SIEMENS

Data sheet 3RV2011-0BA20

Circuit breaker size S00 for motor protection, CLASS 10 A release 0.14...0.2 A N release 2.6 A Spring-type terminal Standard switching 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	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	

• of the terminal	• on the front	IP20
• of the main contacts typical • of auxiliary contacts typical 100 000 Electrical endurance (switching cycles) • typical 100 000 Type of protection Increased safety Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Q Ambient conditions Ambient emperature • during operation • during storage • during transport Temperature compensation -20 +60 °C -50 +80 °C -50 +80 °C -50 +80 °C Adjustable pick-up value current circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating violage • rated value • at AC-3 rated value maximum • at AC-3 — at 400 V rated value Operating current • at AC-3 — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 690 V vated value	• of the terminal	IP20
• of auxiliary contacts typical Electrical endurance (switching cycles) • typical Type of protection Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient temperature • during operation • during storage • during storage • during transport Temperature compensation • during transport • during transport For an an auxiliary contacts Adjustable pick-up value current of the current dependent overfoad release Operating voltage • at AC-3 arakinum • at AC-3 — at 230 V rated value — at 690 V vated value — at 690 V va	Mechanical service life (switching cycles)	
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	of auxiliary contacts 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 peration -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-dependent overload release Operating voltage • rated value 690 V • at AC-3 rated value maximum 690 V Operating current rated value 50 60 Hz Operating current • at AC-3 — at 400 V rated value 0.2 A Operating power • at AC-3 — at 230 V rated value 30 W — at 500 V rated value 60 W — at 500 V rated value 60 W — at 500 V rated value 90 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts O Number of NC contacts • for auxiliary contacts O Number of NC contacts • for auxiliary contacts O Number of NC contacts • for auxiliary contacts O Number of NC contacts O In the contact O In Carrent O Carrent	Electrical endurance (switching cycles)	
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Equipment marking acc. to DIN EN 81346-2 Q	Type of protection	Increased safety
Ambient conditions Ambient temperature • during operation • during storage • during transport -50 +80 °C -50 +80 °C Temperature compensation -20 +60 °C -50 +80 °C Temperature compensation -20 +60 °C -20 +60 °C Temperature compensation -20 +60 °C -20 +60 °	Protection against electrical shock	finger-safe
Ambient temperature • during operation • during storage • during transport -50+80 °C • during transport -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-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value 0.2 A Operating current rated value 0.2 A Operating current • at AC-3 - at 400 V rated value 0.2 A Operating power • at AC-3 - at 230 V rated value 60 W - at 500 V rated value 60 W - at 500 V rated value 60 W - at 690 V - at 690 V - at 690 V - at 400 V rated value 0.2 A Operating frequency • at AC-3 - at 230 V rated value 60 W - at 500 V rated value 60 W - at 690 V rated value 90 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts • for auxiliary contacts	Equipment marking acc. to DIN EN 81346-2	Q
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rated value at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value 0.2 A Operating current at AC-3 — at 400 V rated value Operating power at AC-3 — at 230 V rated value 30 W — at 400 V rated value 60 W — at 500 V rated value — at 690 V rated value 90 W Operating frequency at AC-3 maximum Operating frequency at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts for auxiliary contacts O Number of NO contacts	<u> </u>	
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Operating frequency rated value Operating current • at AC-3 — at 400 V rated value Operating power • at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at AC-3 maximum Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts Number of NO contacts		
Operating current • at AC-3 — at 400 V rated value Operating power • at AC-3 — at 230 V rated value 30 W — at 400 V rated value 60 W — at 500 V rated value — at 690 V rated value 90 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts Number of NO contacts		
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■ at AC-3 — at 230 V rated value	— at 400 V rated value	0.2 A
— at 230 V rated value 30 W — at 400 V rated value 60 W — at 500 V rated value 90 W Operating frequency	Operating power	
- at 400 V rated value 60 W - at 500 V rated value 90 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts • for auxiliary contacts Number of NO contacts	● at AC-3	
- at 500 V rated value 60 W - at 690 V rated value 90 W Operating frequency ■ at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts ■ for auxiliary contacts Number of NO contacts Number of NO contacts	— at 230 V rated value	30 W
— at 690 V rated value 90 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts Number of NO contacts Number of NO contacts	— at 400 V rated value	60 W
Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of NC contacts • for auxiliary contacts Number of NO contacts 0 Number of NO contacts	— at 500 V rated value	60 W
at AC-3 maximum Auxiliary circuit Number of NC contacts for auxiliary contacts Number of NO contacts O Number of NO contacts	— at 690 V rated value	90 W
Auxiliary circuit Number of NC contacts • for auxiliary contacts Number of NO contacts 0	Operating frequency	
Number of NC contacts • for auxiliary contacts Number of NO contacts 0	• at AC-3 maximum	15 1/h
• for auxiliary contacts Number of NO contacts 0	Auxiliary circuit	
Number of NO contacts	Number of NC contacts	
	• for auxiliary contacts	0
• for auxiliary contacts 0	Number of NO contacts	
	• for auxiliary contacts	0

