



overload relay 14...20 A thermal for motor protection frame size S0, Class 10 for mounting on contactors main circuit: spring-loaded terminal auxiliary circuit: spring-loaded 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	S0
size of contactor can be combined company-specific	S0
power loss [W] for rated value of the current at AC in hot operating state	8.1 W
• per pole	2.7 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
Net Weight	0.231 kg
<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>Environmental footprint</b>	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO <sub>2</sub> eq] total	56.9 kg
global warming potential [CO <sub>2</sub> eq] during manufacturing	1.57 kg
global warming potential [CO <sub>2</sub> eq] during sales	0.061 kg
global warming potential [CO <sub>2</sub> eq] during operation	55.4 kg
global warming potential [CO <sub>2</sub> eq] after end of life	-0.075 kg
<b>Main circuit</b>	

number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	14 ... 20 A
<b>operating voltage</b>	
• rated value	690 V
• at AC-3e rated value maximum	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
<b>operational current rated value</b>	20 A
operational current at AC-3e at 400 V rated value	20 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	7.5 kW
— at 500 V rated value	11 kW
— at 690 V rated value	15 kW
• at AC-3e	
— at 400 V rated value	7.5 kW
— at 500 V rated value	11 kW
— at 690 V rated value	15 kW
<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	integrated
<b>number of NC contacts for auxiliary contacts</b>	1
• note	for contactor disconnection
<b>number of NO contacts for auxiliary contacts</b>	1
• note	for message "Tripped"
number of CO contacts for auxiliary contacts	0
<b>operational current of auxiliary contacts at AC-15</b>	
• at 24 V	3 A
• at 110 V	3 A
• at 120 V	3 A
• at 125 V	3 A
• at 230 V	2 A
• at 400 V	1 A
• at 690 V	0.75 A
<b>operational current of auxiliary contacts at DC-13</b>	
• at 24 V	2 A
• at 60 V	0.3 A
• at 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	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>	
• at 480 V rated value	20 A
• at 600 V rated value	20 A
<b>Short-circuit protection</b>	
<b>design of the fuse link</b>	
• for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	for mounting on contactors: with a vertical mounting plane +/-135° rotatable & +/- 22.5° tiltable, stand-alone installation: with a vertical mounting plane +/-135° rotatable and +/-45° tiltable; for more details see manual
<b>fastening method</b>	Contactor mounting
<b>height</b>	102 mm
<b>width</b>	45 mm
<b>depth</b>	84 mm
<b>Connections/ Terminals</b>	

product component removable terminal for auxiliary and control circuit	No
type of electrical connection <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
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections <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 (1 ... 10 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (18 ... 8)
type of connectable conductor cross-sections <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)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm
<b>Safety related data</b>	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 a
IEC 61508	
T1 value <ul style="list-style-type: none"> <li>for proof test interval or service life according to IEC 61508</li> </ul>	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
<b>Display</b>	
display version for switching status	Slide switch
<b>Approvals Certificates</b>	
General Product Approval	



For use in hazardous locations	Test Certificates	Maritime application
 IECEx	 ATEX	<a href="#">Special Test Certificate</a> <a href="#">Type Test Certificates/Test Report</a>

Maritime application	other
 DNV	 LRS

other	Railway	Environment
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**Further information****Information on the packaging**<https://support.industry.siemens.com/cs/ww/en/view/109813875>**Information for data generation and storage**<https://support.industry.siemens.com/cs/ww/en/view/109995012>**Information- and Downloadcenter (Catalogs, Brochures,...)**<https://www.siemens.com/ic10>**Industry Mall (Online ordering system)**<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-4BC0>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4BC0>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU2126-4BC0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4BC0&lang=en)**Cax online generator**<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4BC0>**Characteristic curves**[https://curves.samaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.samaris.siemens.com/curves/<mmp_prod_noCOMP=)

