## **SIEMENS**

Data sheet 3RV2311-1BC10



Circuit breaker size S00 for starter combination Rated current 2 A N-release 26 A screw terminal Standard switching capacity

product brand name	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] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	7.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
of auxiliary contacts typical	100 000
electrical endurance (switching cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul><li>during operation</li></ul>	-20 +60 °C
<ul><li>during storage</li></ul>	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	2 A
operational current	
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	2 A
<ul><li>at AC-3e at 400 V rated value</li></ul>	2 A

operating power	
• at AC-3	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.8 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
• at AC-3e	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.8 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
operating frequency	
at AC-3 maximum	15 1/h
at AC-3e 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	No
ground fault detection     phase failure detection	No No
phase failure detection    brooking consolity maximum about circuit current (low)	No
breaking capacity maximum short-circuit current (Icu)	400 kA
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	10 kA
breaking capacity operating short-circuit current (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	10 kA
response value current of instantaneous short-circuit trip	26 A
unit	2077
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	2 A
at 600 V rated value	2 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 230 V rated value	0.13 hp
• for 3-phase AC motor	
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	1 hp
Short-circuit protection	
	Yes
product function short circuit protection design of the short-circuit trip	magnetic
design of the short-circuit trip	magnetio
protection of the main circuit	
• at 400 V	gL/gG 25 A
• at 500 V	gL/gG 25 A
• at 690 V	gL/gG 20 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
idotolillig illotilod	according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
e apart	

required spacing	
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
● for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
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Connections/ Terminals	
type of electrical connection	corou tuno torminale
type of electrical connection  • for main current circuit	screw-type terminals
type of electrical connection	screw-type terminals Top and bottom
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit	•
type of electrical connection  • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections	•
type of electrical connection	Top and bottom
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm²
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of electrical connection     • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections     • for main contacts     — solid or stranded     — finely stranded with core end processing     • at AWG cables for main contacts	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm²
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (18 14), 2x 12
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts             — solid or stranded             — finely stranded with core end processing         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts             — solid or stranded             — finely stranded with core end processing         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts             — solid or stranded             — finely stranded with core end processing         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw         • for main contacts  Safety related data	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts             — solid or stranded             — finely stranded with core end processing         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw         • for main contacts  Safety related data  B10 value	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2  M3
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts             — solid or stranded             — finely stranded with core end processing         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw         • for main contacts  Safety related data  B10 value         • with high demand rate according to SN 31920  proportion of dangerous failures	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2  M3  5 000
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2  M3  5 000
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2  M3
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 %
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 % 50 FIT
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 %
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 % 50 FIT
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2  M3  5 000  50 % 50 FIT 10 y
type of electrical connection	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 % 50 FIT 10 y  IP20
type of electrical connection         • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections         • for main contacts	Top and bottom  2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  5 000  50 % 50 % 50 FIT 10 y  IP20  finger-safe, for vertical contact from the front



Confirmation







Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other









Confirmation



Railway

Confirmation Vibration and Shock

## Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2311-1BC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1BC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1BC10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2311-1BC10\&lang=en}}$ 

Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1BC10/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1BC10&objecttype=14&gridview=view1

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