



OVERLOAD RELAY 10...40 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

General technical data:		
product brand name		SIRIUS
Product designation		solid-state overload relay
Size of overload relay		S0
Number of poles / for main current circuit		3
Product function / removable terminal for auxiliary and control circuit		Yes
Product function		
• overload protection		Yes
• Phase failure detection		Yes
• Ground fault detection		Yes
Product component		
• Auxiliary switch		Yes
• Trip indicator		Yes
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Surge voltage resistance / Rated value	kV	6
Protection class IP		
• of the terminal		IP20
• on the front		IP20
Protection against electrical shock		finger-safe

<b>Installation altitude / at height above sea level / maximum</b>	m	2,000
<b>Vibration resistance</b>		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s <sup>2</sup> ; 10 cycles
<b>Ambient temperature</b>		
• during transport	°C	-40 ... +80
• during storage	°C	-40 ... +80
• during operation	°C	-25 ... +60
<b>Relative humidity</b>		
• during operation	/ %	95
<b>EMI immunity / acc. to IEC 60947-1</b>		corresponds to degree of severity 3
<b>EMC emitted interference / acc. to IEC 60947-1</b>		CISPR 11, environment B (residential area)
<b>Electrostatic discharge / acc. to IEC 61000-4-2</b>		6 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling / acc. to IEC 61000-4-3</b>		10 V/m
<b>Conducted interference BURST / acc. to IEC 61000-4-4</b>		2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3
<b>Conducted interference conductor-earth SURGE</b>		2 kV (line to earth) corresponds to degree of severity 3
<b>Conducted interference conductor-conductor SURGE</b>		1 kV (line to line) corresponds to degree of severity 3
<b>Type of protection</b>		II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]
<b>Active power loss / total / typical</b>	W	3
<b>Size of contactor / can be combined / company-specific</b>		S0

#### Main circuit:

<b>Type of voltage / for main current circuit</b>		AC
<b>Operating current</b>		
• at AC-3 / at 400 V / Rated value	A	40
• 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
• 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
<b>Type of assignment</b>		2

#### Control circuit/ Control:

<b>Type of voltage supply / via input/output link master</b>		No
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Type of voltage / for auxiliary and control current circuit		AC/DC
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#### Auxiliary circuit:

Design of the auxiliary switch		integrated
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		1
Number of CO contacts / for auxiliary contacts		0
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gG: 6 A

#### Protective and monitoring functions:

Design of the overload circuit breaker		electronic
Trip class		CLASS 5, 10, 20 and 30 adjustable
Adjustable response value current		
<ul style="list-style-type: none"> <li>of the current-dependent overload release</li> </ul>	A	10 ... 40

#### Installation/ mounting/ dimensions:

Mounting type		direct mounting
mounting position		any
Depth	mm	84
Height	mm	87
Width	mm	45
Arrangement of electrical connectors / for main current circuit		Top and bottom

#### Connections/ terminals:

Design of the electrical connection		
<ul style="list-style-type: none"> <li>for main current circuit</li> </ul>		screw-type terminals
<ul style="list-style-type: none"> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
<ul style="list-style-type: none"> <li>for main contacts <ul style="list-style-type: none"> <li>single or multi-stranded</li> <li>finely stranded <ul style="list-style-type: none"> <li>with core end processing</li> </ul> </li> </ul> </li> <li>for AWG conductors / for main contacts</li> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>single or multi-stranded</li> <li>finely stranded <ul style="list-style-type: none"> <li>with core end processing</li> </ul> </li> </ul> </li> <li>for AWG conductors / for auxiliary contacts</li> </ul>		1x (1 ... 10 mm <sup>2</sup> ), 2x (1 ... 10 mm <sup>2</sup> )  1x (1 ... 6 mm <sup>2</sup> ), 2 x (1 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>  1x (16 ... 8), 2x (16 ... 8)  1x (0,5 ... 4 mm <sup>2</sup> ), 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )  1x (0,5 ... 1.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ), 1x (0.5 ... 2.5 mm <sup>2</sup> )  1x (20 ... 14), 2x (20 ... 14)

## UL/CSA ratings:

Contact rating / of the auxiliary contacts / acc. to UL

B300 / R300

## Certificates/ approvals:

General Product Approval

EMC

For use in hazardous locations



CCC



CSA



UL



C-TICK



ATEX

Declaration of Conformity

Test Certificates



EG-Konf.

