

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.14...0.2A,N-REL.2.6A, SCREW CONNECTION, STANDARD SW. CAPACITY, W. TRANSVERSE AUX. SWITCH 1NO+1NC



product brandname	SIRIUS
Product designation	3RV2 circuit breaker
Design of the product	For motor protection

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
Insulation voltage with degree of pollution 3 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
• 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
Type of protection	Increased safety
Certificate of suitability relating to ATEX	on request
Protection against electrical shock	finger-safe
Equipment marking 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-dependent overload release	0.14 ... 0.2 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	0.2 A
Operating current	
• at AC-3	
— at 400 V rated value	0.2 A
Operating power	
• at AC-3	
— at 230 V rated value	30 W
— at 400 V rated value	60 W
— at 500 V rated value	60 W
— at 690 V rated value	90 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	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	0.15 A

Protective and monitoring functions	
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 kA
• at 400 V rated value	100 kA
• at 500 V rated value	100 kA
• at 690 V rated value	100 kA
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

UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	0.2 A
• at 600 V rated value	0.2 A
Contact rating of auxiliary contacts according to UL	C300 / R300

Short-circuit protection

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)

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	96 mm
Required spacing <ul style="list-style-type: none">• with side-by-side mounting<ul style="list-style-type: none">— forwards 0 mm— Backwards 0 mm— upwards 50 mm— downwards 50 mm— at the side 0 mm• for grounded parts<ul style="list-style-type: none">— forwards 0 mm— Backwards 0 mm— upwards 50 mm— at the side 30 mm— downwards 50 mm• for live parts<ul style="list-style-type: none">— forwards 0 mm— Backwards 0 mm— upwards 50 mm— downwards 50 mm— at the side 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 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 	<p>2x (0,75 ... 2,5 mm²), 2x 4 mm²</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (18 ... 14), 2x 12</p>
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 	<p>2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14)</p>
Tightening torque <ul style="list-style-type: none"> • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 	<p>0.8 ... 1.2 N·m</p> <p>0.8 ... 1.2 N·m</p>
Design of screwdriver shaft	<p>Diameter 5 to 6 mm</p>
Design of the thread of the connection screw <ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts 	<p>M3</p> <p>M3</p>

Safety related data

B10 value <ul style="list-style-type: none"> • with high demand rate acc. to SN 31920 	<p>5 000</p>
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 	<p>50 %</p> <p>50 %</p>
Failure rate [FIT] <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 	<p>50 FIT</p>
T1 value for proof test interval or service life acc. to IEC 61508	<p>10 y</p>
Display version <ul style="list-style-type: none"> • for switching status 	<p>Handle</p>

Certificates/approvals

General Product Approval	For use in hazardous locations
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[KTL](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates	Shipping Approval
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Shipping Approval	other
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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=3RV2011-0BA15>

Cax online generator

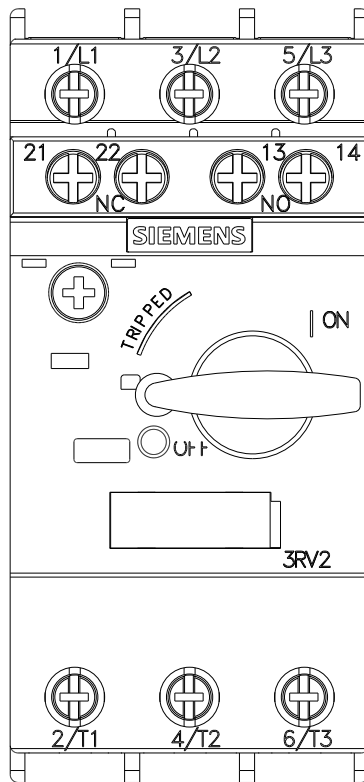
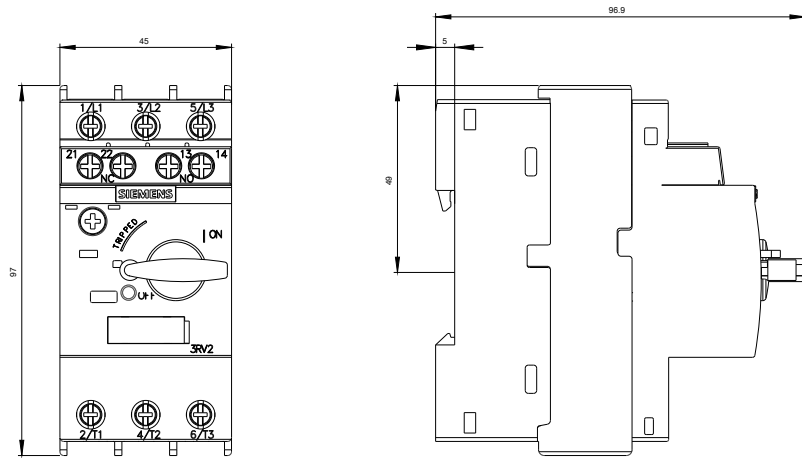
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0BA15>

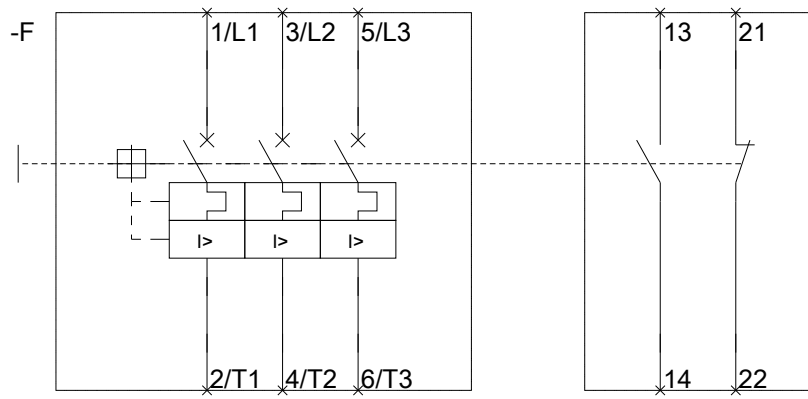
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA15>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0BA15&lang=en





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