



Overload relay 7.0...10 A Thermal For motor protection Size S00, Class 10 Stand-alone installation Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
<b>General technical data</b>	
size of overload relay	S00
size of contactor can be combined company-specific	S00
power loss [W] for rated value of the current at AC in hot operating state	6.6 W
• per pole	2.2 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
• in networks with ungrounded star point between auxiliary and auxiliary circuit	440 V
• in networks with grounded star point between auxiliary and auxiliary circuit	440 V
• in networks with ungrounded star point between main and auxiliary circuit	440 V
• in networks with grounded star point between main and auxiliary circuit	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-55 ... +80 °C
temperature compensation	-40 ... +60 °C
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	7 ... 10 A
operating voltage	
• rated value	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	10 A
operational current at AC-3e at 400 V rated value	10 A

<b>operating power</b>	
<ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> <li>at AC-3e <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> </ul>	4 kW 5.5 kW 7.5 kW  4 kW 5.5 kW 7.5 kW
<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	integrated
<b>number of NC contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>note</li> </ul>	for contactor disconnection
<b>number of NO contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>note</li> </ul>	for message "Tripped"
number of CO contacts for auxiliary contacts	0
<b>operational current of 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> <li>at 690 V</li> </ul>	3 A 3 A 3 A 3 A 2 A 1 A 0.75 A
<b>operational current of 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 0.3 A 0.22 A 0.22 A 0.11 A
<b>contact rating of auxiliary contacts according to UL</b>	B600 / R300
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-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>	10 A 10 A
<b>Short-circuit protection</b>	
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 6 A, quick: 10 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	stand-alone installation
<b>height</b>	102 mm
<b>width</b>	45 mm
<b>depth</b>	79 mm
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	No
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals spring-loaded terminals
<b>arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>for main contacts <ul style="list-style-type: none"> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul> </li> <li>for AWG cables for main contacts</li> </ul>	1x (0,5 ... 4 mm²) 1x (0.5 ... 2.5 mm²) 1x (0.5 ... 2.5 mm²) 1x (20 ... 12)

<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (0.5 ... 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 (0.5 ... 1.5 mm <sup>2</sup> ) 2x (20 ... 14)
<b>design of screwdriver shaft</b>	Diameter 3 mm
<b>size of the screwdriver tip</b>	3,0 x 0,5 mm
<b>Safety related data</b>	
<b>failure rate [FIT] with low demand rate according to SN 31920</b>	50 FIT
<b>MTTF with high demand rate</b>	2 280 a
IEC 61508	
<b>T1 value</b>	
<ul style="list-style-type: none"> <li>for proof test interval or service life according to IEC 61508</li> </ul>	20 a
<b>Electrical Safety</b>	
<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front
<b>Display</b>	
display version for switching status	Slide switch
<b>Approvals Certificates</b>	
<b>General Product Approval</b>	

[Confirmation](#)



