



OVERLOAD RELAY 0.32...1.25 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		
• 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/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		
• 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	0.32 ... 1.25
Operating voltage		
• for remote-reset function for DC	V	24

• 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	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	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
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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
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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
- during storage
- during transport

°C

-25 ... +60

°C

-40 ... +80

°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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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



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

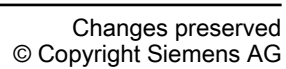
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB31234NE0>

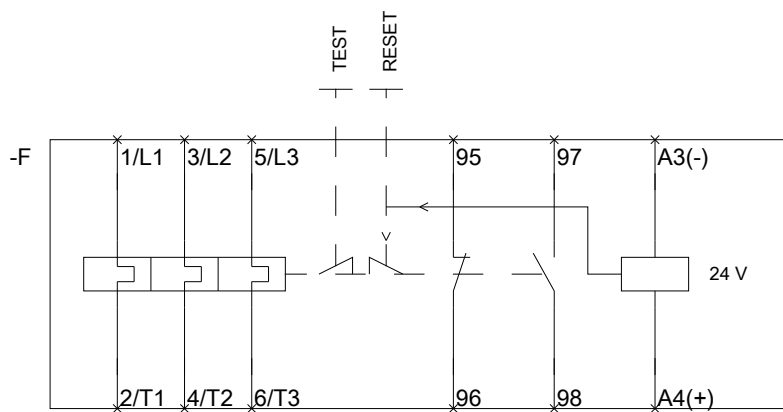
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RB31234NE0/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=3RB31234NE0&lang=en





last modified:

11.03.2015