



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:

Active power loss total typical	W	0.1
Insulation voltage	V	690
<ul style="list-style-type: none"> with degree of pollution 3 Rated value 		
Shock resistance		15g / 11 ms
<ul style="list-style-type: none"> acc. to IEC 60068-2-27 		
Vibration resistance		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 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		IP20
<ul style="list-style-type: none"> on the front 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		F
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 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	1 ... 4
Operating voltage	V	24
<ul style="list-style-type: none"> for remote-reset function for DC 		

<ul style="list-style-type: none"> • at AC-3 Rated value maximum 	V	690
Operating frequency Rated value	Hz	50 ... 60
Operating current		
<ul style="list-style-type: none"> • at AC-3 — at 400 V Rated value 	A	4

Auxiliary circuit:

Number of NC contacts		
<ul style="list-style-type: none"> • for auxiliary contacts — Note 		1 for contactor disconnection
Number of NO contacts		
<ul style="list-style-type: none"> • for auxiliary contacts — Note 		1 for message "tripped"
Number of CO contacts		
<ul style="list-style-type: none"> • for auxiliary contacts 		0
Design of the auxiliary switch		integrated
Operating current of the auxiliary contacts at AC-15		
<ul style="list-style-type: none"> • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V 	A	4 4 4 4 3
Operating current of the auxiliary contacts at DC-13		
<ul style="list-style-type: none"> • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V 	A	2 0.55 0.3 0.3 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
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Short-circuit:

Design of the fuse link		
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required 		Fuse gG: 20 A 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		
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	mm	0 0 0 0 0 6 0 6 6 6 6 0 6 6 6

Connections/ Terminals:

Type of electrical connection		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		spring-loaded terminals spring-loaded terminals
Arrangement of electrical connectors for main current circuit		Top and bottom
Product function		
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 		Yes
Type of connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing 		1x (1 ... 10 mm ²) 1x (1 ... 6 mm ²) 1x (1 ... 6 mm ²) 1x (18 ... 8) 1x (0,5 ... 1,5 mm ²), 2x (0,5 ... 1,5 mm ²) 1x (0.25 ... 1.5 mm ²), 2x (0.25 ... 1.5 mm ²)

- finely stranded without core end processing
- for AWG conductors for auxiliary contacts

1x (0.25 ... 1.5 mm²), 2x (0.25 ... 1.5 mm²)

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:

General Product Approval	EMC	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Shipping Approval	other
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[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

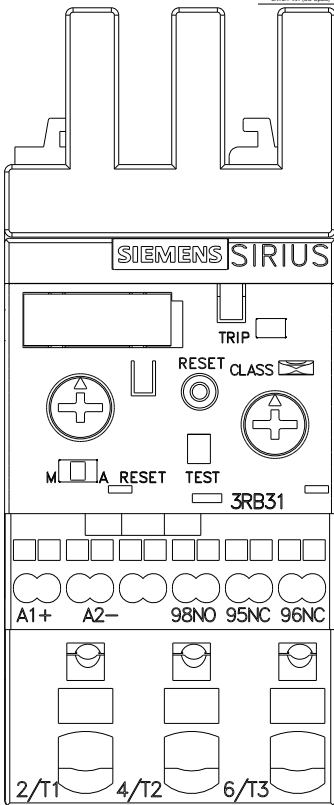
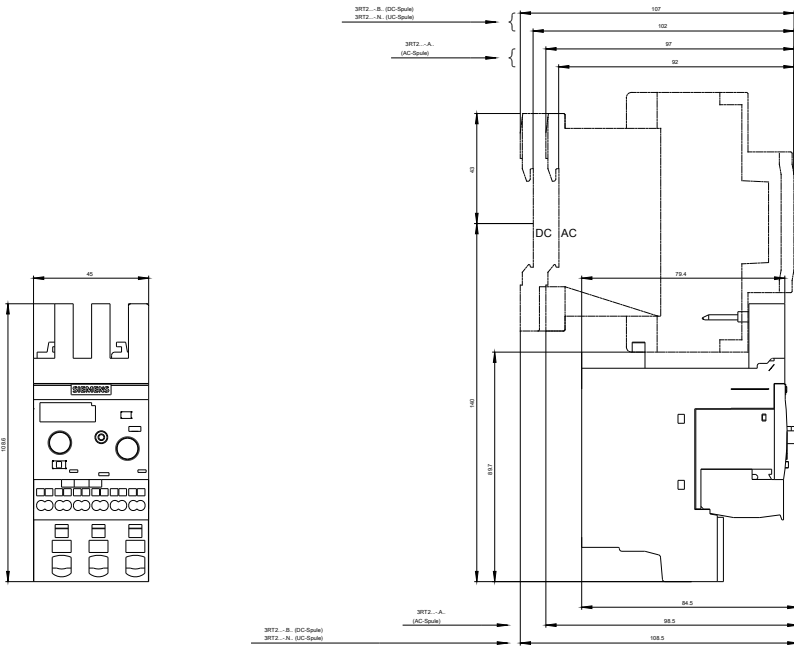
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB31234PE0>

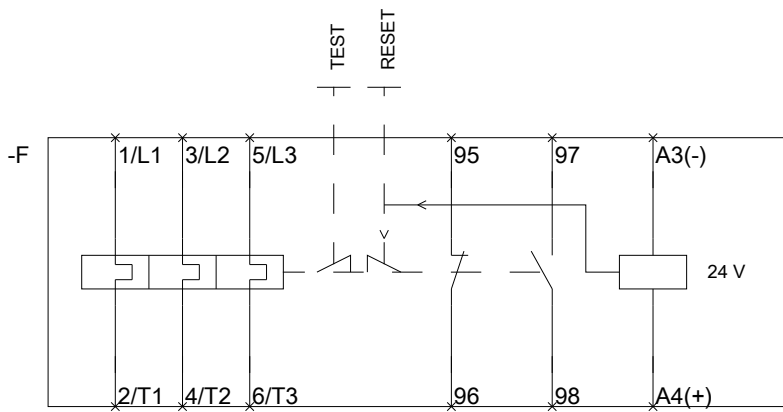
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RB31234PE0/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=3RB31234PE0&lang=en





last modified:

11.03.2015