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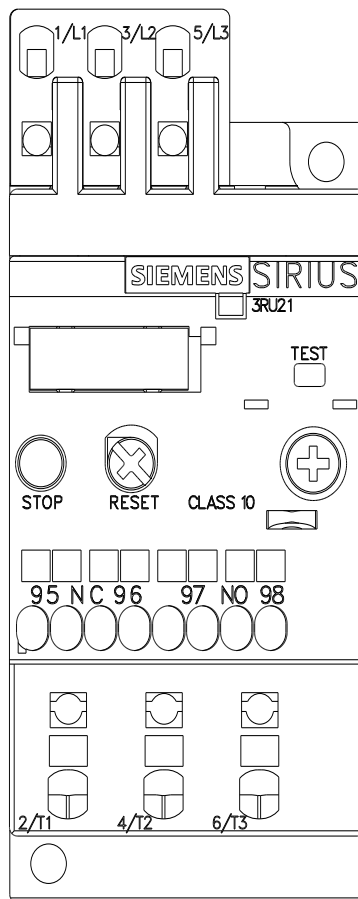
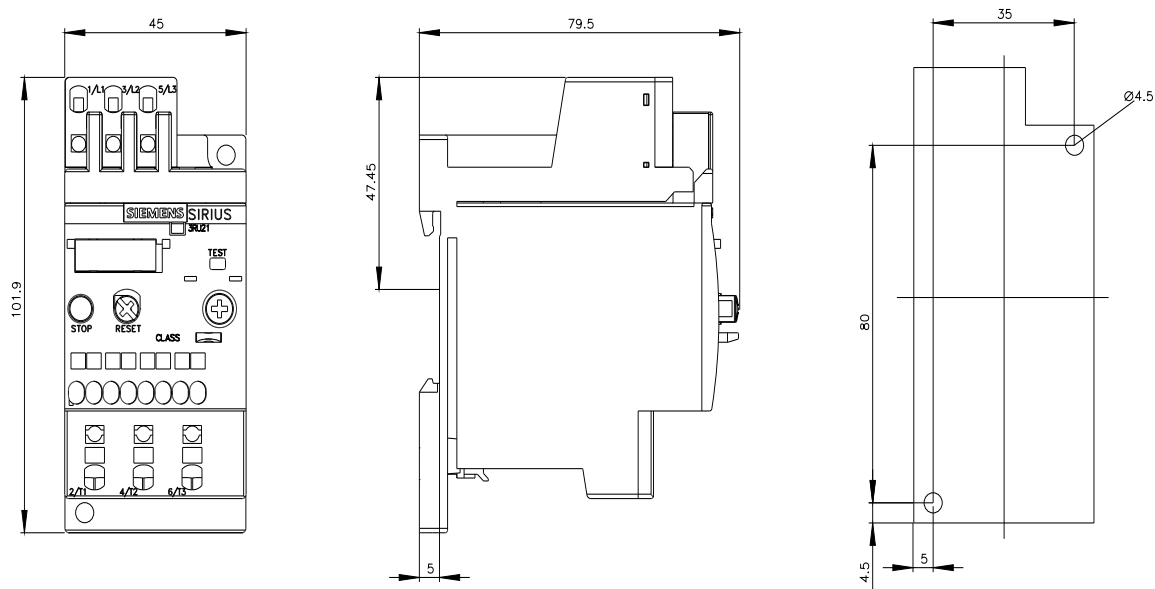
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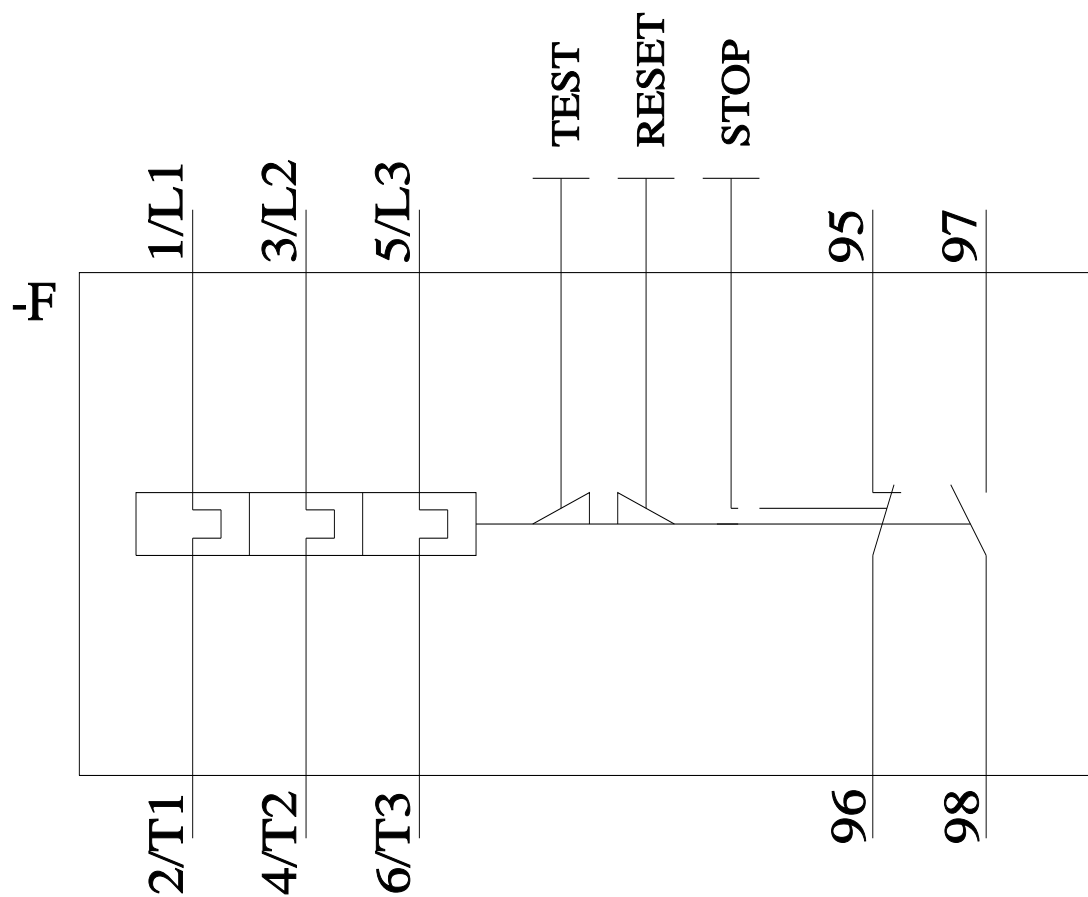


<b>For use in hazardous locations</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
 ATEX	<a href="#">Special Test Certificate</a>	 ABS
 IECEX	<a href="#">Type Test Certificates/Test Report</a>	 BUREAU VERITAS
<b>Marine / Shipping</b>		<b>other</b>
 DNV	 LRS	 PRS
	 RINA	 RMRS
<b>other</b>	<b>Railway</b>	<b>Environment</b>
<a href="#">Confirmation</a>	<a href="#">Special Test Certificate</a>	
		<a href="#">Environmental Confirmations</a>

<b>Further information</b>	
Information on the packaging	
<a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>	
Information- and Downloadcenter (Catalogs, Brochures,...)	
<a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a>	
Industry Mall (Online ordering system)	
<a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1JC1">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1JC1</a>	
Cax online generator	
<a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RU2116-1JC1">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RU2116-1JC1</a>	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
<a href="https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1JC1">https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1JC1</a>	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)	
<a href="http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1JC1&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1JC1&amp;lang=en</a>	

Characteristic: Tripping characteristics, I²t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1JC1/char>  
Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-1JC1&objecttype=14&gridview=view1>





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