# **SIEMENS**

Data sheet 3RV2311-1AC20

CIRCUIT-BREAKER SZ S00, FOR STARTER COMBINATION, RATED CURRENT 1.6A, N-RELEASE 21A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY



product brandname	SIRIUS
Product designation	Circuit breaker
Design of the product	For starter combinations
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 value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	400 V
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
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 storage      during transport	-50 +80 °C
• during transport	00 III 100 C
Main circuit	
Number of poles for main current circuit	3
Operating voltage	
• rated value	690 V
<ul><li>at AC-3 rated value maximum</li></ul>	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 power	
● at AC-3	
— at 230 V rated value	250 W
— at 400 V rated value	550 W
— at 500 V rated value	750 W
— at 690 V rated value	1 100 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	No
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
<ul> <li>at AC at 500 V rated value</li> </ul>	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
<ul> <li>with 2 current paths in series at DC at 300 V rated value</li> </ul>	10 kA
<ul> <li>with 3 current paths in series at DC at 450 V rated value</li> </ul>	10 kA
JL/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
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 230 V rated value	0.1 hp
• for three-phase AC motor	
— at 460/480 V rated value	0.75 hp
— at 575/600 V rated value	0.75 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 20 A
● at 690 V	gL/gG 16 A
nstallation/ mounting/ dimensions	any.
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	
<ul> <li>with side-by-side mounting</li> </ul>	
— 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	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
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	
<ul> <li>single or multi-stranded</li> </ul>	2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	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	

<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	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**

Declaration of Conformity











#### **Test Certificates**

## **Shipping Approval**

Special Test Certificate Type Test
Certificates/Test
Report





KC





## **Shipping Approval**

## other





Environmental Confirmations

Confirmation



Miscellaneous

#### Railway

Vibration and Shock

#### Further information

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

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

Industry Mall (Online ordering system)

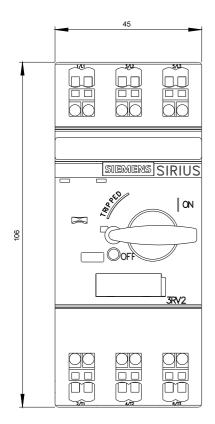
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2311-1AC20

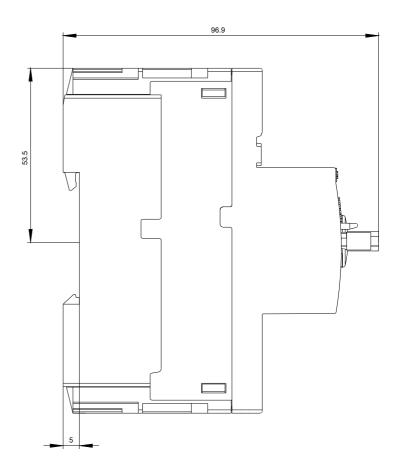
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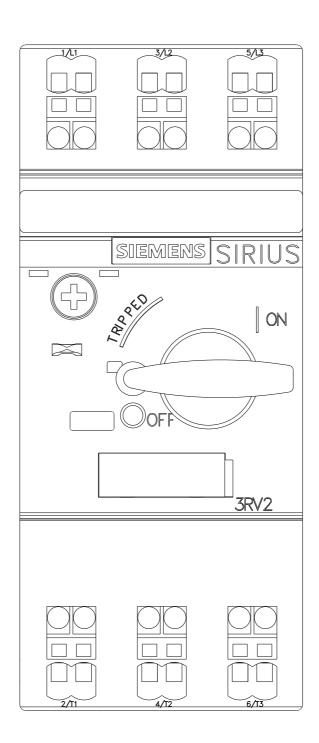
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1AC20

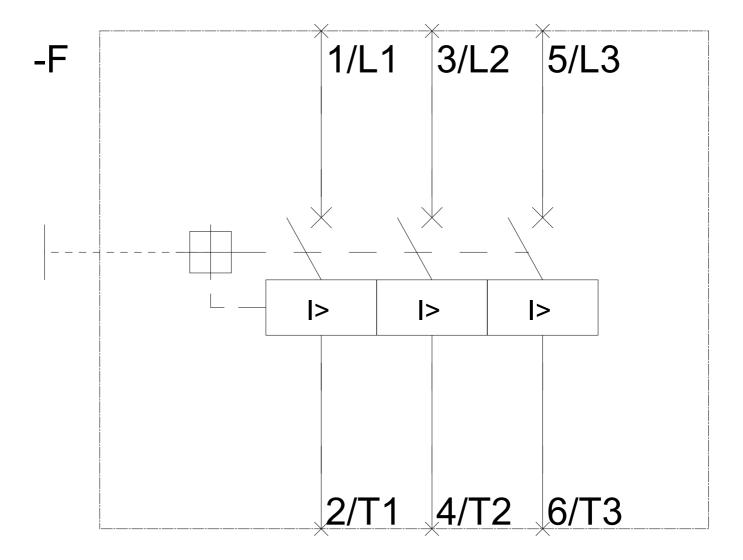
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1AC20









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