



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 7...10A, N-RELEASE 130A, SCREW CONNECTION, STANDARD SW. CAPACITY W. TRANSVERSE AUX. SWITCH 1NO+1NC

product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Active power loss total typical	7 W
Insulation voltage	690 V
• with degree of pollution 3 Rated value	
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of the auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Temperature compensation	-20 ... +60 °C
Size of contactor can be combined company-specific	S2
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Type of protection	Increased safety
Equipment marking	
• acc. to DIN EN 81346-2	Q
Main circuit:	
Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	7 ... 10 A
Operating voltage	

<ul style="list-style-type: none"> • Rated value 	690 V
<ul style="list-style-type: none"> • at AC-3 Rated value maximum 	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	10 A
Operating current	
<ul style="list-style-type: none"> • at AC-3 — at 400 V Rated value 	10 A
Operating frequency	
<ul style="list-style-type: none"> • at AC-3 maximum 	15 1/h

Auxiliary circuit:

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	1
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	1
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Product expansion Auxiliary switch	Yes
Design of the auxiliary switch	transverse
Operating current of the 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 the 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:

Trip class	CLASS 10
Design of the overload circuit breaker	thermal
Operational short-circuit current breaking capacity (Ics) with 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 42 kA 4 kA
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • with AC at 240 V Rated value • with AC at 400 V Rated value • with AC at 500 V Rated value • with AC at 690 V Rated value 	100 kA 100 kA 42 kA 6 kA
Breaking capacity short-circuit current (Icn)	

<ul style="list-style-type: none"> • with 1 current path for DC at 150 V Rated value 	10 kA
<ul style="list-style-type: none"> • with 2 current paths in series for DC at 300 V Rated value 	10 kA
<ul style="list-style-type: none"> • with 3 current paths in series for DC at 450 V Rated value 	10 kA
Response value current of the instantaneous short-circuit release	130 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value 	10 A
<ul style="list-style-type: none"> • at 600 V Rated value 	10 A
Contact rating of the auxiliary contacts acc. to UL	C300 / R300

Short-circuit:

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 400 V 	gL/gG 50 A
<ul style="list-style-type: none"> • at 500 V 	gL/gG 40 A
<ul style="list-style-type: none"> • at 690 V 	gL/gG 40 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 — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards 	0 mm 0 mm 50 mm 50 mm 0 mm 0 mm 0 mm 50 mm 30 mm 50 mm

• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	30 mm

Connections/ Terminals:

Product function	
• removable terminal for auxiliary and control circuit	No
Type of electrical connection	
• for main current circuit	screw-type terminals
• 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-section	
• for main contacts	
— single or multi-stranded	2x (0,75 ... 2,5 mm ²), 2x 4 mm ²
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for main contacts	2x (18 ... 14), 2x 12
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M3
• of the auxiliary and control contacts	M3

Safety related data:

B10 value with high demand rate acc. to SN 31920	50 000
Proportion of dangerous failures	
• with low demand rate acc. to SN 31920	40 %
• with high demand rate acc. to SN 31920	40 %
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Protection against electrical shock	finger-safe

Mechanical data:

Size of the circuit-breaker	S00
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Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
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Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
Relative humidity during operation	10 ... 95 %

Display:

Display version	
• for switching status	Handle

Certificates/ approvals:

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

[Declaration of the Compliance with the order](#)

[Special Test Certificate](#)



Shipping Approval



other

[Confirmation](#)

[Environmental Confirmations](#)



