# **SIEMENS**

Data sheet 3RV2321-1BC10

CIRCUIT-BREAKER SZ S0, FOR STARTER COMBINATION, RATED CURRENT 2 A, N-REL. 26A SCREW CONNECTION, STANDARD SW. CAPACITY



Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker
Design of the product	For starter combinations

General technical data	
Size of the circuit-breaker	S0
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	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	
Protection class IP	

• on the front	IP20
<ul><li>of the terminal</li></ul>	IP20
Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Certificate of suitability relating to ATEX	on request
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-20 +60 °C
<ul><li>during storage</li></ul>	-50 +80 °C
<ul><li>during transport</li></ul>	-50 +80 °C
Relative humidity during operation	10 95 %
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	2 A
Operating current	
• at AC-3	
— at 400 V rated value	2 A
Operating power	
• at AC-3	
— at 230 V rated value	370 W
	370 VV
— at 400 V rated value	750 W
— at 400 V rated value — at 500 V rated value	
	750 W
— at 500 V rated value	750 W 750 W
<ul><li>— at 500 V rated value</li><li>— at 690 V rated value</li></ul>	750 W 750 W
— at 500 V rated value  — at 690 V rated value  Operating frequency	750 W 750 W 1 100 W
<ul> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> <li>Operating frequency</li> <li>• at AC-3 maximum</li> </ul>	750 W 750 W 1 100 W
— at 500 V rated value  — at 690 V rated value  Operating frequency  ■ at AC-3 maximum  Auxiliary circuit	750 W 750 W 1 100 W

Number of NO contacts	
• for auxiliary contacts	0
Number of CO contacts	
• for auxiliary contacts	0
Protective and monitoring functions	
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	10 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
• at AC at 500 V rated value	100 kA
• at AC at 690 V rated value	10 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
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	2 A
• at 600 V rated value	2 A
Yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 230 V rated value	0.125 hp
• for three-phase AC motor	
— at 460/480 V rated value	0.75 hp
— at 575/600 V rated value	1 hp
Short-circuit protection	
Design of the short-circuit trip	magnetic
Installation/ mounting/ dimensions	
Mounting position	any

Mounting type

Height

Width

Depth

according to DIN EN 60715

97 mm

45 mm

96 mm

screw and snap-on mounting onto 35 mm standard mounting rail

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 (1 2,5 mm²), 2x (2,5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 8)
Tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M4

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	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

#### **General Product Approval**

**Declaration of** Conformity











#### **Test Certificates**

#### **Shipping Approval**

Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge n

ABS







Railway

#### **Shipping Approval**

### other

Bestätigungen



Schwingen/Schocke

n





Umweltbestätigung



## 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=3RV2321-1BC10

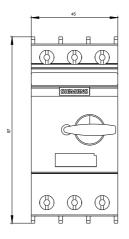
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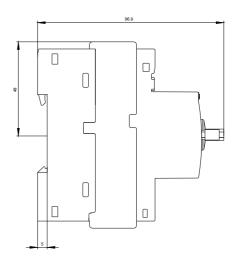
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2321-1BC10

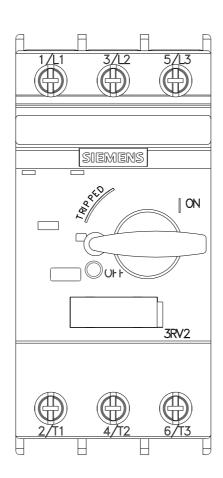
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

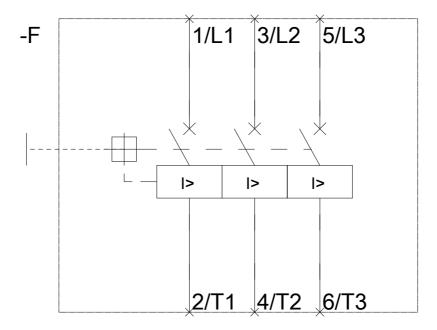
https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-1BC10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2321-1BC10&lang=en









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