

Circuit breaker size S00 for motor protection, CLASS 10 A-release
0.35...0.5 A N-release 6.5 A screw terminal Standard switching
capacity with transverse auxiliary switches 1 NO+1 NC



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] total typical	5 W
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
• in networks with grounded star point between main and auxiliary circuit	400 V
Protection class IP	
• on the front	IP20
• of the terminal	IP20

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
Certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
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
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	0.35 ... 0.5 A
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	0.5 A
Operating current	
• at AC-3	
— at 400 V rated value	0.5 A
Operating power	
• at AC-3	
— at 230 V rated value	60 W
— at 400 V rated value	120 W
— at 500 V rated value	120 W
— at 690 V rated value	180 W
Operating frequency	
• at AC-3 maximum	15 1/h
Auxiliary circuit	
Design of the auxiliary switch	transverse
Number of NC contacts for auxiliary contacts	1
Number of NO contacts for auxiliary contacts	1
Number of CO contacts	
• for auxiliary contacts	0

Operating current of auxiliary contacts at AC-15	<ul style="list-style-type: none"> • at 24 V • at 120 V • at 125 V • at 230 V 	2 A 0.5 A 0.5 A 0.5 A
Operating current of auxiliary contacts at DC-13	<ul style="list-style-type: none"> • at 24 V • at 60 V 	1 A 0.15 A
Protective and monitoring functions		
Product function		
<ul style="list-style-type: none"> • Ground fault detection • Phase failure detection 	No Yes	
Trip class	CLASS 10	
Design of the overload release	thermal	
Operational short-circuit current breaking capacity (Ics) at AC		
<ul style="list-style-type: none"> • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value 	100 kA 100 kA 100 kA 100 kA	
Maximum short-circuit current breaking capacity (Icu)		
<ul style="list-style-type: none"> • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value 	100 kA 100 kA 100 kA 100 kA	
Breaking capacity short-circuit current (Icn)		
<ul style="list-style-type: none"> • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value 	10 kA 10 kA 10 kA	
Response value current		
<ul style="list-style-type: none"> • of instantaneous short-circuit trip unit 	6.5 A	
UL/CSA ratings		
Full-load current (FLA) for three-phase AC motor		
<ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value 	0.5 A 0.5 A	
Contact rating of auxiliary contacts according to UL	C300 / R300	
Short-circuit protection		
Product function Short circuit protection	Yes	
Design of the short-circuit trip	magnetic	

Design of the fuse link	<ul style="list-style-type: none"> for short-circuit protection of the auxiliary switch required 	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A)
Design of the fuse link for IT network for short-circuit protection of the main circuit	<ul style="list-style-type: none"> at 690 V 	gL/gG 4 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		97 mm
Width		45 mm
Depth		97 mm
Required spacing		
<ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 		0 mm
		0 mm
		50 mm
		50 mm
		0 mm
<ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards 		0 mm
		0 mm
		50 mm
		30 mm
		50 mm
<ul style="list-style-type: none"> for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 		0 mm
		0 mm
		50 mm
		50 mm
		30 mm
Connections/Terminals		
Product function		
<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 		No
Type of electrical connection		
<ul style="list-style-type: none"> for main current circuit for auxiliary and control current circuit 		screw-type terminals
Arrangement of electrical connectors for main current circuit		
		Top and bottom
Type of connectable conductor cross-sections		

<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts 	2x (0,75 ... 2,5 mm ²), 2x 4 mm ² 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (18 ... 14), 2x 12
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • at AWG conductors for auxiliary contacts 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (20 ... 16), 2x (18 ... 14)
Tightening torque	
<ul style="list-style-type: none"> • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Size of the screwdriver tip	Pozidriv 2
Design of the thread of the connection screw	
<ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts 	M3 M3
Safety related data	
B10 value	
<ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	50 % 50 %
Failure rate [FIT]	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version	
<ul style="list-style-type: none"> • for switching status 	Handle
Certificates/approvals	

General Product Approval		For use in hazardous locations
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CCC



CSA



UL

KC



ATEX

For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
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IECEx



EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS

Marine / Shipping					
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BUREAU
VERITAS



LRS



PRS



RINA



RMRS



DNV-GL.COM/AF

other	Railway
Confirmation	Vibration and Shock



VDE

Further information	
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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=3RV2011-0FA15>