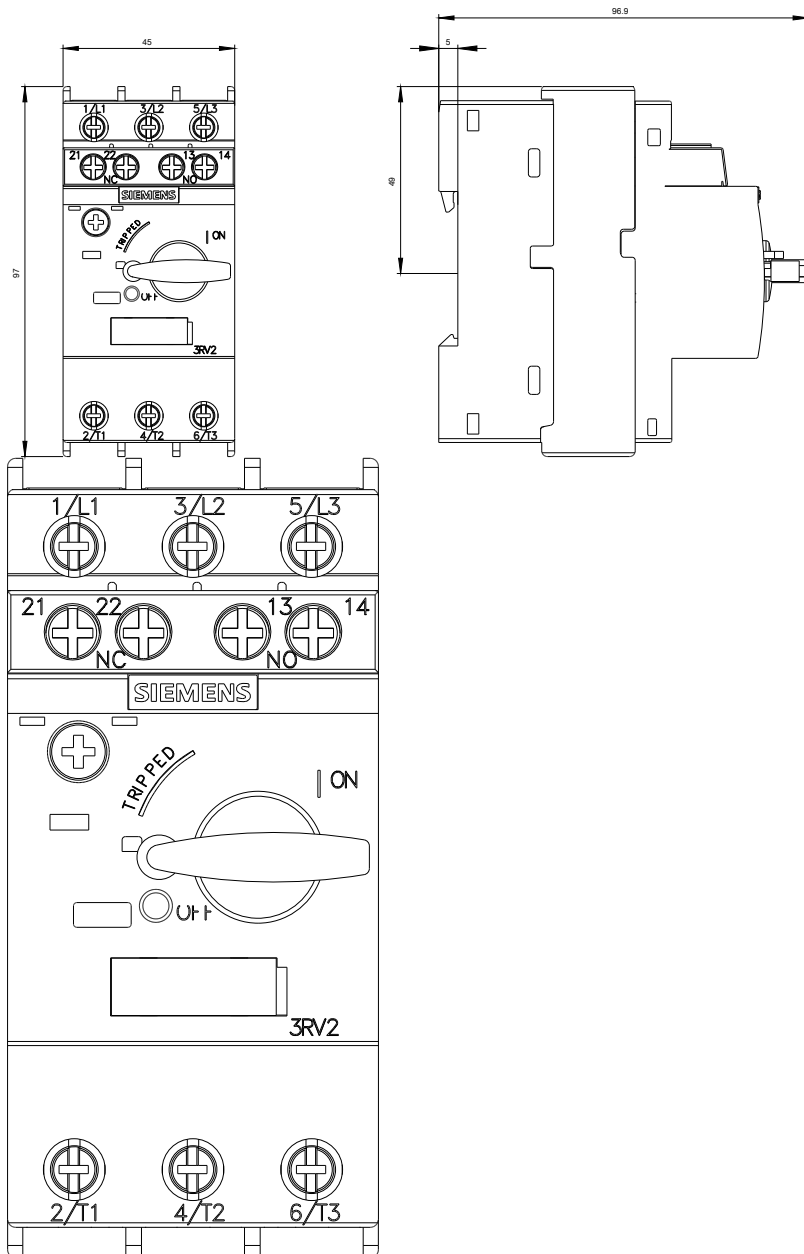
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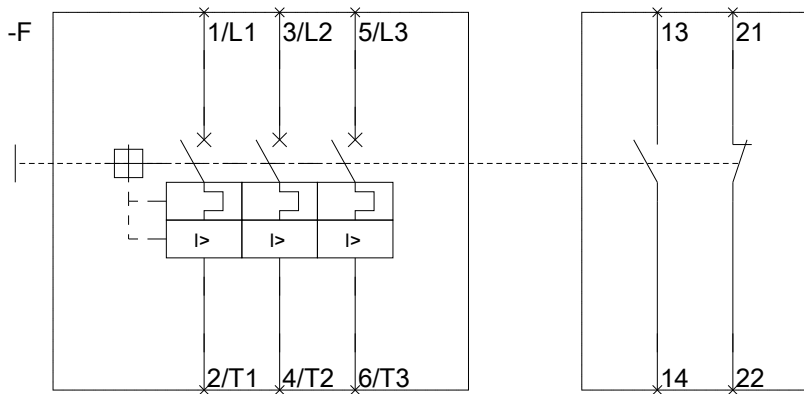
Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)
<http://www.siemens.com/industrymall>

Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20111JA15>





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