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval

other



ABS



BUREAU VERITAS



GL



LRS



RINA

[Environmental Confirmations](#)

## 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

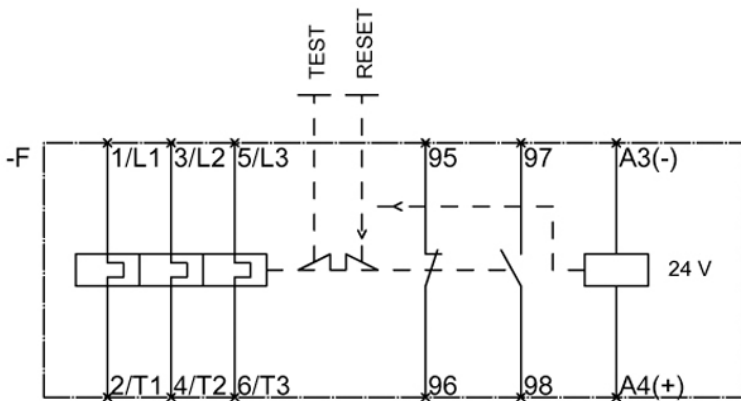
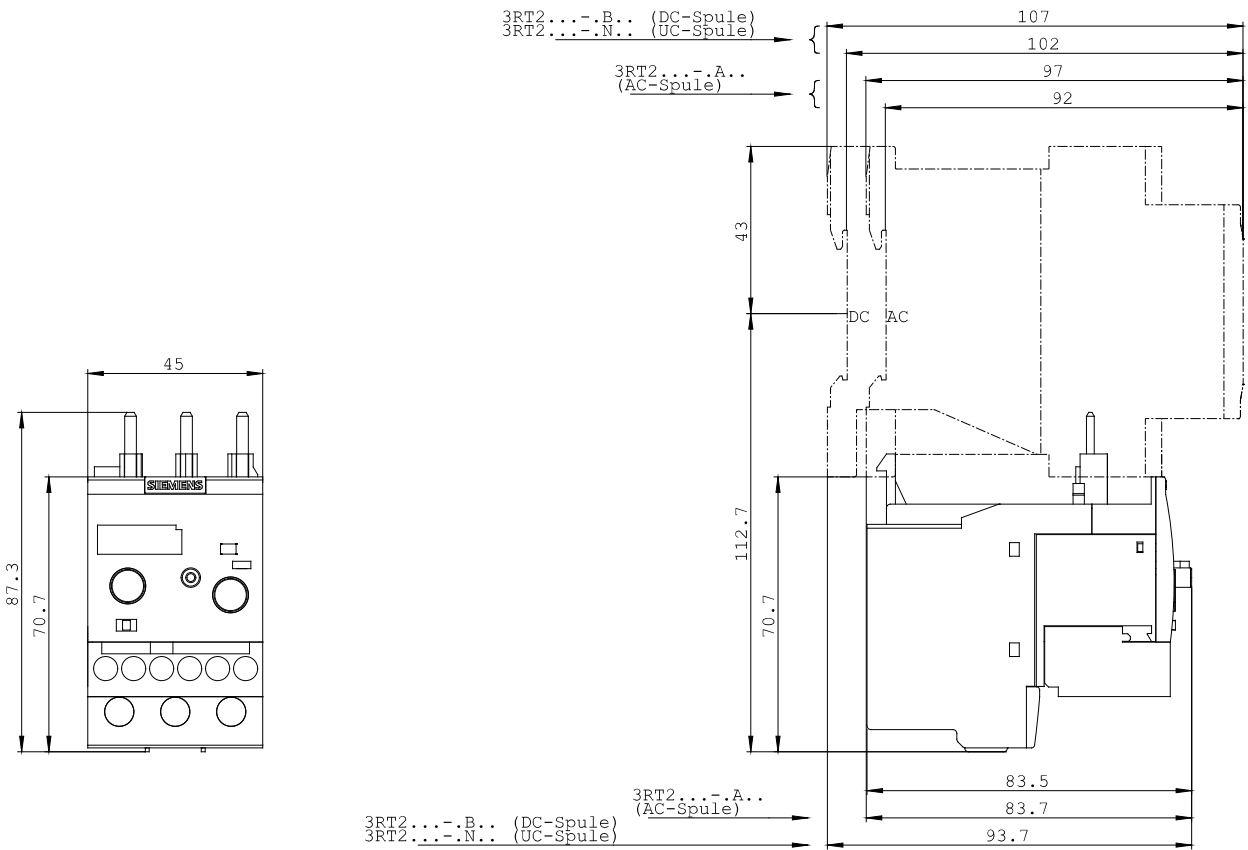
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WWW/view/en/3RB3123-4VB0/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RB3123-4VB0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3123-4VB0)



last change:

Nov 17, 2014