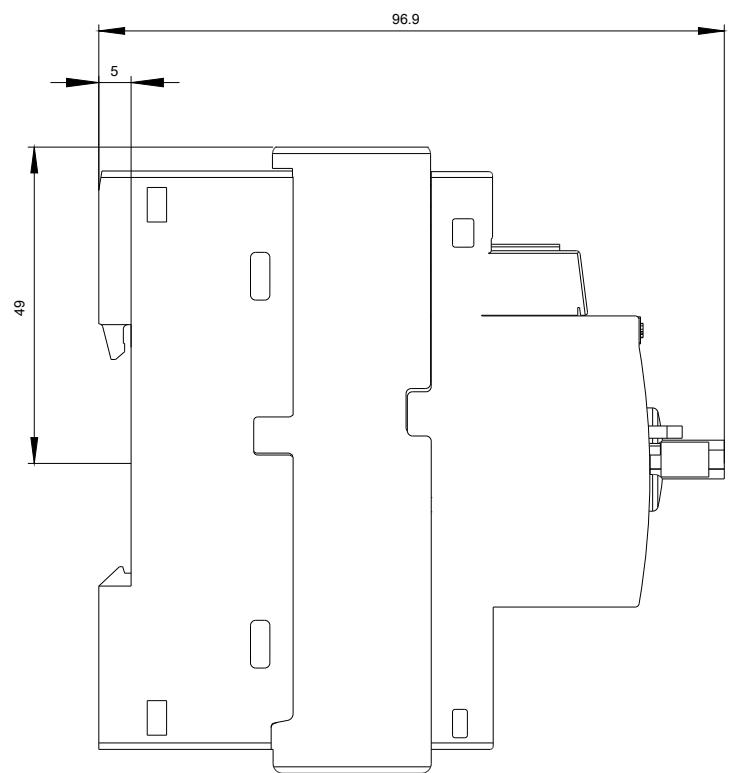
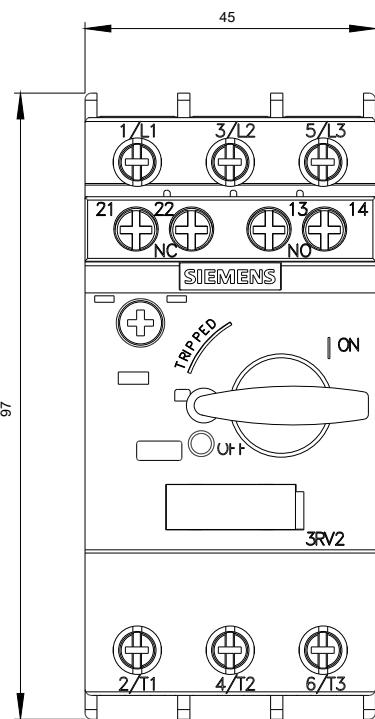
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0FA15>

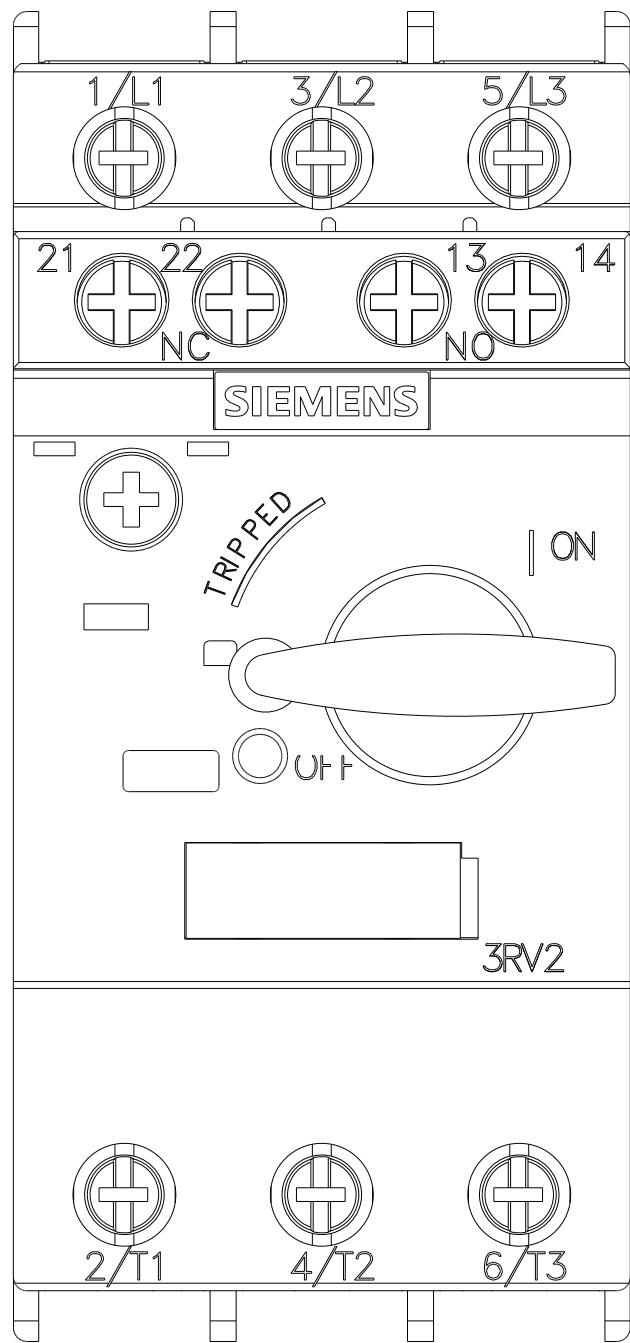
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0FA15>

