA	30
• at 500 V Rated value	kA	5
• at 690 V Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
 with AC at 240 V Rated value 	kA	100
 with AC at 400 V Rated value 	kA	65
 with AC at 500 V Rated value 	kA	10
 with AC at 690 V Rated value 	kA	4
Response value current of the instantaneous short-	А	650
circuit release		
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	45
• at 600 V Rated value	А	45
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated 	metric	3
value	hp	
 for single-phase AC motor at 230 V Rated 	metric	10
value	hp	
• for three-phase AC motor at 200/208 V Rated	metric	15
value	hp	

 for three-phase AC motor at 220/230 V Rated value 	metric hp	15
 for three-phase AC motor at 460/480 V Rated value 	metric hp	40
 for three-phase AC motor at 575/600 V Rated value 	metric hp	50

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 240 V	none required
• at 400 V	125
• at 500 V	100
• at 690 V	80

mounting position		any
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	mm	140
Width	mm	55
Depth	mm	149
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	10
— downwards	mm	50
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	50
— downwards	mm	50
— at the side	mm	10

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 25 mm²), 1x (1 35 mm²)
 finely stranded with core end processing 		2x (1 16 mm²), 1x (1 25 mm²)
 for AWG conductors for main contacts 		2x (18 3), 1x (18 2)
Tightening torque	_	
 for main contacts with screw-type terminals 	N∙m	3 4.5
Design of screwdriver shaft	-	Diameter 5 to 6 mm
Design of the thread of the connection screw		
 for main contacts 		M6
Safety related data:		
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
Mechanical data:		
Size of the circuit-breaker		S2
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
	_	
Ambient temperature		
• double a subscription	°C	
during operation	°C	-20 +60
during storage	°C	-50 +80
 during storage during transport	°C °C	-50 +80 -50 +80
during storage	°C	-50 +80
 during storage during transport	°C °C	-50 +80 -50 +80
 during storage during transport Relative humidity during operation	°C °C	-50 +80 -50 +80
 during storage during transport Relative humidity during operation Display:	°C °C	-50 +80 -50 +80

General Product Approval

other

Confirmation

Environmental Confirmations

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

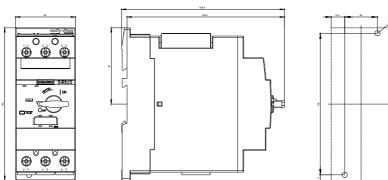
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

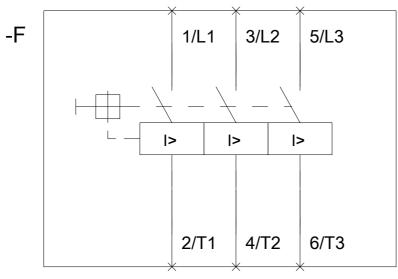
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV23314VC10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV23314VC10/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=3RV23314VC10&lang=en





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