## **SIEMENS**

Data sheet 3RB3123-4NB0



OVERLOAD RELAY 0.32...1.25 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

product brand name	SIRIUS
Product designation	solid-state overload relay

General technical data:		
Active power loss total typical	W	0.1
Insulation voltage		
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690
Shock resistance		
• acc. to IEC 60068-2-27		15g / 11 ms
Vibration resistance		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s <sup>2</sup> ; 10 cycles
Surge voltage resistance Rated value	kV	6
Size of contactor can be combined company-specific		S0
Type of assignment		2
Protection class IP		
• on the front		IP20
• of the terminal		IP20
Type of protection	-	II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]
Equipment marking		
• acc. to DIN EN 61346-2		F
• acc. to DIN EN 81346-2		F

Main circuit:		
Number of poles for main current circuit		3
Adjustable response value current of the current- dependent overload release	А	0.32 1.25
Operating voltage		
<ul> <li>for remote-reset function for DC</li> </ul>	V	24

Operating current	Hz	50 60
• at AC-3		
— at 400 V Rated value	Α	1.25
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		1
— Note		for contactor disconnection
Number of NO contacts		
• for auxiliary contacts		1
— Note		for message "tripped"
Number of CO contacts		
• for auxiliary contacts		0
Design of the auxiliary switch		integrated
Operating current of the auxiliary contacts at AC-15		
● 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
Operating current of the auxiliary contacts at DC-13		
● at 24 V	Α	2
● at 60 V	Α	0.55
● at 110 V	Α	0.3
● at 125 V	Α	0.3
● at 220 V	Α	0.11
Protective and monitoring functions:		
Trip class		CLASS 5, 10, 20 and 30 adjustable
Design of the overload circuit breaker		electronic
UL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		B300 / R300
Short-circuit:		
Design of the fuse link		
• for short-circuit protection of the main circuit		
— required		Fuse gG: 6 A
• for short-circuit protection of the auxiliary switch		fuse gG: 6 A
required		
Installation/ mounting/ dimensions:		
mounting position		any

Mounting type		direct mounting
Height	mm	87
Width	mm	45
Depth	mm	84
Required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— at the side	mm	6
— downwards	mm	6
• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

Connections/ Terminals:					
Type of electrical connection					
• for main current circuit		screw-type terminals			
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals			
Arrangement of electrical connectors for main current circuit		Top and bottom			
Product function					
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		Yes			
Type of connectable conductor cross-section					
• for main contacts					
<ul> <li>single or multi-stranded</li> </ul>		1x (1 10 mm²), 2x (1 10 mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>		1x (1 6 mm²), 2 x (1 6 mm²), 1x 10 mm²			
<ul> <li>for AWG conductors for main contacts</li> </ul>		1x (16 8), 2x (16 8)			
• for auxiliary contacts					
— single or multi-stranded		1x (0,5 4 mm²), 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>		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)
Safety related data:		
Protection against electrical shock		finger-safe
Mechanical data:		
Size of overload relay		S0
Communication/ Protocol:		
Protocol is supported		
IO-Link protocol		No
Type of voltage supply via input/output link master		No
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-40 <b>+</b> 80
during transport	°C	-40 <b>+</b> 80
Relative humidity during operation	%	95
Electromagnetic compatibility:		
EMC emitted interference		
• acc. to IEC 60947-1		CISPR 11, environment B (residential area)
EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV (line to earth) corresponds to degree of severity 3
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV (line to line) corresponds to degree of severity 3
Field-bound parasitic coupling acc. to IEC 61000-4-3	_	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Display:		
Display version		
• for switching status		Slide switch
Certificates/ approvals:		

## General Product Approval EMC















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Declaration of Conformity	Test Certificates		Shipping Approval		
	Special Test Certificate	Type Test Certificates/Test	E BURE		

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other



EG-Konf.



Environmental Confirmations

Report

Confirmation

ABS

## Further informatior

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RB31234NB0}\\$ 

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

http://support.automation.siemens.com/WW/view/en/3RB31234NB0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB31234NB0&lang=en



