SIEMENS

Data sheet 3RV2031-4KA10

CIRCUIT BREAKER SIZE S2, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 62...73A, N-RELEASE 949A, SCREW TERMINAL, STANDARD BREAKING CAPACITY



Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:	
Size of the circuit-breaker	S2
Size of contactor can be combined company-specific	S2
Product extension	
Auxiliary switch	Yes
Power loss [W] total typical	21 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	IP00

acc. to IEC 60068-2-27 Because IEC (switching cycles) of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical of auxiliary contacts typical et ypical Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Rembient conditions: Installation altitude at height above sea level maximum Ambient temperature of during operation of during storage of during transport -50 +80 °C -50 +80 °C Temperature compensation -20 +60 °C Relative humidity during operation 10 95 %	Shock resistance	
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— at 400 V rated value 37 000 W — at 500 V rated value 45 000 W — at 690 V rated value 55 000 W		22 000 W
— at 500 V rated value 45 000 W — at 690 V rated value 55 000 W		
— at 690 V rated value 55 000 W		
a. 555 / 1805 / 1806		
operating inequality		55 555 W
• at AC-3 maximum 15 1/h		15 1/h
• at AC-5 maximum	- at AC-3 maximum	10 m
	Protective and monitoring functions:	
Trip class 10	Trip class	Class 10
Design of the overload release thermal		

Operational short-circuit current breaking capacity	
(Ics) at AC	
• at 240 V rated value	65 kA
• at 400 V rated value	30 kA
• at 500 V rated value	5 kA
• at 690 V rated value	2 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	65 kA
• at AC at 400 V rated value	65 kA
• at AC at 500 V rated value	8 kA
• at AC at 690 V rated value	4 kA
• at 480 AC Y/277 V acc. to UL 489 rated value	20 A
UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	
● at 480 V rated value	65 A
• at 600 V rated value	62 A
Yielded mechanical performance [hp]	
 for three-phase AC motor 	
▼ ioi tiliee-pilase AC filotoi	
— at 200/208 V rated value	20 hp
·	20 hp 25 hp
— at 200/208 V rated value	·
— at 200/208 V rated value— at 220/230 V rated value	25 hp
at 200/208 V rated valueat 220/230 V rated valueat 460/480 V rated value	25 hp 50 hp

magnetic
none required
160
125
100

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	140 mm
Width	55 mm
Depth	149 mm
Required spacing	
with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm

50 mm
50 mm
0 mm
0 mm
0 mm
50 mm
10 mm
50 mm
0 mm
0 mm
50 mm
50 mm
10 mm

Connections/ Terminals:	
Product function	
removable terminal for auxiliary and control	No
circuit	
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 (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
 at AWG conductors for main contacts 	2x (18 2), 1x (18 1)
Tightening torque	
 for main contacts with screw-type terminals 	3 4.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M6

Safety related data:	
B10 value	
 with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	50 %
Failure rate [FIT]	
• with low demand rate acc. to SN 31920	50 FIT

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

Display version

• for switching status

Handle

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates

Conformity

Typprüfbescheinigu

ng/Werkszeugnis

other	Railway

Umweltbestätigung Schwingen/Schocke

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Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV20314KA10

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV20314KA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20314KA10&lang=en



