SIEMENS

Data sheet 3RV2011-1AA25



CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-RELEASE 21A, SPRING-L. 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	6 W
Insulation voltage	
• with degree of pollution 3 Rated value	690 V
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	S0
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	1.1 ... 1.6 A
Operating voltage	

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• Rated value	690 V
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	1.6 A
Operating current	
• at AC-3	
— at 400 V Rated value	1.6 A
Operating frequency	
• at AC-3 maximum	15 1/h

Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	1
Number of NO contacts	
• for auxiliary contacts	1
Number of CO contacts	
• for auxiliary contacts	0
Product expansion Auxiliary switch	Yes
Design of the auxiliary switch	transverse
Operating current of the auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
Operating current of the auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	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	
• 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)	
• with AC at 240 V Rated value	100 kA
• with AC at 400 V Rated value	100 kA
• with AC at 500 V Rated value	100 kA
• with AC at 690 V Rated value	100 kA
Breaking capacity short-circuit current (Icn)	

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• with 1 current path for DC at 150 V Rated value	10 kA
• with 2 current paths in series for DC at 300 V Rated value	10 kA
• with 3 current paths in series for DC at 450 V Rated value	10 kA
Response value current of the instantaneous short-circuit release	21 A

UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	
• at 480 V Rated value	1.6 A
• at 600 V Rated value	1.6 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	
• for short-circuit protection of the auxiliary switch required	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)
Design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 500 V	gL/gG 20 A
• at 690 V	gL/gG 16 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	106 mm
Width	45 mm
Depth	96 mm
Required spacing	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	30 mm
— downwards	50 mm
• for live parts	

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— 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	spring-loaded terminals
• for auxiliary and control current circuit	spring-loaded 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 (0,5 ... 4 mm²)
— finely stranded with core end processing	2x (0.5 ... 2.5 mm²)
— finely stranded without core end processing	2x (0.5 ... 2.5 mm²)
• for AWG conductors for main contacts	2x (20 ... 12)
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 ... 2,5 mm²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²)
— finely stranded without core end processing	2x (0.5 ... 1.5 mm²)
• for AWG conductors for auxiliary contacts	2x (20 ... 14)
Design of screwdriver shaft	Diameter 5 to 6 mm

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

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
CCC	CSA	UL	KTL	EAC	ATEX

Declaration of Conformity	Test Certificates			Shipping Approval	
EG-Konf.	Type Test Certificates/Test Report	Special Test Certificate	Declaration of the Compliance with the order	ABS	BUREAU VERITAS

Shipping Approval					
DNV	GL	LRS	PRS	RINA	RMRS

other			
Environmental Confirmations	Confirmation	VDE	other

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=3RV20111AA25

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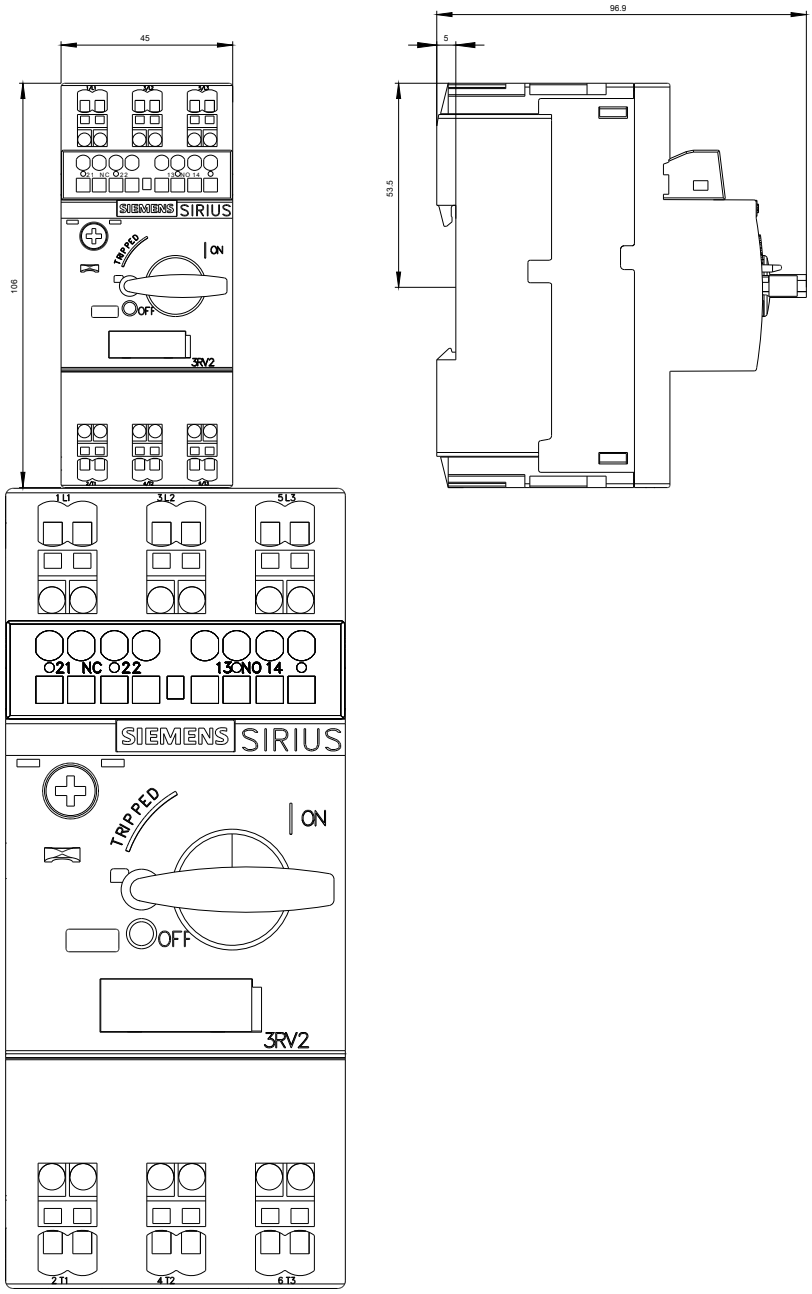
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RV20111AA25

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20111AA25&lang=en



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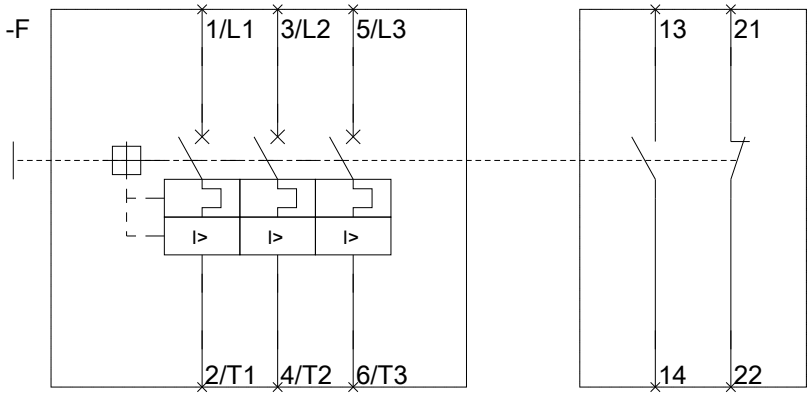

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