SIEMENS

Data sheet 3RV2011-0KA10

CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 0.9...1.25A, N-RELEASE16A, SCREW CONNECTION, STANDARD SW. CAPACITY



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

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	6 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
Protection class IP	

• on the front	IP20			
• of the terminal	IP20			
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			
Protection against electrical shock	finger-safe			
Equipment marking acc. to DIN EN 81346-2	Q			
Ambient conditions				
Ambient temperature				
during operation	-20 +60 °C			
during storage	-50 +80 °C			
during transport	-50 +80 °C			
Temperature compensation	-20 +60 °C			
Main circuit				
Number of poles for main current circuit	3			
Adjustable pick-up value current of the current-	0.9 1.25 A			
dependent overload release				
Operating voltage	690 V			
• rated value	690 V			
at AC-3 rated value maximum Operating frequency rated value	50 60 Hz			
Operating current rated value	1.25 A			
Operating current	1.25 / \			
• at AC-3				
— at 400 V rated value	1.25 A			
Operating power				
• at AC-3				
— at 230 V rated value	180 W			
— at 400 V rated value	370 W			
— at 500 V rated value	370 W			
— at 690 V rated value	750 W			
Operating frequency				
• at AC-3 maximum	15 1/h			
Auxiliary circuit				
Number of NC contacts				
• for auxiliary contacts	0			
Number of NO contacts				
• for auxiliary contacts	0			

Number of CO contacts	
• for auxiliary contacts	0
Protective and monitoring functions	
Product function	
Ground fault detection	No
Phase failure detection	Yes
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	1.25 A
• at 600 V rated value	1.25 A
Yielded mechanical performance [hp]	
• for three-phase AC motor	
— at 460/480 V rated value	0.5 hp
— at 575/600 V rated value	0.5 hp
Short-circuit protection	
Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic
Design of the fuse link for IT network for short-circuit protection of the main circuit	
● at 500 V	gL/gG 16 A

