SIEMENS

Data sheet 3RV1011-0HA10

Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.55...0.8 A N-release 10 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

General technical data	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product extension	
Auxiliary switch	Yes
Power loss [W] total typical	5 W
Power loss [W] for rated value of the current	
 at AC in hot operating state per pole 	1.8 W
Insulation voltage with degree of pollution 3 rated value	690 V
	0137
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between main and auxiliary circuit 	400 V

Protection class IP • on the front of the terminal Mechanical service life (switching cycles) • of the main contacts typical of auxiliary contacts typical 100 000 Electrical endurance (switching cycles) • typical 100 000 Type of protection according to ATEX directive 2014/34/EU Certificate of suitability according to ATEX directive 2014/34/EU Protection against electrical shock Reference code acc. to DIN EN 81346-2 OARnbient conditions Installation altitude at height above sea level • maximum Ambient temperature • during operation • during storage • during transport • during transport Adjustable pick-up value current of the current-dependent overload release Operating requesty rated value • rated value • at AC-3 at 400 V rated value — at 300 V rated value — at 400 V rated value — at 500 W rated value — at 400 V rated value — at 500 W rated value — at 500 W rated value — at 500 V rated value — at 500 W rated value	 in networks with grounded star point between main and auxiliary circuit 	400 V
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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-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value Operating current rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value 120 W — at 400 V rated value 180 W	during storage	-50 +80 °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-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value Operating current rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value 120 W — at 400 V rated value 180 W	during transport	-50 +80 °C
Main circuit Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value Operating current rated value Operating current rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value 120 W — at 400 V rated value 180 W	Temperature compensation	-20 +60 °C
Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value 180 W	Relative humidity during operation	10 95 %
Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value 180 W	Main circuit	
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Operating current ● at AC-3 — at 400 V rated value 0.8 A Operating power ● at AC-3 — at 230 V rated value 120 W — at 400 V rated value 180 W	Operating frequency rated value	50 60 Hz
 at AC-3 at 400 V rated value Operating power at AC-3 at 230 V rated value at 400 V rated value 120 W at 400 V rated value 180 W 	Operating current rated value	0.8 A
— at 400 V rated value 0.8 A Operating power • at AC-3 — at 230 V rated value 120 W — at 400 V rated value 180 W	Operating current	
Operating power ■ at AC-3 — at 230 V rated value — at 400 V rated value 180 W	• at AC-3	
 at AC-3 at 230 V rated value at 400 V rated value 120 W 180 W 	— at 400 V rated value	0.8 A
 at 230 V rated value at 400 V rated value 120 W 180 W 	Operating power	
— at 400 V rated value 180 W	• at AC-3	
	— at 230 V rated value	120 W
— at 500 V rated value 250 W	— at 400 V rated value	180 W
	— at 500 V rated value	250 W

— at 690 V rated value	370 W
Operating frequency	
• at AC-3 maximum	15 1/h
Auxiliary circuit	
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	400.000.0
• at 240 V rated value	100 000 A
• at 400 V rated value	100 000 A
• at 500 V rated value	100 000 A
● at 690 V rated value	100 000 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	100 kA
• at AC at 690 V rated value	100 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 	10 A
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
● at 480 V rated value	0.8 A
• at 600 V rated value	0.8 A
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	None required
● at 500 V	gL/gG 6 A
● at 690 V	gL/gG 6 A

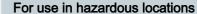
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	90 mm
Width	45 mm
Depth	75 mm

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



LRS







Confirmation

Miscellaneous

other



Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0HA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0HA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0HA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0HA10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0HA10/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0HA10&objecttype=14&gridview=view1

