SIEMENS

Data sheet 3RV2011-1GA40



Circuit breaker size S00 for motor protection, CLASS 10 A-release 4.5...6.3 A N-release 82 A ring cable lug connection Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	7.25 W
at AC in hot operating state per pole	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
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
 between main and auxiliary circuit 	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
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 according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
reference code acc. to IEC 81346-2	Q
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
 ambient temperature during operation 	-20 +60 °C
 ambient temperature during storage 	-50 +80 °C
ambient temperature 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
number of poles for main current circuit	

accurrent dependent eventeed velege	
current-dependent overload release	
 operating voltage rated value 	690 V
operating voltage at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	6.3 A
operational current at AC-3 at 400 V rated value	6.3 A
operating power at AC-3	
 at 230 V rated value 	1 500 W
 at 400 V rated value 	2 200 W
 at 500 V rated value 	3 000 W
at 690 V rated value	4 000 W
operating frequency at AC-3 maximum	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
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
breaking capacity operating short-circuit current (Ics)	tiletillai
at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	100 kA
• at 500 V rated value	100 kA
• at 690 V rated value	4 kA
breaking capacity maximum short-circuit current (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 	6 kA
response value current of instantaneous short-circuit trip unit	82 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	6.3 A
• at 600 V rated value	6.3 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	
• IOI 3-prid3C AO motor	
— at 200/208 V rated value	1 hp
— at 200/208 V rated value	1 hp
•	1.5 hp
at 200/208 V rated valueat 220/230 V rated value	1.5 hp 3 hp
 at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 	1.5 hp
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection	1.5 hp 3 hp
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection product function short circuit protection	1.5 hp 3 hp 5 hp
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit	1.5 hp 3 hp 5 hp
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	1.5 hp 3 hp 5 hp Yes magnetic
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit • at 400 V	1.5 hp 3 hp 5 hp Yes magnetic gL/gG 50 A
- at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit • at 400 V • at 500 V	1.5 hp 3 hp 5 hp Yes magnetic gL/gG 50 A gL/gG 40 A
— at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit • at 400 V • at 500 V • at 690 V	1.5 hp 3 hp 5 hp Yes magnetic gL/gG 50 A
- at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit • at 400 V • at 500 V	1.5 hp 3 hp 5 hp Yes magnetic gL/gG 50 A gL/gG 40 A



fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
• for grounded parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	·
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	O THIN
— downwards	30 mm
— upwards	30 mm
— upwards — at the side	9 mm
at the side for grounded parts at 690 V	J IIIII
	E0 mm
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
product function removable terminal for auxiliary and control circuit	No
type of electrical connection	
 for main current circuit 	
	Ring cable lug connection
for auxiliary and control circuit	ring cable connection
for auxiliary and control circuit arrangement of electrical connectors for main current circuit	
• for auxiliary and control circuit arrangement of electrical connectors for main current	ring cable connection
for auxiliary and control circuit arrangement of electrical connectors for main current circuit	ring cable connection
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug	ring cable connection Top and bottom
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug	ring cable connection Top and bottom 0.8 1.2 N·m
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque for main contacts for ring cable lug for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque for main contacts for ring cable lug for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque for main contacts for ring cable lug for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque for main contacts for ring cable lug for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts of the auxiliary and control contacts Safety related data B10 value	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts Safety related data B10 value • with high demand rate acc. to SN 31920	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque for main contacts for ring cable lug for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts of the auxiliary and control contacts Safety related data B10 value	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts Safety related data B10 value • with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3 M3
for auxiliary and control circuit arrangement of electrical connectors for main current circuit tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts Safety related data B10 value • with high demand rate acc. to SN 31920 proportion of dangerous failures	ring cable connection Top and bottom 0.8 1.2 N·m 1.2 0.8 N·m 7.5 mm Diameter 5 to 6 mm Size 2 and Pozidriv 2 M3 M3 5 000



10 y T1 value for proof test interval or service life acc. to **IEC 61508** protection class IP on the front acc. to IEC 60529 IP00 display version for switching status Handle

Certificates/ approvals

General Product Approval

For use in hazardous locations













For use in
hazardous
locations

Declaration of Conformity

Test Certificates

Marine / Shipping





Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping













other

Railway

Confirmation



Confirmation

Vibration and Shock

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-1GA40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1GA40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1GA40&lang=en

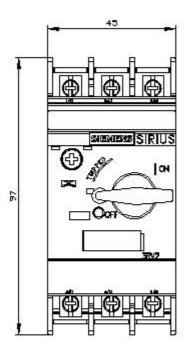
Characteristic: Tripping characteristics, I2t, Let-through current

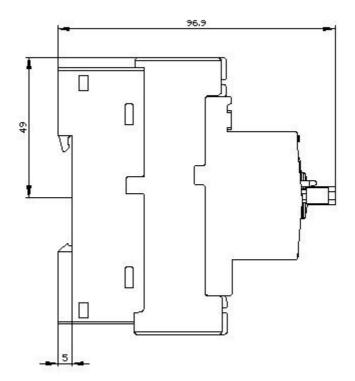
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1GA40/char

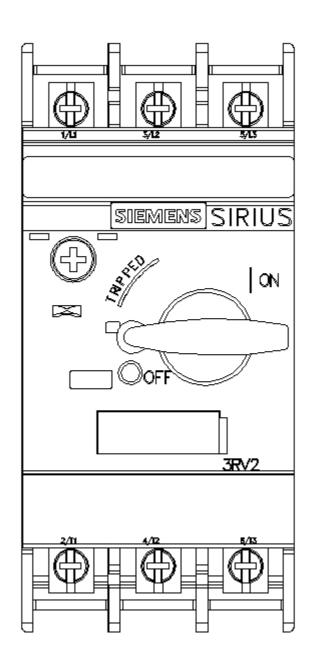
Further characteristics (e.g. electrical endurance, switching frequency)

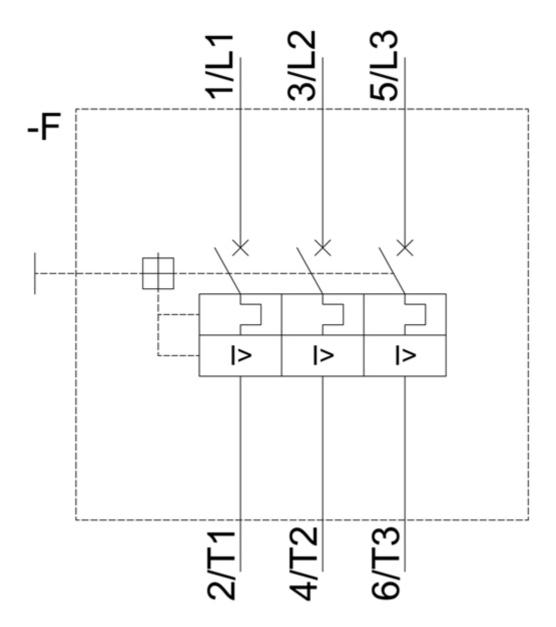
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1GA40&objecttype=14&gridview=view1











last modified: 12/9/2020 🖸