



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:

Size of contactor can be combined company-specific	S0
Active power loss total typical	0.1 W
Insulation voltage	690 V
<ul style="list-style-type: none"> with degree of pollution 3 Rated value 	
Surge voltage resistance Rated value	6 kV
Protection class IP	IP20
<ul style="list-style-type: none"> on the front of the terminal 	IP20
Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 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	F
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 acc. to DIN EN 81346-2 	F

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	-25 ... +60 °C
<ul style="list-style-type: none"> during operation during storage 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	0.32 ... 1.25 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	1.25 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
- for short-circuit protection of the auxiliary switch required

Fuse gG: 6 A
fuse gG: 6 A

Installation/ mounting/ dimensions:

mounting position	any
Mounting type	direct mounting
Height	87 mm
Width	45 mm
Depth	84 mm
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 	<p>0 mm 0 mm 0 mm 0 mm 0 mm</p> <p>6 mm 0 mm 6 mm 6 mm 6 mm</p> <p>6 mm 0 mm 6 mm 6 mm 6 mm</p>

Connections/ Terminals:

Product function	
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	Yes
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	<p>screw-type terminals screw-type terminals</p>
Arrangement of electrical connectors for main current circuit	Top and bottom
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 	1x (1 ... 10 mm ²), 2x (1 ... 10 mm ²)

<ul style="list-style-type: none"> — finely stranded with core end processing • for AWG conductors for main contacts 	<p>1x (1 ... 6 mm²), 2 x (1 ... 6 mm²), 1x 10 mm²</p> <p>1x (16 ... 8), 2x (16 ... 8)</p>
Type of connectable conductor cross-section <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for auxiliary contacts 	<p>1x (0,5 ... 4 mm²), 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)</p> <p>1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²), 1x (0.5 ... 2.5 mm²)</p> <p>1x (20 ... 14), 2x (20 ... 14)</p>
Mechanical data:	
Size of overload relay	S0
Communication/ Protocol:	
Protocol is supported <ul style="list-style-type: none"> • IO-Link protocol 	No
Type of voltage supply via input/output link master	No
Electromagnetic compatibility:	
EMC emitted interference <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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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Shipping Approval	other
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[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

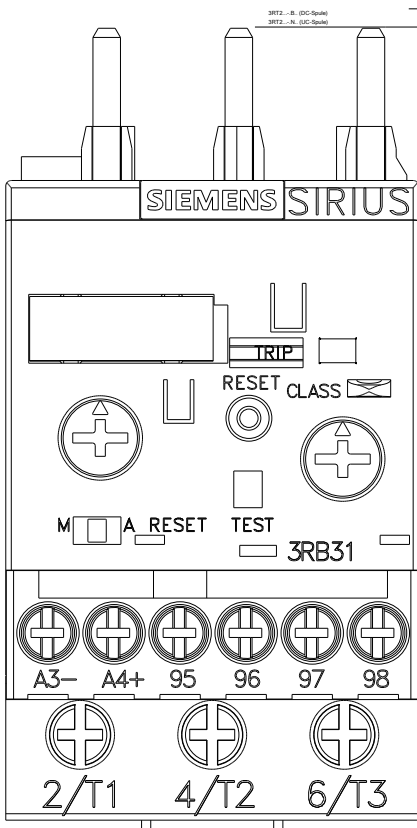
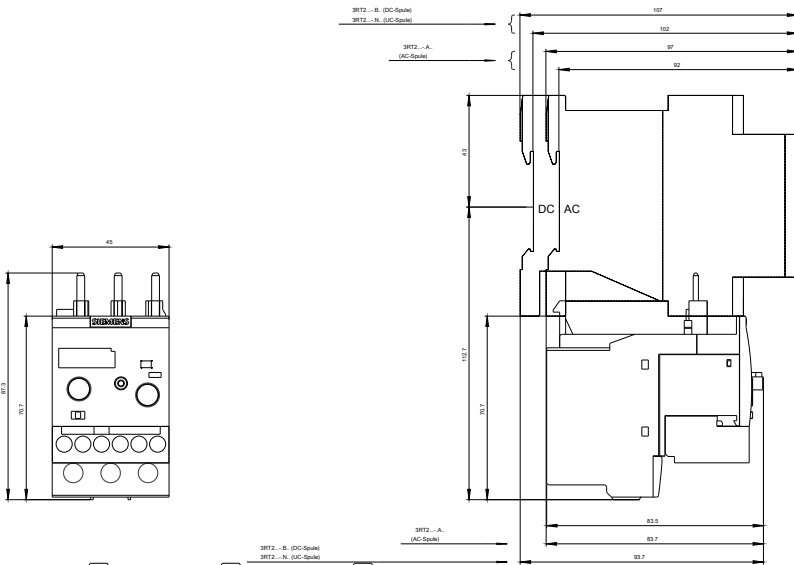
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB31234NB0>

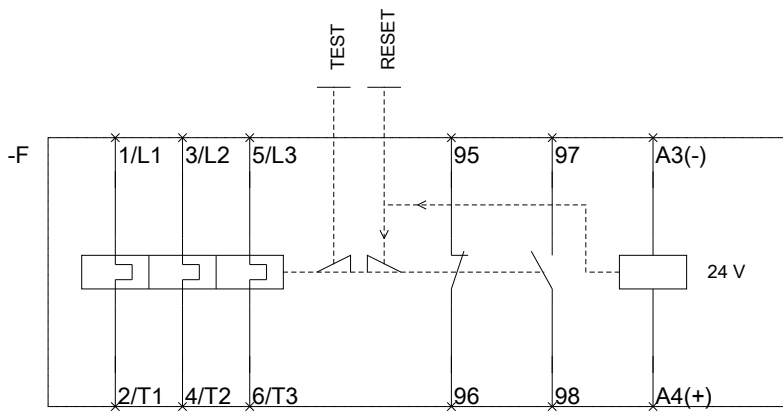
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RB31234NB0>

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





last modified:

29.06.2015