



Overload relay 70...80 A Thermal For motor protection Size S2, Class 10A  
 Contactor mounting Main circuit: Screw Auxiliary circuit: spring-type  
 terminal Manual-Automatic-Reset

<b>product brand name</b>	SIRIUS
<b>product designation</b>	thermal overload relay
<b>product type designation</b>	3RU2
<b>General technical data</b>	
<b>size of overload relay</b>	S2
<b>size of contactor can be combined company-specific</b>	S2
power loss [W] for rated value of the current at AC in hot operating state	18.9 W
• per pole	6.3 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<b>maximum permissible voltage for safe isolation in networks with grounded star point</b>	
• between auxiliary and auxiliary circuit	415 V
• between auxiliary and auxiliary circuit	415 V
• between main and auxiliary circuit	690 V
• between main and auxiliary circuit	690 V
shock resistance acc. to IEC 60068-2-27	8g / 11 ms
<b>recovery time after overload trip</b>	
• with automatic reset typical	10 min
• with remote-reset	10 min
• with manual reset	10 min
<b>type of protection according to ATEX directive 2014/34/EU</b>	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 98 ATEX G 001
<b>reference code acc. to IEC 81346-2</b>	F
Substance Prohibitance (Date)	15.10.2014 00:00:00
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-40 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-55 ... +80 °C
<b>temperature compensation</b>	-40 ... +60 °C
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3

<b>adjustable current response value current of the current-dependent overload release</b>	70 ... 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>operational current rated value</b>	80 A
<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	integrated
<b>number of NC contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• note</li> </ul>	1 for contactor disconnection
<b>number of NO contacts for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• note</li> </ul>	1 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> </ul>	3 A 3 A 3 A 3 A 2 A 1 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
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
<b>contact rating of auxiliary contacts according to UL</b>	B600 / R300
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10A
<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>	80 A 80 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>	Contactor mounting
<b>height</b>	90 mm
<b>width</b>	55 mm
<b>depth</b>	105 mm
<b>Connections/ Terminals</b>	
product function removable terminal for auxiliary and control circuit	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>	screw-type 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> </ul> </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> )




• at AWG cables for main contacts	2x (18 ... 2), 1x (18 ... 1)
<b>type of connectable conductor cross-sections</b>	
• for auxiliary contacts	
— solid or stranded	2x (0.5 ... 2.5 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> )
— finely stranded without core end processing	2x (0.5 ... 2.5 mm <sup>2</sup> )
• at AWG cables for auxiliary contacts	2x (20 ... 14)
<b>tightening torque</b>	
• for main contacts with screw-type terminals	3 ... 4.5 N·m
<b>design of screwdriver shaft</b>	Diameter 5 ... 6 mm
<b>size of the screwdriver tip</b>	Pozidriv PZ 2
<b>design of the thread of the connection screw</b>	
• for main contacts	M6

<b>Safety related data</b>	
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>protection class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. to IEC 60529</b>	finger-safe, for vertical contact from the front

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

<b>Certificates/ approvals</b>	
<b>General Product Approval</b>	<b>For use in hazardous locations</b>



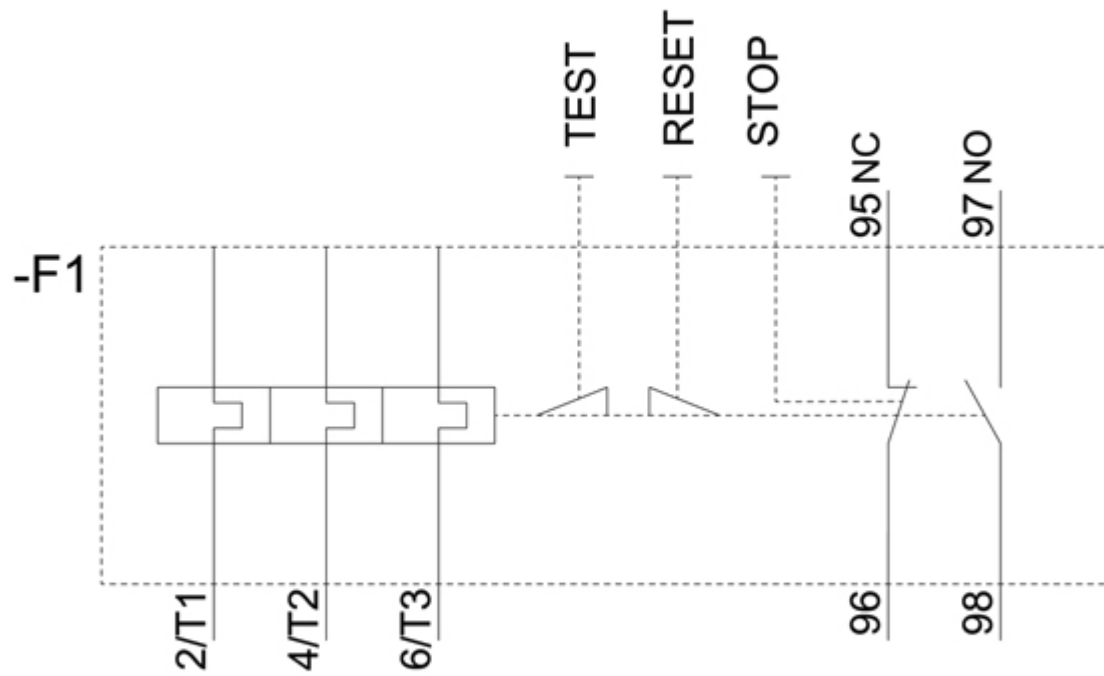
<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
 EG-Konf.	Miscellaneous <u>Special Test Certificate</u>	<u>Type Test Certificates/Test Report</u>  ABS  BUREAU VERITAS

<b>Marine / Shipping</b>	<b>other</b>
 LRS  PRS  RINA  RMRS  DNV-GL	<u>Confirmation</u>

<b>Railway</b>
<u>Special Test Certificate</u>

<b>Further information</b>
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