SIEMENS

Data sheet 3RV2131-4SA10



CIRCUIT BREAKER, SIZE S2, FOR MOTOR PROTECTION, CLASS 10, W. OVERLOAD RELAY FUNCTION A-RELEASE 9.5...14A, N-RELEASE 208A, STANDARD BREAKING CAPACITY

Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:		
Active power loss total typical	W	10
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-	Α	9.5 14
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	Α	14
Operating current		
• at AC-3		
— at 400 V Rated value	Α	14
Operating power		
● at AC-3		
— at 230 V Rated value	W	3 000
— at 400 V Rated value	W	5 500
— at 500 V Rated value	W	7 500
— at 690 V Rated value	W	11 000
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	Α	100
	kA	30
at 400 V Rated value at 500 V Rated value	kA	6
at 500 V Rated value	kA kA	3
at 690 V Rated value Maximum about circuit current breaking canceity (lay)	KA	3
Maximum short-circuit current breaking capacity (Icu)	kΛ	100
with AC at 400 V Rated value	kA	100
with AC at 400 V Rated value	kA	65
with AC at 500 V Rated value	kA	12
with AC at 690 V Rated value	kA	5
Response value current of the instantaneous short- circuit release	Α	208
UL/CSA ratings:		

Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	14
• at 600 V Rated value	Α	14
yielded mechanical performance [hp]		
● for single-phase AC motor at 110/120 V Rated value	metric hp	1.5
 for single-phase AC motor at 230 V Rated value 	metric hp	3
• for three-phase AC motor at 200/208 V Rated value	metric hp	5
● for three-phase AC motor at 220/230 V Rated value	metric hp	5
● for three-phase AC motor at 460/480 V Rated value	metric hp	10
• for three-phase AC motor at 575/600 V Rated value	metric hp	15

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	100
● at 500 V	80
● at 690 V	63

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	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
nections/ Terminals:		

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 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
 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	S2
Ambient conditions:	

m	2 000
°C	-20 +60
°C	-50 + 80
°C	-50 + 80
	°C

Relative humidity during operation	%	10 95
Display:		
Display version		
• for switching status		Handle

Certificates/ approvals:

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=3RV21314SA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV21314SA10/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=3RV21314SA10&lang=en







