# **SIEMENS**

Product data sheet 3RB3123-4SB0



OVERLOAD RELAY 3...12 A FOR MOTOR PROTECTION SIZE S0,

CLASS 5...30 CONTACTOR ASS. MAIN CIRCUIT: SCREW CONN. AUX.CIRCUIT: SCREW CONN. MANUAL-AUTOM.-RESET INT. GROUND FAULT DETECTION

General technical data:		
Product brand name		SIRIUS
product designation		solid-state overload relay
Protection class IP / on the front		IP20
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-40 80
during transport	°C	-40 80
during operating	°C	-25 60
Relative humidity		
during operating phase	/ %	95
EMC immunity to interference		
according to IEC 60947-1		corresponds to degree of severity 3
EMC emitted interference		
according to IEC 60947-1		CISPR 11, environment B (residential area)
Conductor-bound parasitic coupling BURST		
according to IEC 61000-4-4		2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3
Conductor-bound parasitic coupling conductor-earth SURGE		

according to IEC 61000-4-5		2 kV (line to earth) corresponds to degree of severity 3
Conductor-bound parasitic coupling conductor-conductor SURGE		
according to IEC 61000-4-5		1 kV (line to line) corresponds to degree of severity 3
Electrostatic discharge		
according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling		
according to IEC 61000-4-3		10 V/m
Resistance against shock		15g / 11 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / total / typical	W	0.05
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		F
according to DIN EN 61346-2		F
Size of overload relay		S0
Size of the contactor / can be combined / company-specific		S0
type of protection		PTB 09 ATEX 3001 Ex II (2) GD
Type of assignement		2
Trip class		CLASS 5, 10, 20 and 30 adjustable
Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at AC-3 / rated value		
• maximum	V	690
Operating current / at AC-3 / at 400 V		
rated value	Α	12
Adjustable response current		
of the current-dependent overload release	Α	3 12
Service power / for three-phase servomotors / at 400 V / at 50 Hz		
• for AC three-phase	kW	1.1 5.5
Operating current / of the fuse link		
rated value	Α	25
Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		acceptability for PLC control (17 V, 5 mA)
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		1
Number of change-over switches / for auxiliary contacts		0
Number of change-over switches / for auxiliary contacts  Operating current / of the auxiliary contacts		0

• at 24 V	Α	4
• at 110 V	Α	4
• at 120 V	Α	4
• at 125 V	Α	4
• at 230 V	Α	3
• at DC-13		
• at 24 V	Α	2
• at 60 V	Α	1
• at 110 V	Α	0.3
• at 125 V	Α	0.3
• at 220 V	Α	1

Short-circuit:	
Design of the fuse link / for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 6 A

Installation/mounting/dimensions:			
Built in orientation		any	
Type of mounting		direct mounting	
Width	mm	45	
Height	mm	69.7	
Depth	mm	83.5	
Distance, to be maintained, to the ranks assembly			
• forwards	mm	0	
• backwards	mm	0	
• upwards	mm	0	
• downwards	mm	0	
• sidewards	mm	0	
Distance, to be maintained, to earthed part			
• forwards	mm	6	
• backwards	mm	0	
• upwards	mm	6	
• downwards	mm	6	
• sidewards	mm	6	
Distance, to be maintained, conductive elements			
• forwards	mm	6	
• backwards	mm	0	
• upwards	mm	6	
• downwards	mm	6	
• sidewards	mm	6	

Connections:	
Design of the electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Product function / removable terminal for auxiliary and control circuit	Yes
Type of the connectable conductor cross-section	
• for main contacts	
• solid	1x (1 10 mm²), 2x (1 10 mm²)
• stranded	1x (1 10 mm²), 2x (1 10 mm²)
• finely stranded	
<ul> <li>with conductor end processing</li> </ul>	1x (1 6 mm²), 2 x (1 6 mm²), 1x 10 mm²
• for AWG conductors / for main contacts	1x (16 8), 2x (16 8)
for auxiliary contacts	
• solid	1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• finely stranded	
with conductor end processing	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.5 2.5 mm²)
• for AWG conductors / for auxiliary contacts	1x (20 14), 2x (20 14)

Certificates/approvals:				
Verification of suitability	UL / CSA			
• ATEX	Ye	Yes		
General Product Approval		For use in hazardous locations	Test Certificates	





ROSTEST





other

Manufacturer

**Shipping Approval** 





GL



LRS



Manufacturer

## UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to  $\ensuremath{\mathsf{UL}}$ 

B300 / R300

Reliability figures:

Protection against electrical shock finger-safe

**Further information:** 

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

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

### Industry Mall (Online ordering system)

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

### Cax online generator:

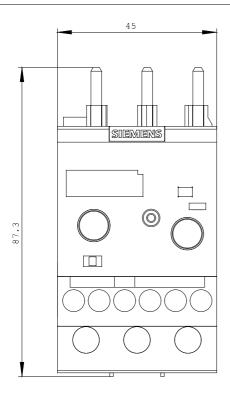
http://www.siemens.com/cax

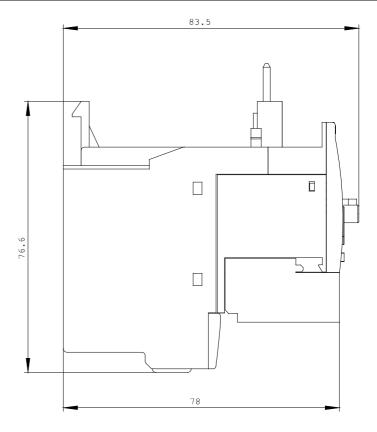
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

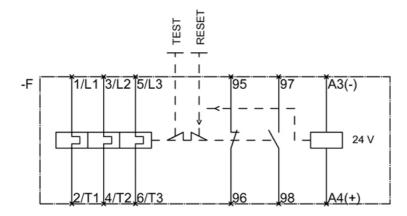
http://support.automation.siemens.com/WW/view/en/3RB3123-4SB0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RB3123-4SB0







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