

CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION,
 RATED CURRENT 25A, N-RELEASE 325A, SCREW
 CONNECTION, STANDARD SW. CAPACITY



product brand name	SIRIUS
Product designation	3RV2 circuit breaker
Design of the product	For starter combinations

General technical data	
Size of the circuit-breaker	S0
Size of contactor can be combined company-specific	S00, S0
Product extension	
• Auxiliary switch	Yes
Power loss [W] total typical	8 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
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
Relative humidity during operation	10 ... 95 %

Main circuit	
Number of poles for main current circuit	3
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	25 A
Operating current	
• at AC-3	
— at 400 V rated value	25 A
Operating power	
• at AC-3	
— at 230 V rated value	5 500 W
— at 400 V rated value	11 000 W
— at 500 V rated value	15 000 W
— at 690 V rated value	22 000 W
Operating frequency	
• at AC-3 maximum	15 1/h

Auxiliary circuit	
Number of NC contacts	
• 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

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 	<p>100 kA</p> <p>25 kA</p> <p>5 kA</p> <p>2 kA</p>
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 	<p>100 kA</p> <p>55 kA</p> <p>10 kA</p> <p>4 kA</p>
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 	<p>10 kA</p> <p>10 kA</p> <p>10 kA</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>25 A</p> <p>25 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>2 hp</p> <p>3 hp</p> <p>5 hp</p> <p>7.5 hp</p> <p>15 hp</p>

Short-circuit protection

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 • at 500 V • at 690 V 	<p>gL/gG 63 A</p> <p>gL/gG 50 A</p> <p>gL/gG 50 A</p>

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 • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	<ul style="list-style-type: none"> 0 mm 0 mm 50 mm 50 mm 0 mm 0 mm 0 mm 50 mm 30 mm 50 mm 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-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 	<ul style="list-style-type: none"> 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² 2x (16 ... 12), 2x (14 ... 8)
Tightening torque	
<ul style="list-style-type: none"> • for main contacts with screw-type terminals 	2 ... 2.5 N·m
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	
<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

Declaration of Conformity



[KTL](#)



Test Certificates

Shipping Approval

[Typprüfbescheinigung/Werkszeugnis](#)

[spezielle Prüfbescheinigung](#)
[n](#)



Shipping Approval

other

Railway



[Bestätigungen](#)

[Umweltbestätigung](#)



[Schwingen/Schocke](#)
[n](#)

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=3RV2321-4DC10>

Cax online generator

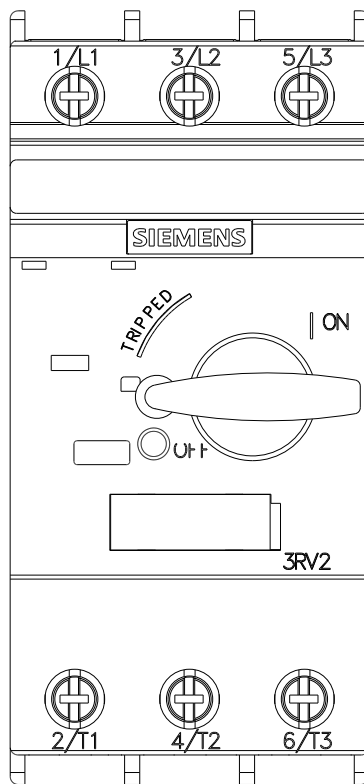
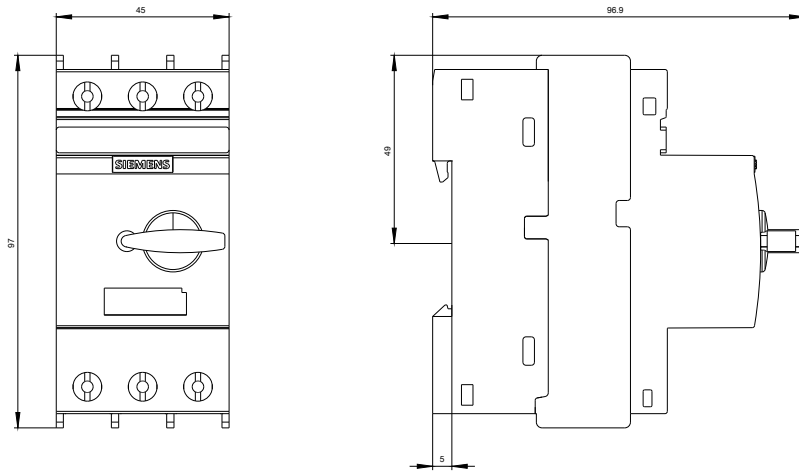
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2321-4DC10>

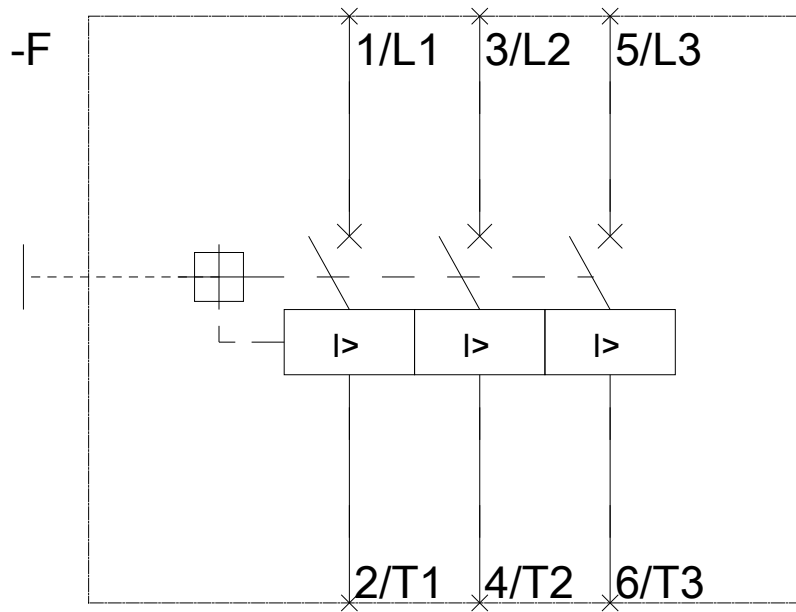
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-4DC10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2321-4DC10&lang=en





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