# **SIEMENS**

Data sheet 3RV2311-1AC10

CIRCUIT-BREAKER SZ S00, FOR STARTER COMBINATION, RATED CURRENT 1.6A, N-RELEASE 21A, SCREW 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
A selection of a security of	
Ambient conditions  Ambient temperature	
during operation	-20 +60 °C
	-50 +80 °C
during storage	-50 +80 °C
during transport	-50 +60 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
- IOI auxiliary contacts	

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]	
<ul><li>for single-phase AC motor</li></ul>	
— at 230 V rated value	0.1 hp
<ul><li>for three-phase AC motor</li></ul>	
— 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	
Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	97 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	screw-type 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 (0,75 2,5 mm²), 2x 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (18 14), 2x 12
Tightening torque	
for main contacts with screw-type terminals	0.8 1.2 N·m
Design of screwdriver shaft	Diameter 5 to 6 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**

Declaration of Conformity











#### **Test Certificates**

## **Shipping Approval**

Type Test
Certificates/Test
Report

Special Test Certificate





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)

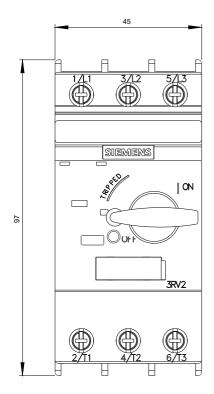
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2311-1AC10

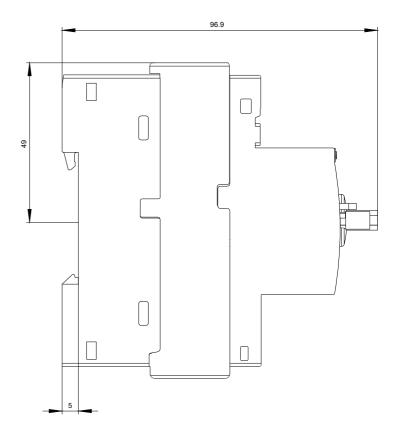
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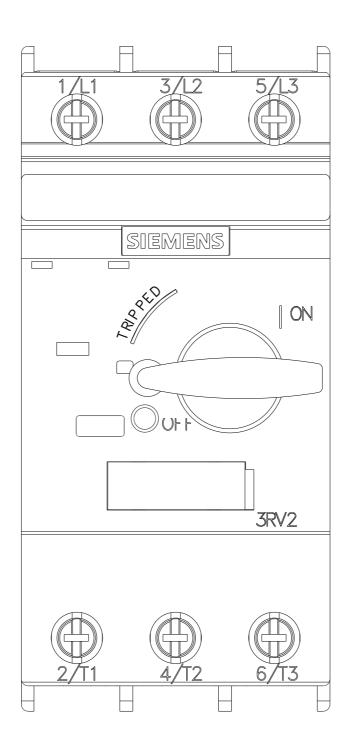
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1AC10

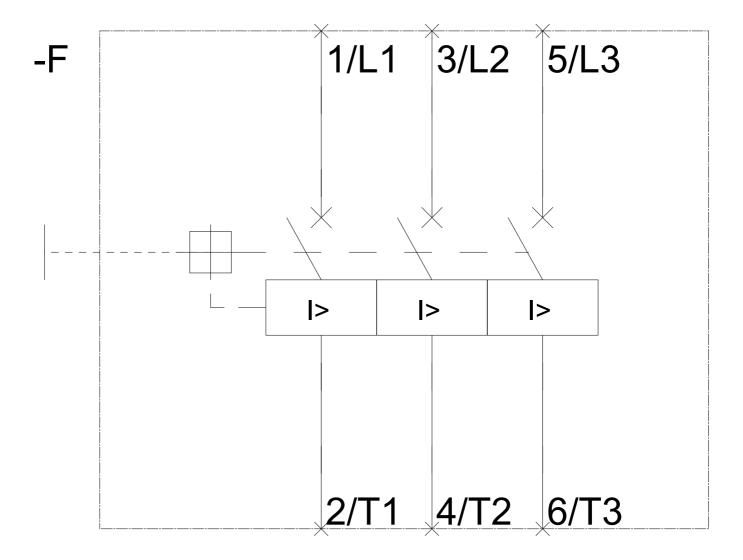
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1AC10









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