SIEMENS

Data sheet

3RV2131-4WA10



CIRCUIT BREAKER, SIZE S2, FOR MOTOR PROTECTION, CLASS 10, W. OVERLOAD RELAY FUNCTION A-RELEASE 42...52A, N-RELEASE 741A, 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
Temperature compensation	°C	-20 +60
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
Adjustable response value current of the current-	А	42 52
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 current Rated value	A	52
Operating current	-	
• at AC-3		
— at 400 V Rated value	А	52
Operating power		
• at AC-3		
— at 230 V Rated value	W	15 000
— at 500 V Rated value	W	30 000
— at 690 V Rated value	W	45 000
Operating frequency		
• at AC-3 maximum	1/h	15
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— Note		1
Number of NO contacts		
 for auxiliary contacts 		
— Note		1
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		
• at 240 V Rated value	А	100
• at 400 V Rated value	kA	30
• at 500 V Rated value	kA	4
• 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	8
• with AC at 690 V Rated value	kA	4
Response value current of the instantaneous short- circuit release	A	741
LIL /CCA rational		

UL/CSA ratings:

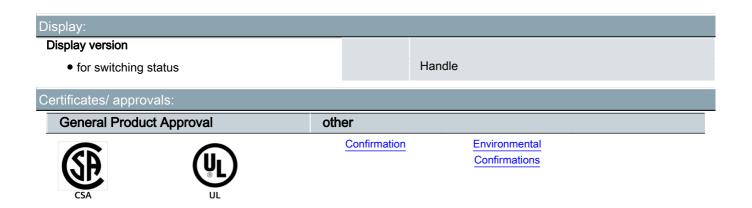
Full-load current (FLA) for three-phase AC motor

• at 480 V Rated value	А	52
• at 600 V Rated value	А	52
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	5
 for single-phase AC motor at 230 V Rated value 	metric hp	10
 for three-phase AC motor at 200/208 V Rated value 	metric hp	15
 for three-phase AC motor at 220/230 V Rated value 	metric hp	20
 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	160
• at 500 V	125
• at 690 V	100

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	140		
Width	mm	75		
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
 for auxiliary and control current circuit 		screw-type terminals
Arrangement of electrical connectors for main current	-	Top and bottom
circuit		
Product function		
 removable terminal for auxiliary and control 		No
circuit		
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		2x (1 35 mm²), 1x (1 50 mm²)
 — finely stranded with core end processing 		2x (1 25 mm²), 1x (1 35 mm²)
 for AWG conductors for main contacts 		2x (18 2), 1x (18 1)
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
 of the auxiliary and control contacts 		M3
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		\$2
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



Further information

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

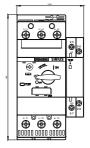
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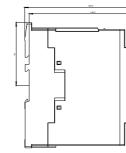
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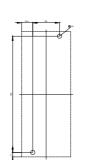
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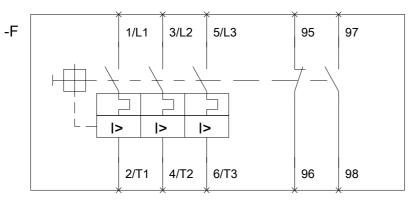
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV21314WA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV21314WA10&lang=en









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