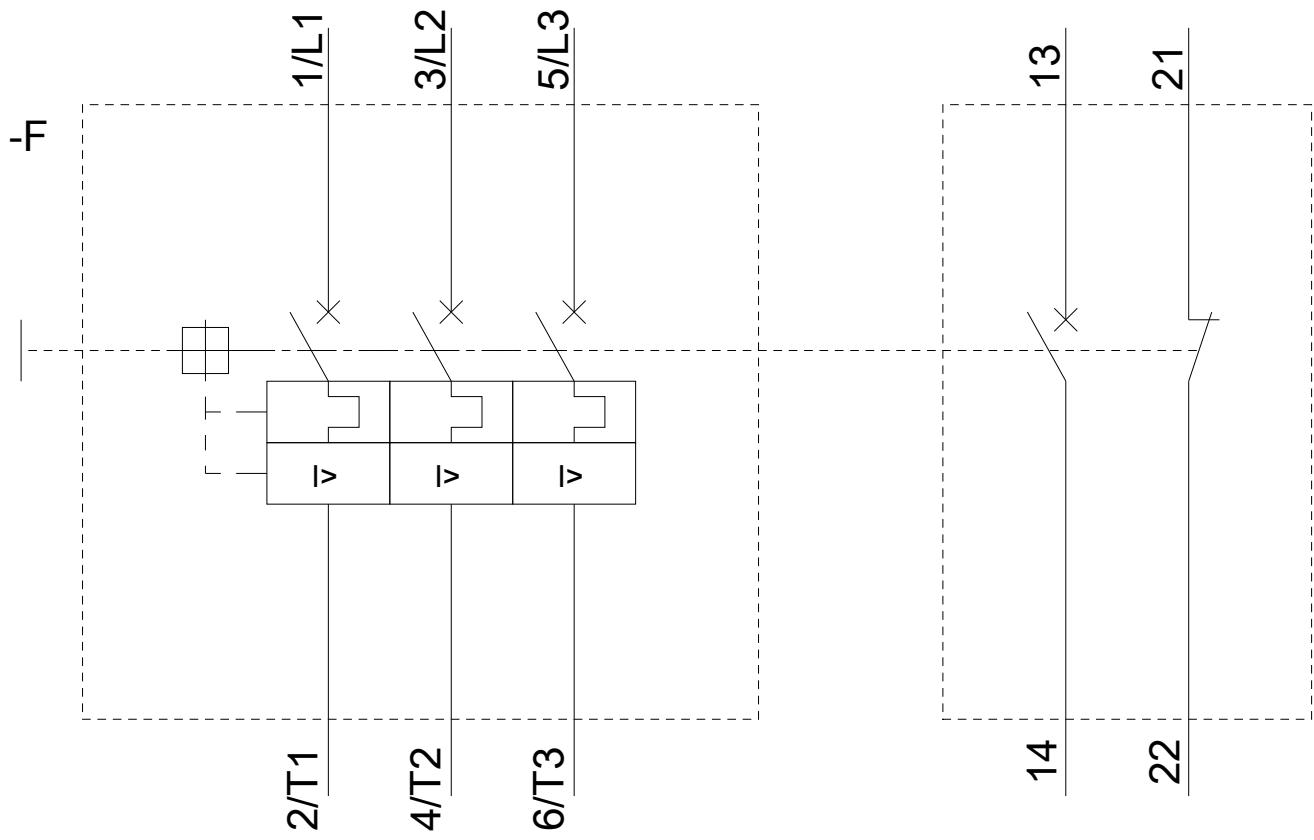
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0FA15&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0FA15/char>

Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0FA15&objecttype=14&gridview=view1>







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