Number of CO contacts 0 • for auxiliary contacts Protective and monitoring functions Product function • Ground fault detection No Yes • Phase failure detection Trip class CLASS 10 Design of the overload release thermal Operational short-circuit current breaking capacity (Ics) at AC 100 kA • 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 Maximum short-circuit current breaking capacity (Icu) 100 kA • at AC at 240 V rated value

100 kA

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	0.2 A
• at 600 V rated value	0.2 A

Short-circuit protection	
Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic

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 	

at AC at 400 V rated valueat AC at 500 V rated value

— 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	Top and bottom
circuit	
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)
 finely stranded without core end 	2x (0.5 2.5 mm²)
processing	
 at AWG conductors for main contacts 	2x (20 12)
Design of screwdriver shaft	Diameter 3 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











For use in hazardous locations	Declaration of Conformity	Test Certificates		Shipping App	oroval
		Special Test	Type Test	RICAN BUA	ATU VE





Special Test
Certificate

Type Test
Certificates/Test
Report



other



Shipping Approval











Environmental Confirmations

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=3RV2011-0BA20

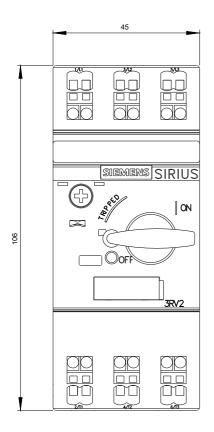
Cax online generator

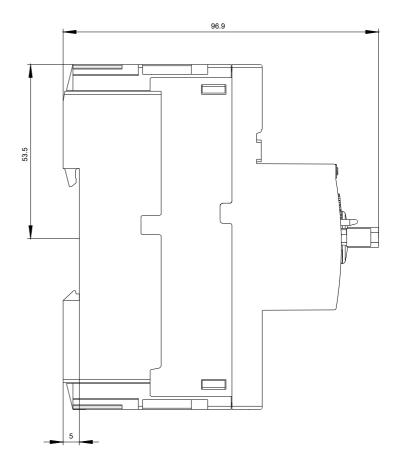
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0BA20

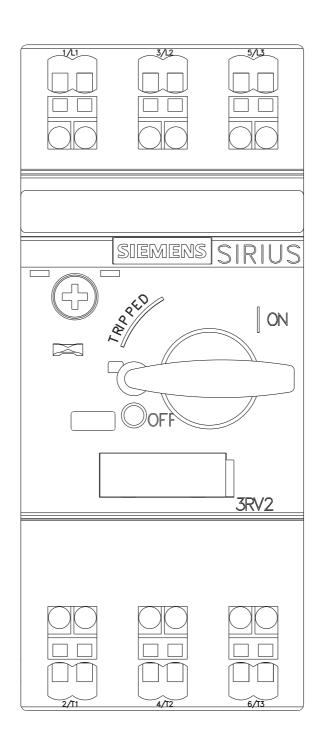
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

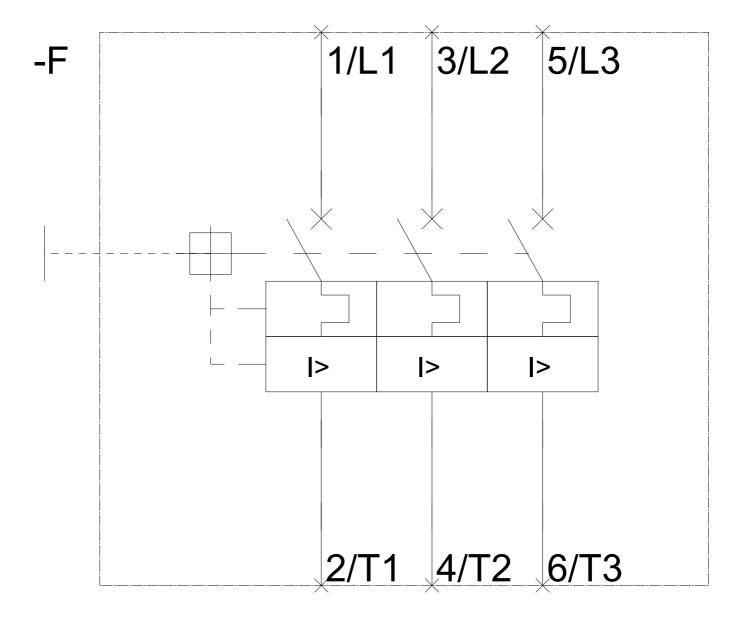
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0BA20&lang=en









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