• at 690 V

gL/gG 16 A

Mounting type screw and snap-on mounting onto 35 mm standard mounting reaccording to DIN EN 60715 Height 97 mm Width Depth 96 mm Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side • for grounded parts — for grounded parts — forwards — at the side • o mm • for grounded parts — forwards — backwards — upwards — at the side — o mm • for live parts • for live parts — forwards — Backwards — Backwards — upwards — downwards • for live parts — forwards — forwards — Backwards — downwards • for live parts — forwards — downwards • for live parts — forwards — downwards — backwards — downwards — at the side — at the side — at the side — at the side — downwards — downwards — downwards — downwards — downwards — at the side —	Mounting position	any			
Height 97 mm Width 97 mm Width 96 mm Required spacing • with side-by-side mounting — forwards 0 mm — at the side 0 mm • for grounded parts — forwards 0 mm • for grounded parts — forwards 0 mm • for grounded parts — forwards 0 mm — upwards 50 mm • for grounded parts — forwards 0 mm • for grounded parts — forwards 0 mm — at the side 30 mm — at the side 30 mm • at the side 30 mm • for live parts — forwards 50 mm • for live parts — forwards 0 mm • for live parts — forwards 0 mm • for main current circuit 50 mm Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connectors for main current circuit Type of one connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Tightening torque Tightening torque Tightening torque 1 mm 4 5 mm 5 mm 5 mm 5 mm 5 cored-15 mm²), 2x 4 mm² 2x (18 14), 2x 12 Tightening torque	 				
Very black	Mounting type				
Depth Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — of for grounded parts — forwards — Backwards — of man orman o	Height	97 mm			
● with side-by-side mounting ─ forwards ─ Backwards ─ upwards ─ downwards ─ at the side ─ for grounded parts ─ forwards ─ for grounded parts ─ forwards ─ at the side ─ o mm ● for grounded parts ─ forwards ─ at the side ─ o mm ─ at the side ─ downwards ─ 50 mm ● for live parts ─ for live parts ─ for live parts ─ for wards ─ o mm ─ at the side ─ o mm ─ at the side ─ o mm ─ remvards ─ o mm ─ at the side ─ on mm ─ orwards ─ on mm ─ orwards ─ on mm ─ orwards ─ on mm ─ at the side ─ 30 mm ──────────────────────────────────	Width	45 mm			
with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side — of rorwards — forwards — at the side — forwards — forwards — forwards — forwards — Backwards — upwards — at the side — upwards — at the side — downwards — at the side — downwards — at the side — downwards — for ilive parts — forwards — forwards — forwards — backwards — upwards — Backwards — upwards — backwards — upwards — downwards — at the side — downwards — at the side — when the side — of main current circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Tightening torque	Depth	96 mm			
forwards	Required spacing				
	with side-by-side mounting				
- upwards 50 mm - downwards 50 mm - at the side 0 mm • for grounded parts - forwards 0 mm - Backwards 0 mm - at the side 30 mm - forwards 50 mm - forwards 50 mm - forwards 50 mm - forwards 50 mm - forwards 90 mm - Backwards 90 mm - Backwards 90 mm - upwards 50 mm - downwards 50 mm - at the side 30 mm - removable terminal for auxiliary and control circuit Type of lectrical connection - for main current circuit screw-type terminals Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections - for main contacts - single or multi-stranded 2x (0,75 2,5 mm²), 2x 4 mm² - at AWG conductors for main contacts - at AWG conductors for main contacts - at AWG conductors for main contacts Tightening torque	— forwards	0 mm			
- downwards	— Backwards	0 mm			
 at the side for grounded parts forwards Dackwards upwards upwards at the side downwards for live parts for live parts forwards mm for live parts forwards mm Backwards upwards 50 mm Backwards upwards for mm downwards for mm for main current circuit Type of electrical connection for main current circuit Type of connectable conductor cross-sections for main contacts single or multi-stranded finely stranded with core end processing at AWG conductors for main contacts Tightening torque 	— upwards	50 mm			
• for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — backwards — o mm • for live parts — forwards — at the side — downwards • for live parts — forwards — Backwards — upwards — upwards — upwards — downwards — at the side So mm — at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Tightening torque O mm No Toma Toma Toma Screw-type terminals Top and bottom Connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Tightening torque	— downwards	50 mm			
	— at the side	0 mm			
	 for grounded parts 				
- upwards	— forwards	0 mm			
- at the side - downwards • for live parts - forwards - forwards - Backwards - Backwards - upwards - downwards - downwards - at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts Tightening torque 30 mm 50 mm 50 mm 60 mm 70 mm 70 mm 70 and bottom 2x (0.75 2,5 mm²), 2x 4 mm² 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.75 2.5 mm²), 2x (0.75 2.5 mm²)	— Backwards	0 mm			
- downwards • for live parts - forwards - Backwards - upwards - downwards - at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts Tightening torque 50 mm No No Top mm Screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12	— upwards	50 mm			
● for live parts — forwards — Backwards — upwards — downwards — at the side Connections/Terminals Product function ● removable terminal for auxiliary and control circuit Type of electrical connection ● for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections ● for main current circuit 2x (0,75 2,5 mm²), 2x 4 mm² — finely stranded with core end processing ● at AWG conductors for main contacts — single or multi-stranded — finely stranded with core end processing ● at AWG conductors for main contacts Tightening torque	— at the side	30 mm			
- forwards 0 mm - Backwards 50 mm - upwards 50 mm - downwards 50 mm - at the side 30 mm Connections/Terminals Product function	— downwards	50 mm			
Backwards - upwards - downwards - at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts 10 mm No No Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque	• for live parts				
- upwards - downwards - at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts 100 mm No Screw-type terminals Top and bottom Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque	— forwards	0 mm			
- downwards - at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12	— Backwards	0 mm			
— at the side Connections/Terminals Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts — at the side No No Screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12	— upwards	50 mm			
Product function • removable terminal for auxiliary and control circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts 1	— downwards	50 mm			
Product function	— at the side	30 mm			
 removable terminal for auxiliary and control circuit Type of electrical connection for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections for main contacts single or multi-stranded finely stranded with core end processing at AWG conductors for main contacts Tightening torque No No No No No Screw-type terminals Top and bottom 2	Connections/Terminals				
circuit Type of electrical connection • for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Tightening torque Type of electrical connectors for main current circuit Top and bottom Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12	Product function				
 ◆ for main current circuit Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections ◆ for main contacts — single or multi-stranded — finely stranded with core end processing ◆ at AWG conductors for main contacts Tightening torque Screw-type terminals Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque		No			
Arrangement of electrical connectors for main current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Top and bottom Top and bottom Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12	Type of electrical connection				
circuit Type of connectable conductor cross-sections ● for main contacts 2x (0,75 2,5 mm²), 2x 4 mm² — single or multi-stranded 2x (0,75 2,5 mm²), 2x (0.75 2.5 mm²) — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) ● at AWG conductors for main contacts 2x (18 14), 2x 12 Tightening torque	• for main current circuit	screw-type terminals			
 for main contacts single or multi-stranded finely stranded with core end processing at AWG conductors for main contacts 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque		Top and bottom			
 — single or multi-stranded — finely stranded with core end processing ● at AWG conductors for main contacts 2x (0.5 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque	Type of connectable conductor cross-sections				
— finely stranded with core end processing • at AWG conductors for main contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 Tightening torque	• for main contacts				
• at AWG conductors for main contacts 2x (18 14), 2x 12 Tightening torque	 single or multi-stranded 	2x (0,75 2,5 mm²), 2x 4 mm²			
Tightening torque	 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
	 at AWG conductors for main contacts 	2x (18 14), 2x 12			
• for main contacts with screw-type terminals 0.8 1.2 N·m	Tightening torque				
	• for main contacts with screw-type terminals	0.8 1.2 N·m			
Design of screwdriver shaft Diameter 5 to 6 mm	Design of screwdriver shaft	Diameter 5 to 6 mm			

