



OVERLOAD RELAY 20...80 A FOR MOTOR PROTECTION SIZE S2, CLASS 10E FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

Figure similar

product brand name	SIRIUS
Product designation	solid-state overload relay
<b>General technical data:</b>	
Active power loss total typical	4.6 W
Insulation voltage	690 V
<ul style="list-style-type: none"> <li>with degree of pollution 3 Rated value</li> </ul>	
Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s <sup>2</sup> ; 10 cycles
Surge voltage resistance Rated value	6 kV
Temperature compensation	60 ... -25 °C
Recovery time	
<ul style="list-style-type: none"> <li>after overload trip with automatic reset typical</li> </ul>	3 min
<ul style="list-style-type: none"> <li>after overload trip with remote-reset</li> </ul>	0 min
<ul style="list-style-type: none"> <li>after overload trip with manual reset</li> </ul>	0 min
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	II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]
Equipment marking	
<ul style="list-style-type: none"> <li>acc. to DIN EN 81346-2</li> </ul>	F
<b>Main circuit:</b>	
Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	20 ... 80 A

<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• Rated value</li> <li>• at AC-3 Rated value maximum</li> </ul>	690 V 690 V
<b>Operating frequency Rated value</b>	50 ... 60 Hz
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V Rated value</li> </ul>	80 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> </ul>	4 A 4 A 4 A 4 A 3 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 60 V</li> <li>• at 110 V</li> <li>• at 125 V</li> <li>• at 220 V</li> </ul>	2 A 0.55 A 0.3 A 0.3 A 0.11 A

#### Protective and monitoring functions:

<b>Trip class</b>	CLASS 10E
<b>Design of the overload circuit breaker</b>	electronic
<b>Response time of the ground fault protection in settled state</b>	1 000 ms

#### 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>	80 A 80 A
<b>Contact rating of the auxiliary contacts acc. to UL</b>	B600 / R300

#### Short-circuit:

<b>Design of the fuse link</b>	
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- for short-circuit protection of the main circuit
  - required
- for short-circuit protection of the auxiliary switch required

Fuse gG: 250 A  
fuse gG: 6 A

#### Installation/ mounting/ dimensions:

<b>mounting position</b>	any
<b>Mounting type</b>	direct mounting
<b>Height</b>	99 mm
<b>Width</b>	55 mm
<b>Depth</b>	104 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</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>	<p>0 mm 0 mm 0 mm 10 mm 0 mm</p> <p>10 mm 0 mm 10 mm 10 mm 10 mm</p> <p>10 mm 0 mm 10 mm 10 mm 10 mm</p>

#### Connections/ Terminals:

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	Yes
<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>	<p>screw-type terminals screw-type terminals</p>
<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> </ul> </li> </ul>	1x (1 ... 50 mm <sup>2</sup> ), 2x (1 ... 35 mm <sup>2</sup> )

<ul style="list-style-type: none"> <li>— finely stranded with core end processing</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>	1x (1 ... 35 mm <sup>2</sup> ), 2x (1 ... 25 mm <sup>2</sup> ) 2x (18 ... 2), 1x (18 ... 1)  1x (0,5 ... 4 mm <sup>2</sup> ), 2x (0,5 ... 2,5 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 1x (20 ... 14), 2x (20 ... 14)
<b>Design of screwdriver shaft</b>	Diameter 5 to 6 mm
<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>Proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>	35 %
<b>Protection against electrical shock</b>	finger-safe when touched vertically from front acc. to IEC 60529

#### Mechanical data:

<b>Size of overload relay</b>	S2
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#### Communication/ Protocol:

<b>Protocol is supported</b>	
<ul style="list-style-type: none"> <li>• IO-Link protocol</li> </ul>	No
<b>Type of voltage supply via input/output link master</b>	No

#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
<b>Relative humidity during operation</b>	0 ... 95 %

#### Electromagnetic compatibility:

<b>EMC emitted interference</b>	
<ul style="list-style-type: none"> <li>• acc. to IEC 60947-1</li> </ul>	CISPR 11, environment B (residential area)
<b>EMI immunity acc. to IEC 60947-1</b>	corresponds to degree of severity 3
<b>Conducted interference due to burst acc. to IEC 61000-4-4</b>	2 kV (power ports), 1 kV (signal ports)
<b>Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5</b>	2 kV (line to ground)
<b>Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5</b>	1 kV (line to line)
<b>Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6</b>	10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>	10 V/m

Electrostatic discharge acc. to IEC 61000-4-2

6 kV contact discharge / 8 kV air discharge






#### Display:

##### Display version

- for switching status

Slide switch

#### Certificates/ approvals:

General Product Approval	For use in hazardous locations	Declaration of Conformity	Test Certificates		
 CSA		 UL	 ATEX	 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

#### other

[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

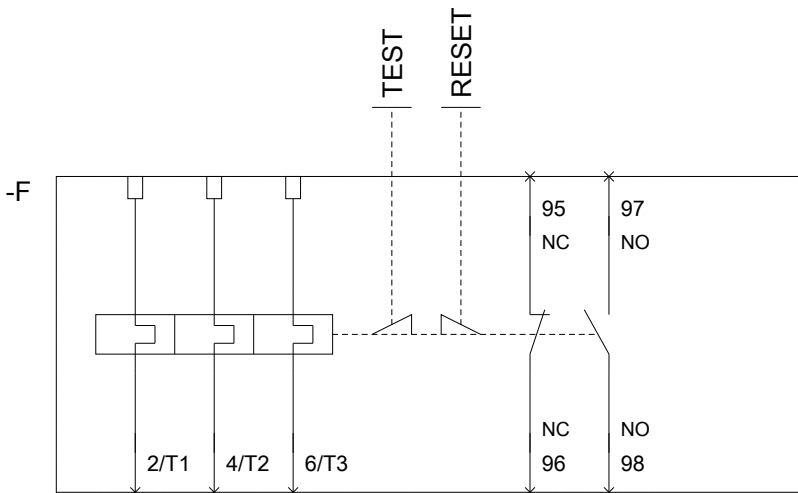
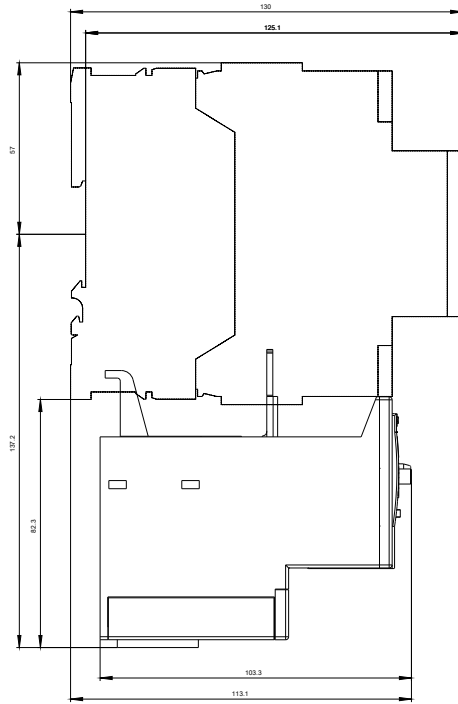
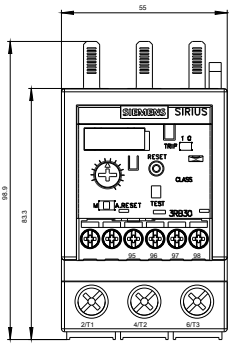
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361WB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB30361WB0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RB30361WB0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB30361WB0&lang=en)



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