



OVERLOAD RELAY 27...32 A FOR MOTOR PROTECTION SZ S0, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay

**General technical data:**

Size of contactor can be combined company-specific	S0
Active power loss total typical	6.9 W
Insulation voltage	690 V
<ul style="list-style-type: none"> <li>with degree of pollution 3 Rated value</li> </ul>	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	IP20
<ul style="list-style-type: none"> <li>on the front</li> <li>of the terminal</li> </ul>	IP20
Temperature compensation	-40 ... +60 °C
Type of assignment	2

**Ambient conditions:**

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

**Main circuit:**

Adjustable response value current of the current-dependent overload release	27 ... 32 A
Operating voltage	

<ul style="list-style-type: none"> <li>• Rated value</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at AC-3 Rated value maximum</li> </ul>	690 V
<b>Operating frequency Rated value</b>	50 ... 60 Hz
<b>Operating current Rated value</b>	32 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V Rated value</li> </ul>	32 A

#### Auxiliary circuit:

<b>Number of NC contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> <li>— Note</li> </ul>	1 for contactor disconnection
<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> <li>— Note</li> </ul>	1 for message "Tripped"
<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0
<b>Design of the auxiliary switch</b>	integrated
<b>Operating current of the auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 110 V</li> <li>• at 120 V</li> <li>• at 125 V</li> <li>• at 230 V</li> <li>• at 400 V</li> </ul>	3 A 3 A 3 A 3 A 2 A 1 A
<b>Operating current of the auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 110 V</li> <li>• at 125 V</li> <li>• at 220 V</li> </ul>	2 A 0.22 A 0.22 A 0.11 A

#### Protective and monitoring functions:

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

#### 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> <li>• at 600 V Rated value</li> </ul>	32 A 32 A
<b>Contact rating of the auxiliary contacts acc. to UL</b>	B600 / R300

#### Installation/ mounting/ dimensions:

<b>mounting position</b>	any
<b>Mounting type</b>	direct mounting

<b>Height</b>	85 mm
<b>Width</b>	45 mm
<b>Depth</b>	85 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 6 mm</li> <li>— downwards 6 mm</li> <li>— at the side 6 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 6 mm</li> <li>— at the side 6 mm</li> <li>— downwards 6 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 6 mm</li> <li>— downwards 6 mm</li> <li>— at the side 6 mm</li> </ul> </li> </ul>	

Connections/ Terminals:	
<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	No
<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>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> </ul>	2x (1 ... 2,5 mm <sup>2</sup> ), 2x (2,5 ... 10 mm <sup>2</sup> ) 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> 2x (16 ... 12), 2x (14 ... 8)
<b>Type of connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <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 (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>Design of screwdriver shaft</b>	5 to 6 mm diameter

<b>Design of the thread of the connection screw</b>	
• for main contacts	M4
• of the auxiliary and control contacts	M3

**Safety related data:**

<b>Proportion of dangerous failures</b>	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	50 %
<b>MTTF with high demand rate</b>	2 280 y
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y






**Mechanical data:**





<b>Size of overload relay</b>	S0
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**Display:**

<b>Display version</b>	
• for switching status	Slide switch

**Certificates/ approvals:**

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Declaration of Conformity</b>
 CCC	 CSA	 EAC
 UL	 ATEX	 EG-Konf.

