SIEMENS

Data sheet 3RB3123-4SE0

OVERLOAD RELAY 3...12 A FOR MOTOR PROTECTION SIZE S0, CLASS 5...30 CONTACTOR ASS. MAIN CIRCUIT: SPR.-LOAD.TERM. AUX.CIRCUIT: SPR.-LOAD.TERM. 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	0.6
Insulation voltage		
• with degree of pollution 3 Rated value	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/s²; 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	A	3 ... 12
Operating voltage		
• for remote-reset function for DC	V	24

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• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
Operating current		
• at AC-3		
— at 400 V Rated value	A	12

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	A	4
• at 110 V	A	4
• at 120 V	A	4
• at 125 V	A	4
• at 230 V	A	3
Operating current of the auxiliary contacts at DC-13		
• at 24 V	A	2
• at 60 V	A	0.55
• at 110 V	A	0.3
• at 125 V	A	0.3
• at 220 V	A	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: 50 A
• for short-circuit protection of the auxiliary switch required		fuse gG: 6 A

Installation/ mounting/ dimensions:		
mounting position		any

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Mounting type		direct mounting
Height	mm	109
Width	mm	45
Depth	mm	85
Required spacing		
• with side-by-side mounting		
— 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		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
Arrangement of electrical connectors for main current circuit		Top and bottom
Product function		
• removable terminal for auxiliary and control circuit		Yes
Type of connectable conductor cross-section		
• for main contacts		
— single or multi-stranded		1x (1 ... 10 mm²)
— finely stranded with core end processing		1x (1 ... 6 mm²)
— finely stranded without core end processing		1x (1 ... 6 mm²)
• for AWG conductors for main contacts		1x (18 ... 8)
• for auxiliary contacts		
— single or multi-stranded		1x (0,5 ... 1,5 mm²), 2x (0,5 ... 1,5 mm²)
— finely stranded with core end processing		1x (0.25 ... 1.5 mm²), 2x (0.25 ... 1.5 mm²)

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— finely stranded without core end processing		1x (0.25 ... 1.5 mm²), 2x (0.25 ... 1.5 mm²)
• for AWG conductors for auxiliary contacts		1x (24 ... 16), 2x (24 ... 16)
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 maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +80
• during transport	°C	-40 ... +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:		

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General Product Approval				EMC	For use in hazardous locations
CCC	CSA		UL	C-TICK	ATEX

Declaration of Conformity	Test Certificates		Shipping Approval		
EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report	ABS	BUREAU VERITAS	GL

Shipping Approval		other	
LRS	RINA	Environmental Confirmations	Confirmation

Further information

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
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB31234SE0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RB31234SE0/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=3RB31234SE0&lang=en

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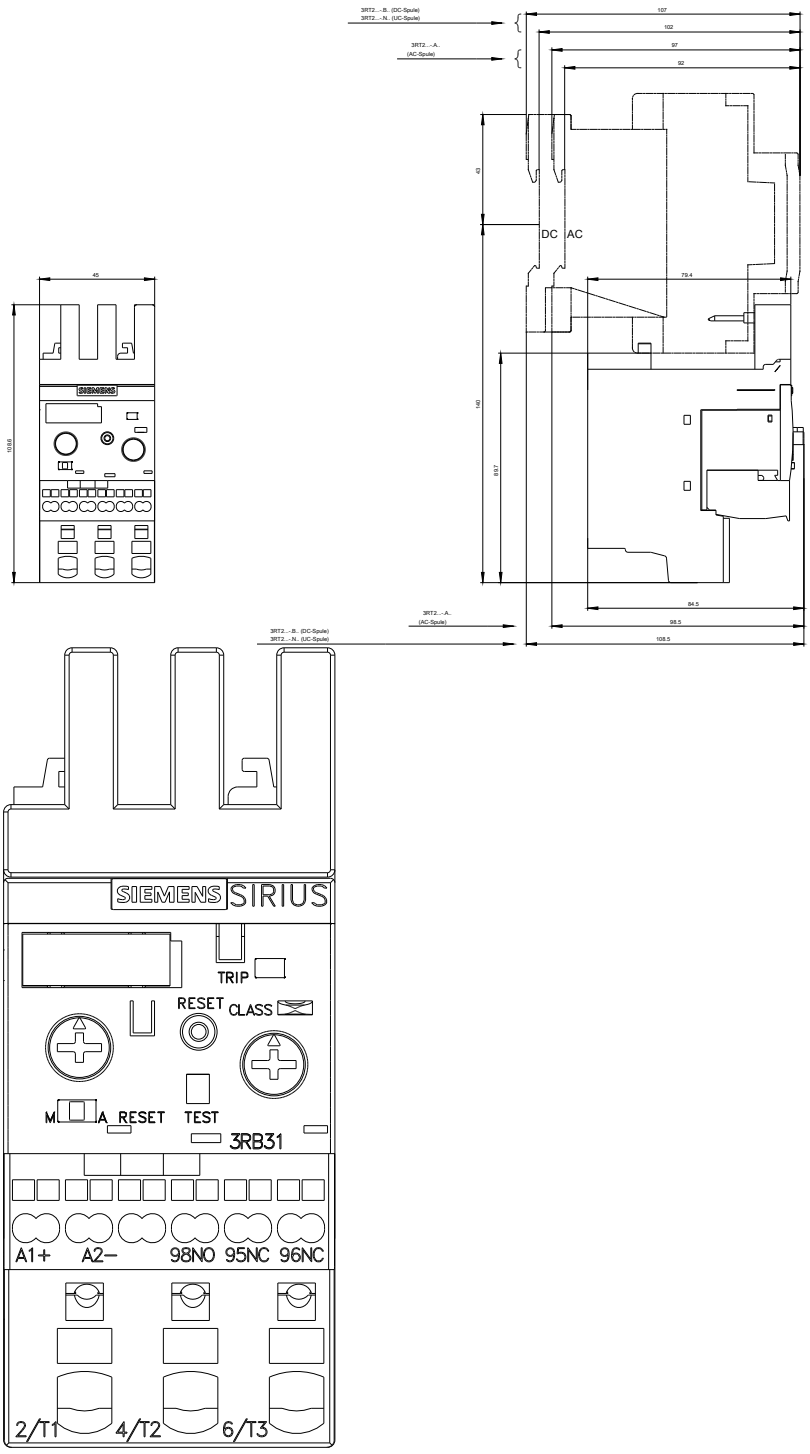

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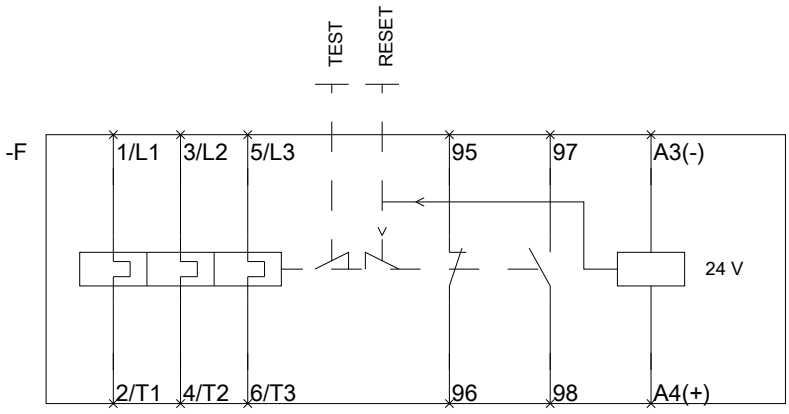

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