



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 34...40A, N-RELEASE 480A, SCREW TERMINAL, STANDARD SWITCHING CAPACITY,

product brand name	SIRIUS
Product designation	3RV2 circuit breaker

General technical data:

Size of contactor can be combined company-specific	S00
Product expansion	Yes
• Auxiliary switch	Yes
Active power loss total typical	14 W
Insulation voltage	690 V
• with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	IP20
• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	100 000
• of the main contacts typical	100 000
• of the auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	100 000
• typical	100 000
Temperature compensation	-20 ... +60 °C
Type of protection	Increased safety

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	-20 ... +40 °C
• during operation	-20 ... +40 °C

<ul style="list-style-type: none"> during storage 	-50 ... +80 °C
<ul style="list-style-type: none"> during transport 	-50 ... +80 °C
Relative humidity during operation	10 ... 95 %

Main circuit:

Adjustable response value current of the current-dependent overload release	34 ... 40 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	40 A
Operating current	
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value 	40 A
Operating power	
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> — at 230 V Rated value — at 400 V Rated value — at 500 V Rated value — at 690 V Rated value 	11 000 W 18 500 W 22 000 W 39 000 W
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

Protective and monitoring functions:

Trip class	CLASS 10
Design of the overload circuit breaker	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 10 kA 3 kA 2 kA
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> at AC at 240 V Rated value with AC at 400 V Rated value 	100 kA 20 kA

<ul style="list-style-type: none"> • at AC at 500 V Rated value • at AC at 690 V Rated value 	<p>6 kA</p> <p>3 kA</p>
Breaking capacity short-circuit current (I_{cn}) <ul style="list-style-type: none"> • with 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 	<p>10 kA</p> <p>10 kA</p> <p>10 kA</p>
Response value current of the instantaneous short-circuit release	<p>480 A</p>

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 	<p>40 A</p> <p>40 A</p>
yielded mechanical performance [hp] <ul style="list-style-type: none"> • for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V Rated value — at 230 V Rated value • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V Rated value — at 220/230 V Rated value — at 460/480 V Rated value 	<p>3 hp</p> <p>7.5 hp</p> <p>10 hp</p> <p>10 hp</p> <p>30 hp</p>

Short-circuit:

Design of the short-circuit trip	<p>magnetic</p>
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 • at 500 V • at 690 V 	<p>gL/gG 63 A</p> <p>gL/gG 63 A</p> <p>gL/gG 63 A</p>

Installation/ mounting/ dimensions:

mounting position	<p>any</p>
Mounting type	<p>screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715</p>
Height	<p>97 mm</p>
Width	<p>45 mm</p>
Depth	<p>96 mm</p>
Required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards 	<p>0 mm</p> <p>0 mm</p> <p>70 mm</p> <p>70 mm</p>

— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	70 mm
— at the side	30 mm
— downwards	70 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	70 mm
— downwards	70 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
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 (1 ... 2,5 mm ²), 2x (2,5 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• for AWG conductors for main contacts	2x (16 ... 12), 2x (14 ... 8)
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M4

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

Mechanical data:

Size of the circuit-breaker	S0
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Display:

Display version	
• for switching status	Handle

Certificates/ approvals:

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



CSA

UL

ATEX

EG-Konf.

Test Certificates	Shipping Approval
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ABS



DNV



GL

Shipping Approval	other
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LRS



PRS



RINA



RMRS

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other



VDE

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

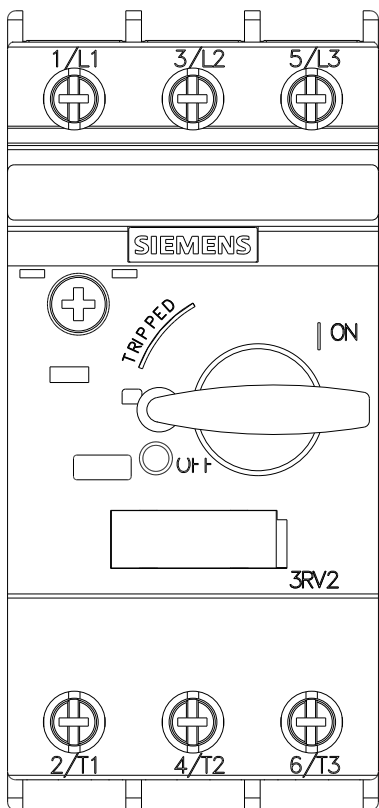
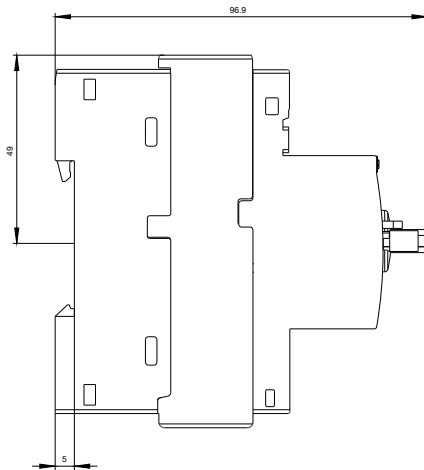
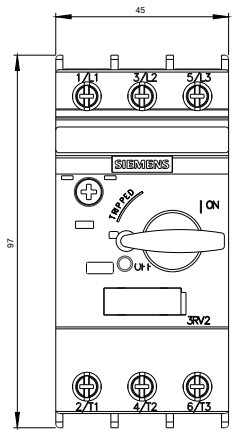
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20214FA10>

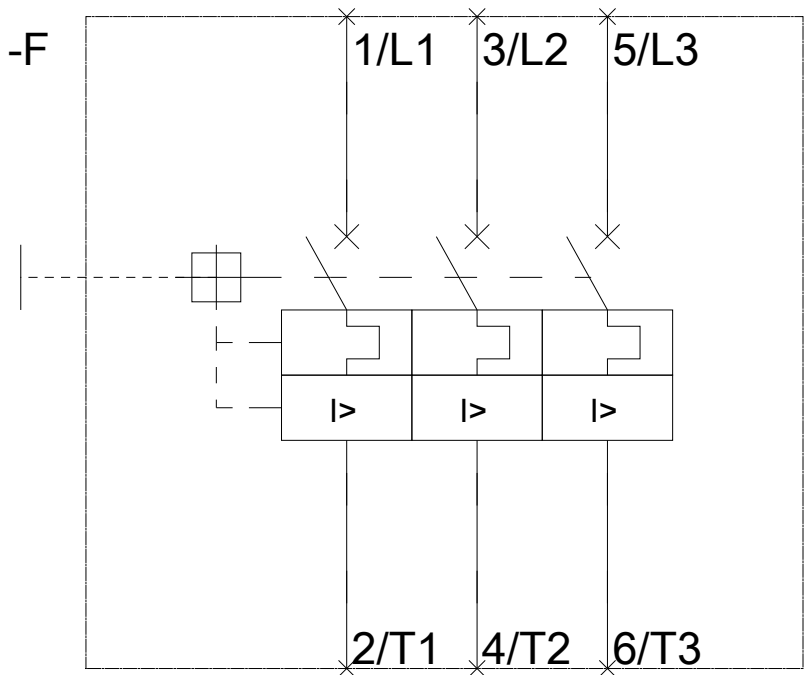
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20214FA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20214FA10&lang=en





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