SIEMENS

Data sheet 3RV2011-0FA20

Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.35...0.5 A N-release 6.5 A Spring-type terminal Standard switching capacity



Product brand name	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	5 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
Type of protection	Increased safety
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
Temperature compensation	-20 +60 °C
Relative humidity during operation	10 95 %
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	0.35 0.5 A
dependent overload release	
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	0.5 A
Operating current	
• at AC-3	
— at 400 V rated value	0.5 A
Operating power	
• at AC-3	
— at 230 V rated value	60 W
— at 400 V rated value	120 W
— at 500 V rated value	120 W
— at 690 V rated value	180 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
Response value current	
• of instantaneous short-circuit trip unit	6.5 A
JL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
● at 480 V rated value	0.5 A
• at 600 V rated value	0.5 A
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	

Mounting position	any	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rai	
Mounting type	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		
— 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 	No	
circuit		
Type of electrical connection		
• for main current circuit	spring-loaded terminals	
Arrangement of electrical connectors for main current circuit	Top and bottom	
Type of connectable conductor cross-sections		
• for main contacts		
— single or multi-stranded	2x (0,5 4 mm²)	
— finely stranded with core end processing	2x (0.5 2.5 mm²)	
	2x (0.5 2.5 mm²)	
 finely stranded without core end processing 	ZA (0.0 2.0 Hilli)	
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Design of screwdriver shaft	Diameter 3 mm
Size of the screwdriver tip	3,0 x 0,5 mm

Safety related data		
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







KC





For use in Declaration of hazardous Conformity locations	Test Certificates	Marine / Shipping
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Special Test Certificate

Type Test Certificates/Test Report





other

Marine / Shipping













Confirmation

other Railway



Miscellaneous

Vibration and Shock

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

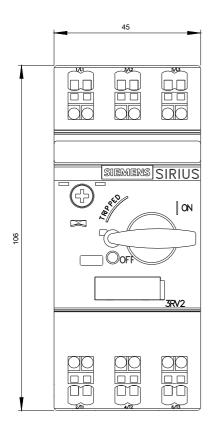
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-0FA20

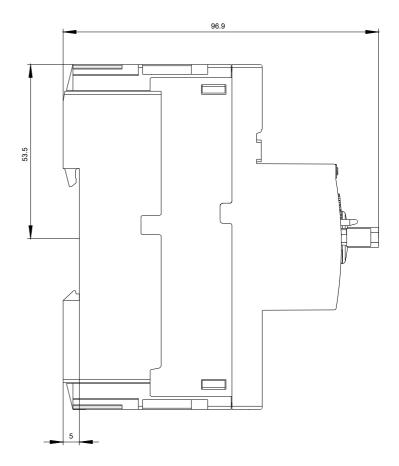
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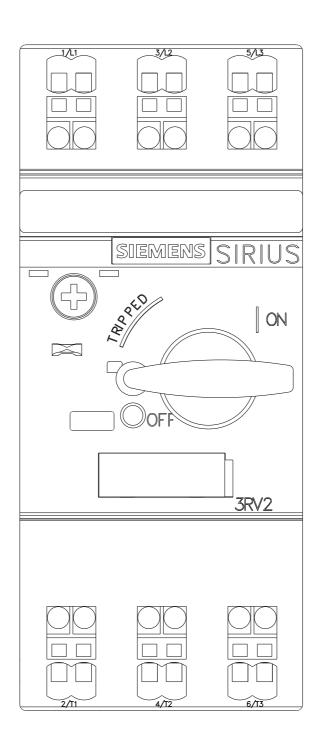
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0FA20

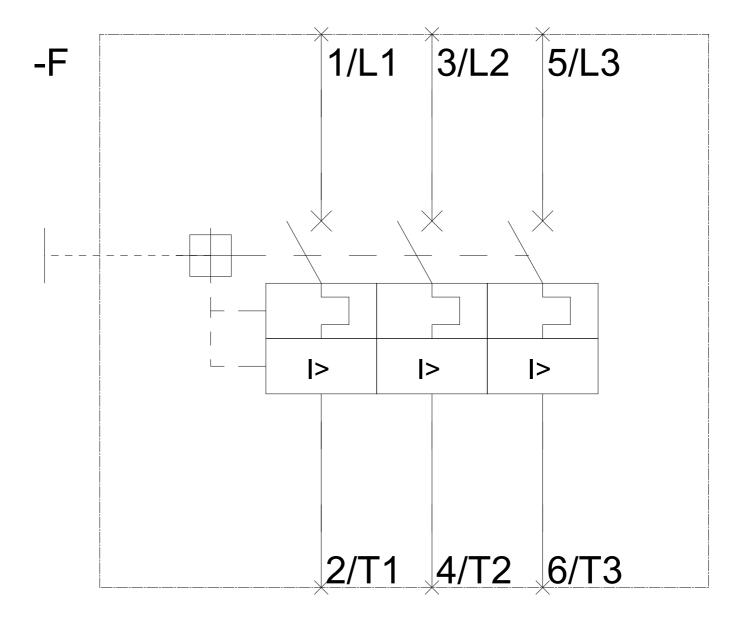
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0FA20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0FA20&lang=en









last modified: 12/14/2017