



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 9..12.5A, N-RELEASE 163A, SCREW CONNECTION, STANDARD SW. CAPACITY

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	9 ... 12.5 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	12.5 A
Operating current	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value 	12.5 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 	0
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Product expansion Auxiliary switch	Yes

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 • with 2 current paths in series for DC at 300 V Rated value • with 3 current paths in series for DC at 450 V Rated value 	10 kA 10 kA 10 kA
Response value current of the instantaneous short-circuit release	163 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value 	12.5 A

- at 600 V Rated value

12.5 A

Short-circuit:

Design of the short-circuit trip	magnetic
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 63 A
<ul style="list-style-type: none"> • at 500 V 	gL/gG 50 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 	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 	screw-type terminals

Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-section	
<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 • for 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>
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
<ul style="list-style-type: none"> • for main contacts 	M3

Safety related data:

B10 value with high demand rate acc. to SN 31920	50 000
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 	<p>40 %</p> <p>40 %</p>
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
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	<p>-20 ... +60 °C</p> <p>-50 ... +80 °C</p> <p>-50 ... +80 °C</p>
Relative humidity during operation	10 ... 95 %

Display:

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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Declaration of Conformity	Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

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Shipping Approval



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Further information

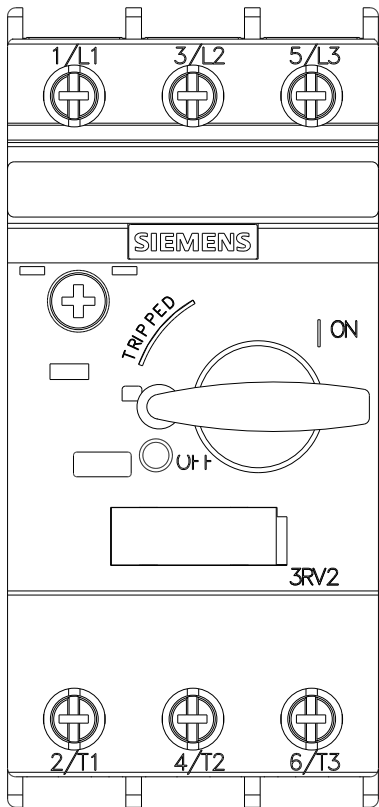
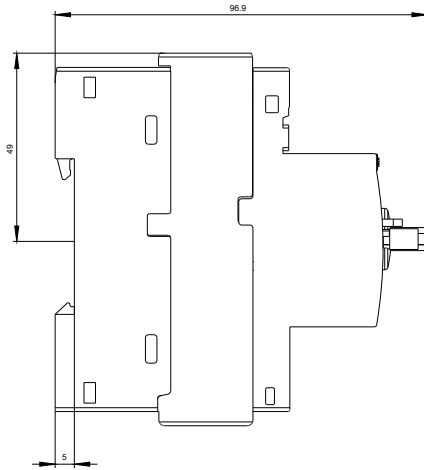
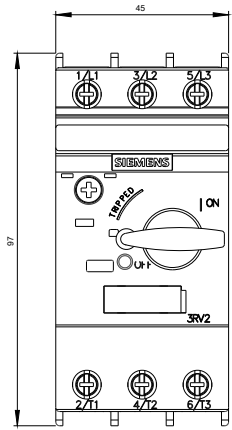
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
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