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

design of the product For starter combinations For starter combinatio	product brand name	SIRIUS
General technical data size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch eart of into operating state at AC in hot operating state at AC in hot operating state at AC in hot operating state surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit between main and auxiliary circuit between main and auxiliary circuit between main and suxiliary circuit between main contacts typical of a contacts typical of auxiliary contacts typical lelectrical endurance (switching cycles) typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Anbient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value operating voltage rated value operating voltage rated value operating frequency rated value operating frequency rated value operating frequency rated value	product designation	Circuit breaker
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperatu	design of the product	For starter combinations
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit between main contact stypical of auxiliary contacts typical of auxiliary contacts typical lectrical endurance (switching cycles) of the main contacts typical lectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humidity during operation operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value operating voltage at AC-3 rated value operating frequency rated value operating frequency rated value	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of auxiliary contacts typical • of the main contacts typical • of the mai	General technical data	
product extension auxiliary switch power loss [VI] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole 1.5 surge voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 6 kV maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of the main contacts typical • of auxiliary contacts typical • clectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Quultance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature	size of the circuit-breaker	S00
power loss [W] for rated value of the current at AC in hot operating state 7.25 W at AC in hot operating state per pole 2.4 W insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 680 V maximum permissible voltage for safe isolation in networks with grounded star point 400 V between main and auxiliary circuit 400 V between main and auxiliary circuit 400 V 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 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) 01.10.2009 00:00:00 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -20 +60 °C ambient temperature during storage -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3 operating voltage at AC-3 rated value assistance of the current circuit on the current circuit on the current value operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	size of contactor can be combined company-specific	S00, S0
at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit betwee	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value asimum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit between main and auxiliary circuit between main and auxiliary circuit of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical of auxiliary contacts typical ledectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Questiance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humidity during operation ambient temperature during transport relative humidity during operation operating voltage rated value operating voltage rated value operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit * bound in the permine with a point in the point in th	 at AC in hot operating state 	7.25 W
value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 25g / 11 ms mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation • ambient temperature during transport relative humidity during operation • operating voltage rated value • operating voltage rated value • operating frequency rated value • operating frequency rated value • operating frequency rated value 50 60 Hz		2.4 W
maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 25g / 11 ms mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical 100 000 electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) 01.10.2009 00:00:00 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage rated value • operating frequency rated value 50 60 Hz		690 V
networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical lou 000 electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation Main circuit number of poles for main current circuit • operating voltage rated value • operating frequency rated value • operating frequency rated value 50 60 Hz	surge voltage resistance rated value	6 kV
between main and auxiliary circuit shock resistance acc. to IEC 60068-2-27 z5g / 11 ms mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical lelectrical endurance (switching cycles) typical lelectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum oambient temperature during operation ambient temperature during storage ambient temperature during storage ambient temperature during transport relative humidity during operation ambient or poles for main current circuit number of poles for main current circuit operating voltage at AC-3 rated value operating frequency rated value 50 60 Hz		
shock resistance acc. to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical lectrical endurance (switching cycles) top 00000000000000000000000000000000000	 between main and auxiliary circuit 	400 V
mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical lectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humidity during operation ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	between main and auxiliary circuit	400 V
 of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) O1.10.2009 00:00:00 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport 50 +80 °C ambient temperature during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit operating voltage rated value operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz 	shock resistance acc. to IEC 60068-2-27	25g / 11 ms
 of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) O1.10.2009 00:00:00 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport 50 +80 °C relative humidity during operation 10 95 % Main circuit operating voltage rated value operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz 	mechanical service life (switching cycles)	
electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	 of the main contacts typical 	100 000
reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation • ambient temperature during transport relative humidity during operation Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	of auxiliary contacts typical	100 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • ambient temperature during transport • ambient temperature during transport • 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	electrical endurance (switching cycles) typical	100 000
installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • ambient temperature during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	reference code acc. to IEC 81346-2	Q
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 ambient temperature during storage ambient temperature during transport 50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value operating voltage at AC-3 rated value maximum operating frequency rated value 60 Hz 	installation altitude at height above sea level maximum	2 000 m
 ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value operating voltage at AC-3 rated value maximum operating frequency rated value 60 Hz 	 ambient temperature during operation 	-20 +60 °C
relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	ambient temperature during storage	-50 +80 °C
Main circuit number of poles for main current circuit 3 ● operating voltage rated value 690 V ● operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	 ambient temperature during transport 	-50 +80 °C
number of poles for main current circuit	relative humidity during operation	10 95 %
 operating voltage rated value operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz 	Main circuit	
● operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	number of poles for main current circuit	3
● operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	operating voltage rated value	690 V
operating frequency rated value 50 60 Hz		
		50 60 Hz
	operational current rated value	2 A