B10 value	
 with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	50 %
Failure rate [FIT]	
 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	
 for switching status 	Handle

Certificates/approvals

General Product Approval

For use in hazardous locations











For use in hazardous locations	Declaration of Conformity	Test Certificates		Shipping App	proval
1505		Type Test	Special Test	ARICAN BUR	EN VER







Type Test
Certificates/Test
Report

Special Test Certificate

KC





Shipping Approval











other

Confirmation

Environmental Confirmations

other Railway



Miscellaneous

Vibration and Shock

Further informatior

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=3RV2011-0KA10

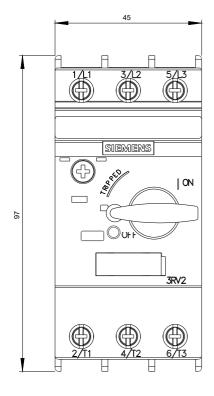
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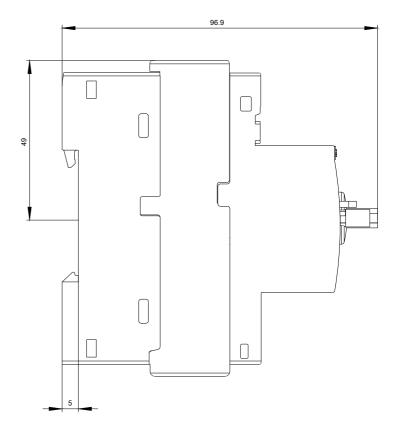
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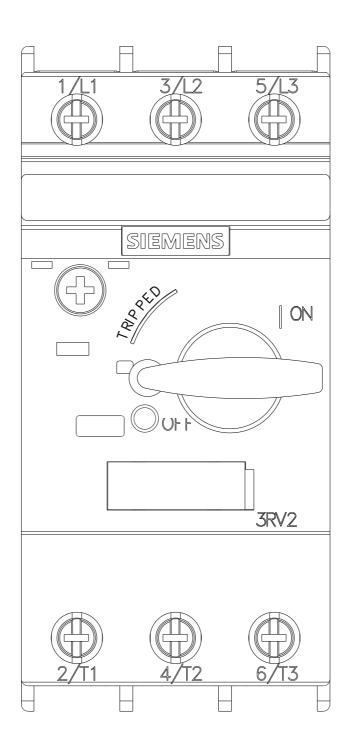
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

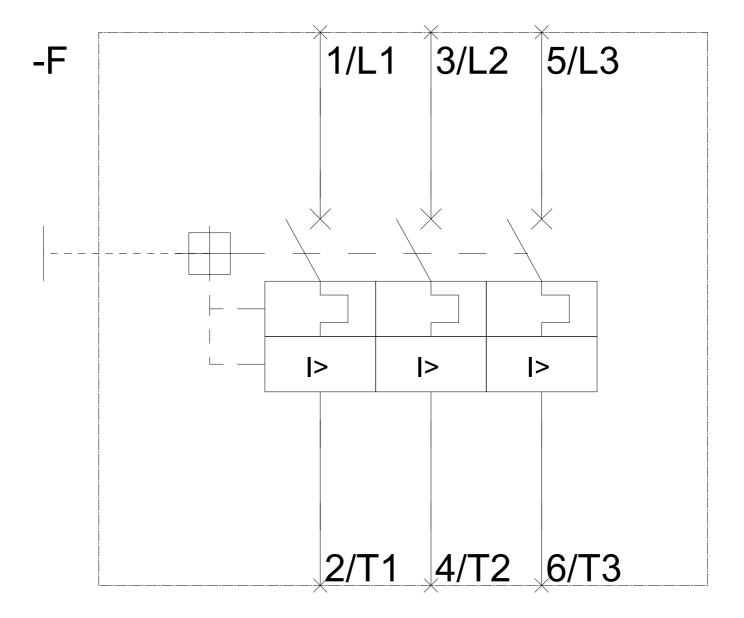
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0KA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0KA10&lang=en









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