



OVERLOAD RELAY 70...80 A FOR MOTOR PROTECTION SIZE S2, CLASS 10A STAND-ALONE INSTALLATION MAIN CIRCUIT: SCREW TERM. AUX. CIRCUIT: SCREW TERM. MANUAL/AUTOMATIC RESET

Figure similar

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay

General technical data:		
Active power loss total typical	W	14
Insulation voltage	V	690
<ul style="list-style-type: none"> <li>with degree of pollution 3 Rated value</li> </ul>		
Shock resistance		8g / 11 ms
<ul style="list-style-type: none"> <li>acc. to IEC 60068-2-27</li> </ul>		
Surge voltage resistance Rated value	kV	6
Temperature compensation	°C	-40 ... +60
Recovery time		
<ul style="list-style-type: none"> <li>after overload trip with automatic reset typical</li> </ul>	min	10
<ul style="list-style-type: none"> <li>after overload trip with remote-reset</li> </ul>	min	10
<ul style="list-style-type: none"> <li>after overload trip with manual reset</li> </ul>	min	10
Size of contactor can be combined company-specific		S2
Type of assignment		2
Protection class IP		
<ul style="list-style-type: none"> <li>on the front</li> </ul>		IP20
<ul style="list-style-type: none"> <li>of the terminal</li> </ul>		IP00
Type of protection		on request
Equipment marking		
<ul style="list-style-type: none"> <li>acc. to DIN EN 81346-2</li> </ul>		F

Main circuit:	
Number of poles for main current circuit	3

<b>Adjustable response value current of the current-dependent overload release</b>	A	70 ... 80
<b>Operating voltage</b>		
• Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
<b>Operating current Rated value</b>	A	80
<b>Operating current</b>		
• at AC-3		
— at 400 V Rated value	A	80

#### Auxiliary circuit:

<b>Number of NC contacts</b>		
• for auxiliary contacts		1
— Note		for contactor disconnection
<b>Number of NO contacts</b>		
• for auxiliary contacts		1
— Note		for message "Tripped"
<b>Number of CO contacts</b>		
• for auxiliary contacts		0
<b>Design of the auxiliary switch</b>		integrated
<b>Operating current of the auxiliary contacts at AC-15</b>		
• 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
<b>Operating current of the auxiliary contacts at DC-13</b>		
• at 24 V	A	2
• at 110 V	A	0.22
• at 125 V	A	0.22
• at 220 V	A	0.11
<b>Design of the miniature circuit breaker</b>		
• for short-circuit protection of the auxiliary switch required		6A (SCC less than equal to 0.5 kA; U less than equal to 260V)

#### Protective and monitoring functions:

<b>Trip class</b>		CLASS 10A
<b>Design of the overload circuit breaker</b>		thermal

#### UL/CSA ratings:

<b>Full-load current (FLA) for three-phase AC motor</b>		
• at 480 V Rated value	A	80

• at 600 V Rated value	A	80
<b>Contact rating of the auxiliary contacts acc. to UL</b>		B600 / R300

### Short-circuit:

<b>Design of the fuse link</b>		
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>		Fuse gG: 160 A fuse gG: 6 A, quick: 10 A

### Installation/ mounting/ dimensions:

<b>mounting position</b>		any
<b>Mounting type</b>		stand-alone installation
<b>Height</b>	mm	105
<b>Width</b>	mm	55
<b>Depth</b>	mm	117
<b>Required spacing</b>		
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— Backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	mm	10 0 10 10 10  10 0 10 10 10  10 0 10 10 10

### Connections/ Terminals:

<b>Type of 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>Arrangement of electrical connectors for main current circuit</b>		Top and bottom
<b>Product function</b>		

<ul style="list-style-type: none"> <li>removable terminal for auxiliary and control circuit</li> </ul>		No
<b>Type of connectable conductor cross-section</b> <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 with core end processing</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 with core end processing</li> </ul> </li> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> ) 2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> ) 2x (18 ... 2), 1x (18 ... 1)  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> ) 2x (20 ... 16), 2x (18 ... 14)
<b>Tightening torque</b> <ul style="list-style-type: none"> <li>for main contacts with screw-type terminals</li> </ul>	N·m	3 ... 4.5
<b>Design of screwdriver shaft</b>		5 to 6 mm diameter
<b>Design of the thread of the connection screw</b> <ul style="list-style-type: none"> <li>for main contacts</li> <li>of the auxiliary and control contacts</li> </ul>		M6 M3

#### Safety related data:

<b>Protection against electrical shock</b>		finger-safe when touched vertically from front acc. to IEC 60529
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#### Mechanical data:

<b>Size of overload relay</b>		S2
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Ambient temperature</b> <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	°C °C °C	-40 ... +70 -55 ... +80 -55 ... +80
<b>Relative humidity during operation</b>	%	0 ... 90

#### Display:

<b>Display version</b> <ul style="list-style-type: none"> <li>for switching status</li> </ul>		Slide switch
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#### Certificates/ approvals:

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

Test Certificates	other
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[Special Test Certificate](#)

[Confirmation](#)

[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

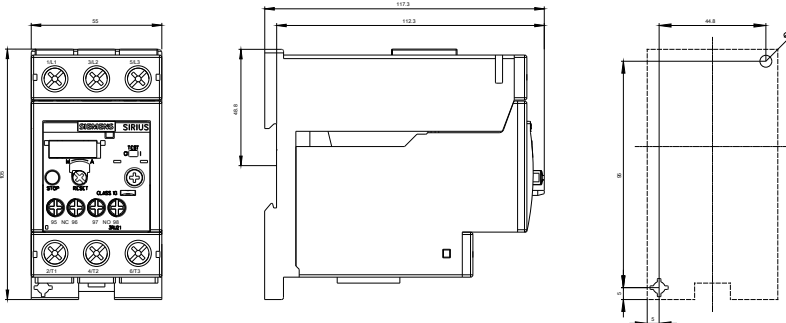
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21364RB1>

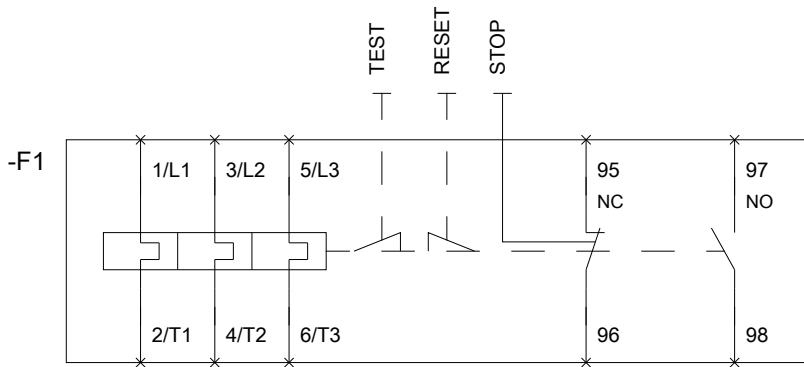
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RU21364RB1/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=3RU21364RB1&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU21364RB1&lang=en)





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