SIEMENS

Data sheet 3RB3123-4PE0

OVERLOAD RELAY 1...4 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:	
Size of contactor can be combined company-specific	S0
Active power loss total typical	0.1 W
Insulation voltage	
• with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles
Type of assignment	2
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

Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
Relative humidity during operation	95 %

Main circuit:	
Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	1 ... 4 A
Operating voltage	
• for remote-reset function for DC	24 V
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current	
• at AC-3	
— at 400 V Rated value	4 A

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	4 A
• at 110 V	4 A
• at 120 V	4 A
• at 125 V	4 A
• at 230 V	3 A
Operating current of the auxiliary contacts at DC-13	
• at 24 V	2 A
• at 60 V	0.55 A
• at 110 V	0.3 A
• at 125 V	0.3 A
• at 220 V	0.11 A

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: 20 A
• for short-circuit protection of the auxiliary switch required	fuse gG: 6 A

Installation/ mounting/ dimensions:	
mounting position	any
Mounting type	direct mounting
Height	109 mm
Width	45 mm
Depth	85 mm
Required spacing	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	6 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm

Connections/ Terminals:	
Product function	
• removable terminal for auxiliary and control circuit	Yes
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
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)
Type of connectable conductor cross-section	
• 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)
— 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)

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

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	For use in hazardous locations
CCC	CSA		UL	C-TICK	ATEX

Declaration of Conformity	Test Certificates		Shipping Approval		
EG-Konf.	Typprüfbescheinigung/Werkszeugnis	spezielle Prüfbescheinigungen	ABS	BUREAU VERITAS	GL

Shipping Approval		other	
LRS	RINA	Umweltbestätigung	Bestätigungen

Further information

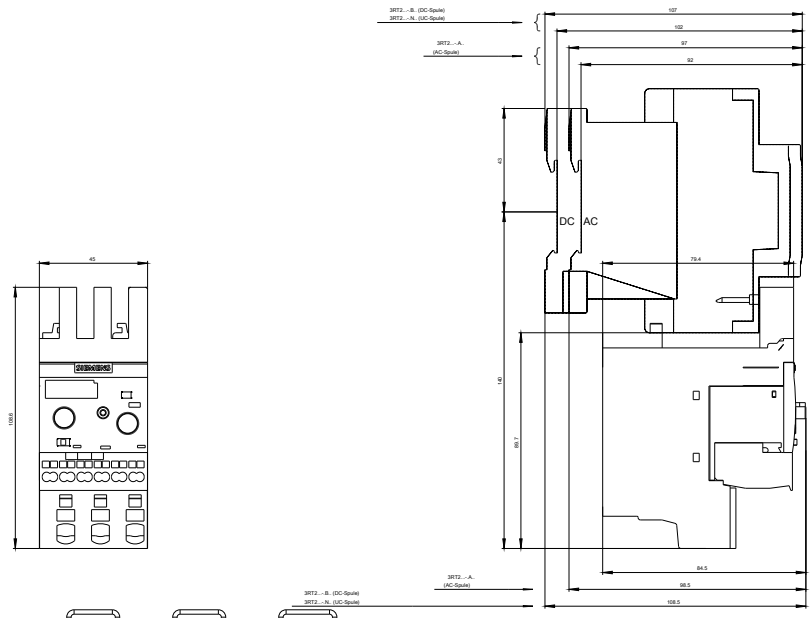
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

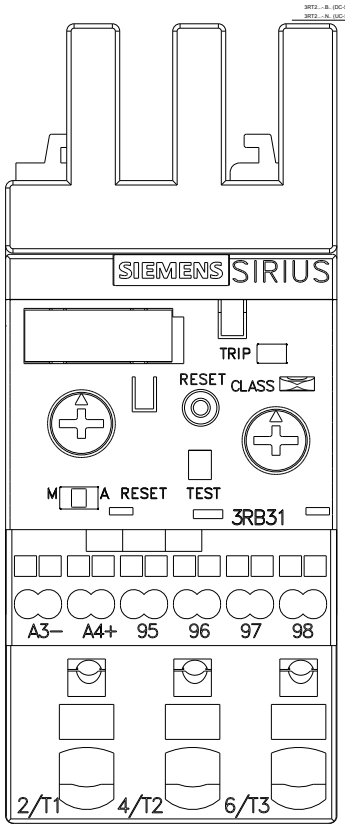
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

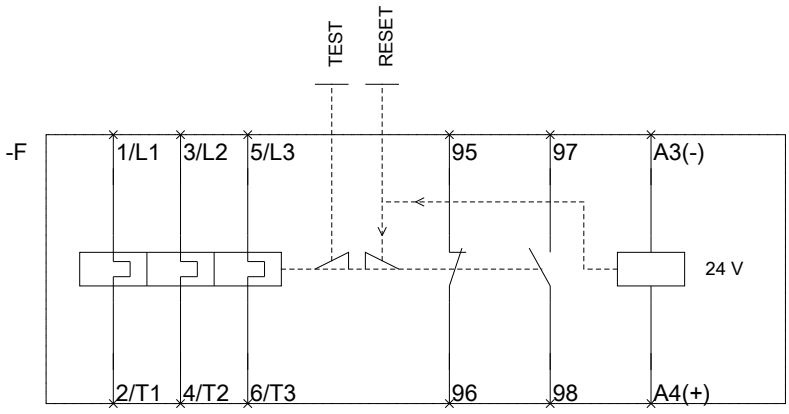
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB31234PE0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RB31234PE0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB31234PE0&lang=en







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