operational current at AC-3 at 400 V rated value	2 A
operating power at AC-3	
 at 230 V rated value 	370 W
 at 400 V rated value 	750 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
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
breaking capacity maximum short-circuit current (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	10 kA
response value current of instantaneous short-circuit trip	26 A
unit	
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	0.125 hp
 for 3-phase AC motor 	
— at 460/480 V rated value	0.75 hp
 at 575/600 V rated value 	1 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 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 according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
 for grounded parts at 400 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	

— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
 for grounded parts at 500 V 	
— 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
Connections/ Terminals	
product function removable terminal for auxiliary and control circuit	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 	
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	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
size of the screwdriver tip	Pozidriv 2
design of the thread of the connection screw	
for main contacts	M3
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
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Handle
Certificates/ approvals	
General Product Approval	Declaration of Conformity











Miscellaneous

Test Certificates

Marine / Shipping

Type Test
Certificates/Test
Report

Special Test Certificate









Marine / Shipping

other

Railway







Confirmation



Vibration and Shock

Railway

Confirmation

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, ...)

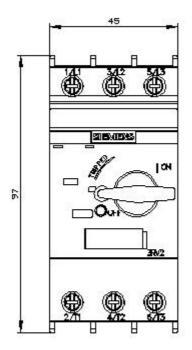
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1BC10&lang=en

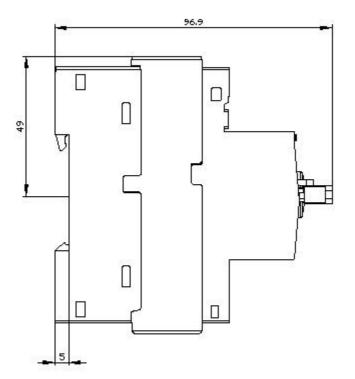
Characteristic: Tripping characteristics, I2t, Let-through current

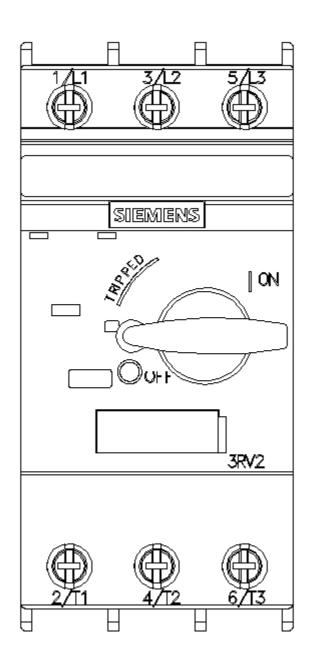
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1BC10/char

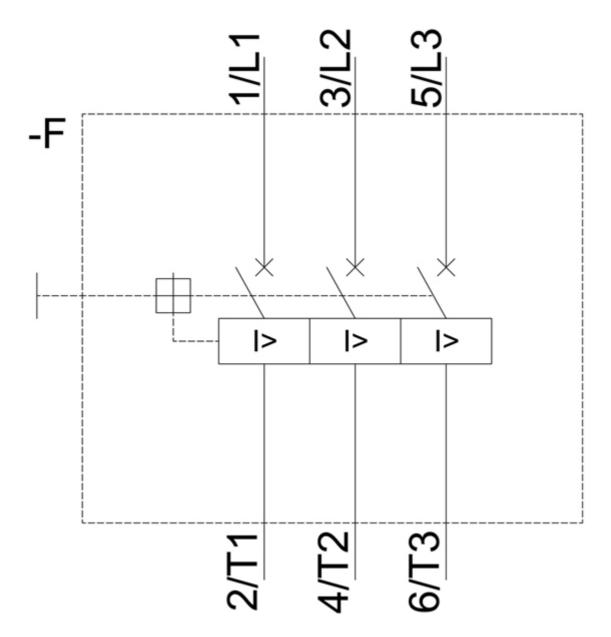
Further characteristics (e.g. electrical endurance, switching frequency)

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









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