



OVERLOAD RELAY 3.5...5.0 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

General technical data:		
product brand name		SIRIUS
Product designation		3RU2 thermal overload relay
Size of overload relay		S00
Size of contactor / can be combined / company-specific		S00
Number of poles / for main current circuit		3
Product function / removable terminal for auxiliary and control circuit		No
Product function		
• overload protection		Yes
• Phase failure detection		Yes
• Ground fault detection		No
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

<b>Protection against electrical shock</b>		finger-safe
<b>Installation altitude / at height above sea level / maximum</b>	m	2,000
<b>Shock resistance / acc. to IEC 60068-2-27</b>		8g / 11 ms
<b>Ambient temperature</b>		
• during transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operation	°C	-40 ... +70
<b>Relative humidity</b>		
• during operation	%	0 ... 90
<b>Active power loss / total / typical</b>	W	6.1

#### Main circuit:

<b>Operating current / Rated value</b>	A	5
<b>Operating voltage / Rated value</b>	V	690
<b>Type of voltage / for main current circuit</b>		AC/DC
<b>Operating frequency</b>		
• Rated value	Hz	50 ... 60
<b>Operating current / at AC-3 / at 400 V / Rated value</b>	A	5
<b>Type of assignment</b>		2

#### Steuerstromkreis

<b>Type of voltage / for auxiliary and control current circuit</b>		AC/DC
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#### Auxiliary circuit:

<b>Design of the auxiliary switch</b>		integrated
<b>Number of NC contacts / for auxiliary contacts</b>		1
<b>Number of NO contacts / for auxiliary contacts</b>		1
<b>Number of CO contacts / for auxiliary contacts</b>		0
<b>Operating current / of the auxiliary contacts</b>		
• at AC-15		
• at 24 V	A	3
• at 110 V	A	3
• at 120 V	A	3
• at 125 V	A	3
• at 230 V	A	2
• at 400 V	A	1
• at DC-13		
• at 24 V	A	2
• at 110 V	A	0.22
• at 125 V	A	0.22
• at 220 V	A	0.11

Protective and monitoring functions:		
<b>Design of the overload circuit breaker</b>		thermal
<b>Trip class</b>		CLASS 10
<b>Adjustable response value current</b>		
<ul style="list-style-type: none"> <li>of the current-dependent overload release</li> </ul>	A	3.5 ... 5
Safety related data:		
<b>Failure rate [FIT] / with low demand rate / acc. to SN 31920</b>	FIT	50
<b>Proportion of dangerous failures / with low demand rate / acc. to SN 31920</b>	%	50
<b>Proportion of dangerous failures / with high demand rate / acc. to SN 31920</b>	%	50
Installation/ mounting/ dimensions:		
<b>Mounting type</b>		direct mounting
<b>mounting position</b>		any
<b>Depth</b>	mm	70
<b>Height</b>	mm	76
<b>Width</b>	mm	45
Connections/ terminals:		
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Design of the electrical connection</b>		
<ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals screw-type terminals
<b>Type of connectable conductor cross-section / for main contacts</b>		
<ul style="list-style-type: none"> <li>single or multi-stranded</li> <li>finely stranded</li> <li>with core end processing</li> </ul>		2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section / for AWG conductors / for main contacts</b>		2x (20 ... 16), 2x (20 ... 18), 2x 12
<b>Type of connectable conductor cross-section / for auxiliary contacts</b>		
<ul style="list-style-type: none"> <li>single or multi-stranded</li> <li>finely stranded</li> <li>with core end processing</li> </ul>		2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section / for AWG conductors / for auxiliary contacts</b>		2x (20 ... 16), 2x (18 ... 14)
UL/CSA ratings:		
<b>Full-load current (FLA) / for three-phase AC motor</b>		
<ul style="list-style-type: none"> <li>at 480 V / Rated value</li> </ul>	A	5

• at 600 V / Rated value

A

5

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

B600 / R300

### Certificates/ approvals:

#### General Product Approval

For use in  
hazardous  
locations

Declaration of  
Conformity



CCC



CSA



UL



ATEX



EG-Konf.

#### Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

#### Shipping Approval



ABS



BUREAU  
VERITAS



DNV



GL



LRS



PRS

#### Shipping Approval

other



RINA



RMRS

[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

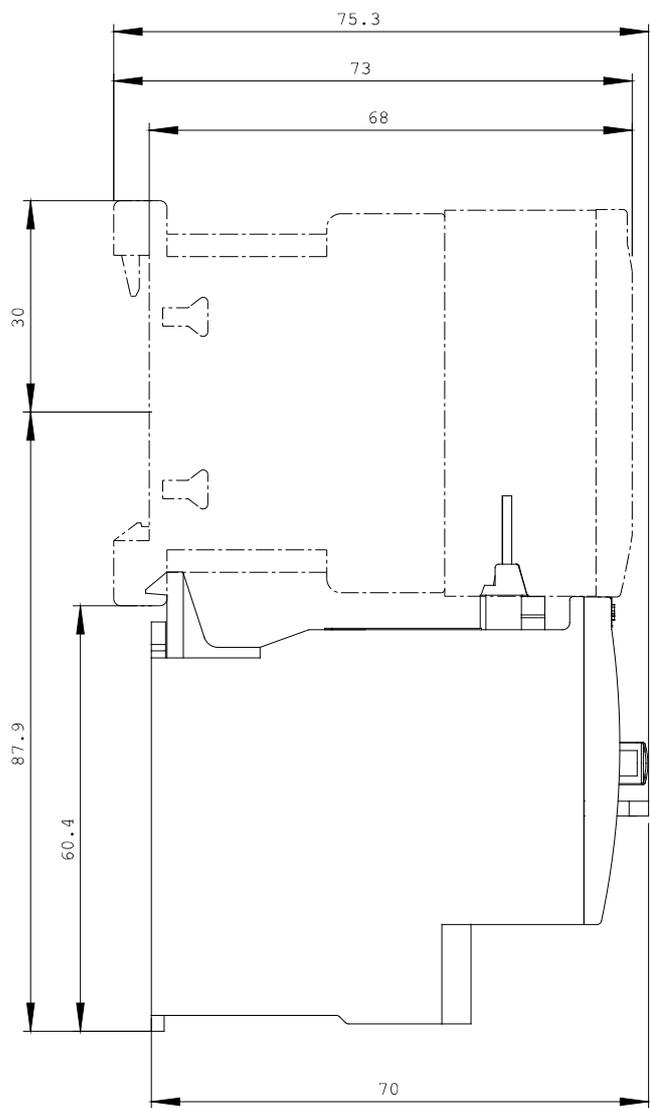
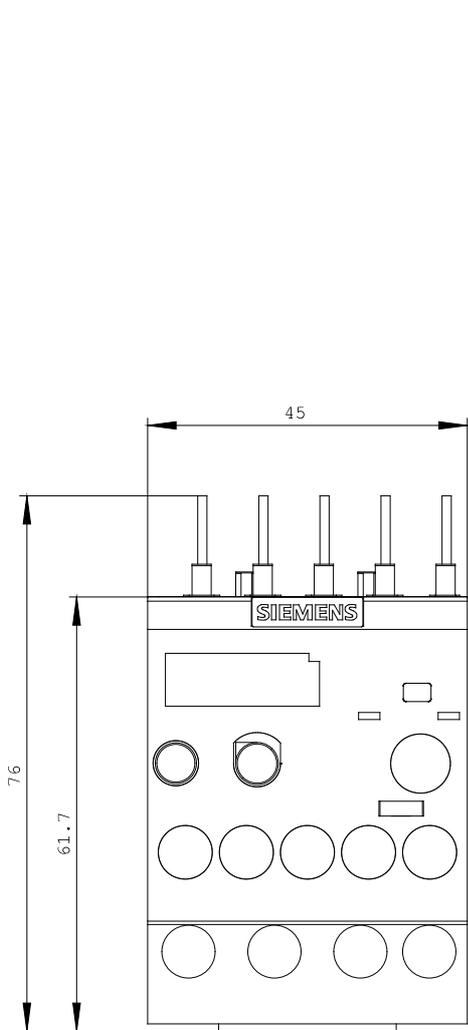
<http://www.siemens.com/cax>

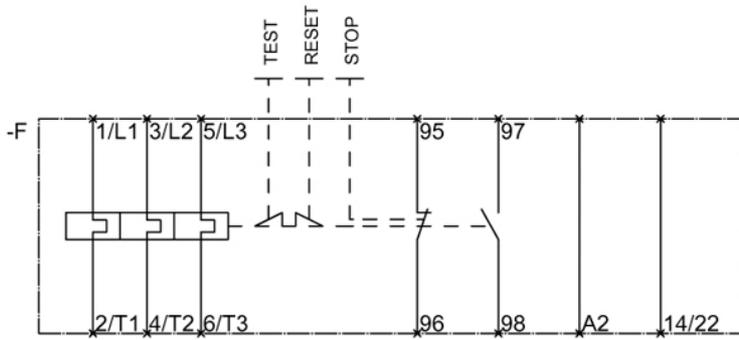
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RU2116-1FB0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RU2116-1FB0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1FB0)





last change:

Dec 3, 2014