SIEMENS

Data sheet 3RV1011-1DA10

Circuit breaker size S00 for motor protection, CLASS 10 A-release 2.2...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 motor protection
Product type designation	3RV1

• on the front	IP20
• of the terminal	IP00
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
Type of protection	Increased safety
Certificate of suitability ATEX	Yes
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
Ambient temperature	
 during operation 	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
Temperature compensation	-20 +60 °C
Relative humidity during operation	10 95 %
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	2.2 3.2 A
dependent overload release	
Operating voltage	
• 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	
Operating frequency ■ at AC-3 maximum	15 1/h

Number of CO contacts	
• for auxiliary contacts	0
Protective and monitoring functions	
Product function	
Ground fault detection	No
Phase failure detection	Yes
Trip class	CLASS 10
Design of the overload release	thermal
Operational short-circuit current breaking capacity	
(Ics) at AC	
• at 240 V rated value	100 000 A
• at 400 V rated value	100 000 A
• at 500 V rated value	3 000 A
• at 690 V rated value	2 000 A
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	3 kA
• at AC at 690 V rated value	2 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 rated value 	10 kA
 with 3 current paths in series at DC at 450 V rated value 	10 kA
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
• at 600 V rated value	3.2 A
Yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.1 hp
— at 230 V rated value	0.25 hp
• for three-phase AC motor	
— at 200/208 V rated value	0.5 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	1.5 hp
— at 575/600 V rated value	2 hp

Short-circuit protection

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	gL/gG 40 A
● at 500 V	gL/gG 35 A
● at 690 V	gL/gG 35 A

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	90 mm	
Width	45 mm	
Depth	75 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	Top and bottom
circuit	
Type of connectable conductor cross-sections	
• for main contacts	
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
 single or multi-stranded 	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
Tightening torque	
 for main contacts with screw-type terminals 	0.8 1.2 N·m
• for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
Size of the screwdriver tip	Pozidriv 2
Design of the thread of the connection screw	
• for main contacts	M3

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 	50 %
• with high demand rate acc. to SN 31920	50 %

Failure rate [FIT]

• with low demand rate acc. to SN 31920

50 FIT

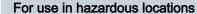
Display version

• for switching status

Rocker switch

Certificates/approvals

General Product Approval















IECEx

Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping

other









Miscellaneous

Confirmation

other



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=3RV1011-1DA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1DA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1DA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1DA10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1DA10&objecttype=14&gridview=view1