<b>Test Certificates</b>	<b>Shipping Approval</b>
<a href="#">Typprüfbescheinigung/Werkszeugnis</a> <a href="#">spezielle Prüfbescheinigung</a> <a href="#">n</a>	 ABS
	 BUREAU VERITAS
	 DNV
	 GL

<b>Shipping Approval</b>	<b>other</b>
 LRS	 PRR
 RINA	 RMRS
	<a href="#">Umweltbestätigung</a>

**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**

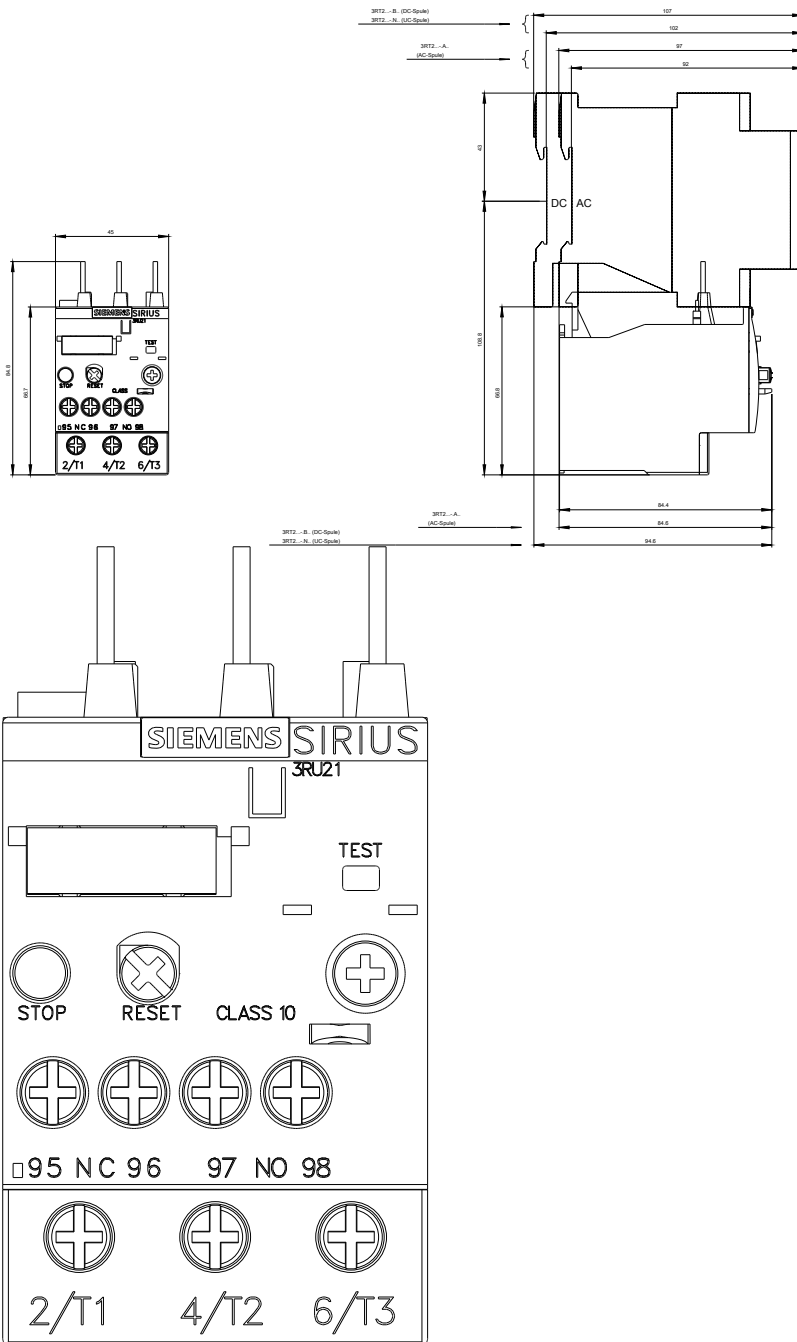
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21264EB0>

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

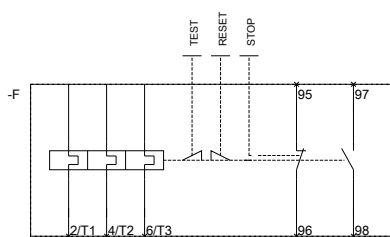
<https://support.industry.siemens.com/cs/ww/en/ps/3RU21264EB0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU21264EB0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU21264EB0&lang=en)



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