



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 [CO2 eq] total	56.9 kg
global warming potential [CO2 eq] during manufacturing	1.57 kg
global warming potential [CO2 eq] during sales	0.061 kg
global warming potential [CO2 eq] during operation	55.4 kg
global warming potential [CO2 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
operating voltage <ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC-3e rated value maximum</li> </ul>	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	20 A
operational current at AC-3e at 400 V rated value	20 A
operating power <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>	7.5 kW 11 kW 15 kW  7.5 kW 11 kW 15 kW
<b>Auxiliary circuit</b>	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts <ul style="list-style-type: none"> <li>• note</li> </ul>	1 for contactor disconnection
number of NO contacts for auxiliary contacts <ul style="list-style-type: none"> <li>• note</li> </ul>	1 for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15 <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
operational current of auxiliary contacts at DC-13 <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
contact rating of auxiliary contacts according to UL	B600 / R300
<b>Protective and monitoring functions</b>	
trip class	CLASS 10
design of the overload release	thermal
<b>UL/CSA ratings</b>	
full-load current (FLA) for 3-phase AC motor <ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>	20 A 20 A
<b>Short-circuit protection</b>	
design of the fuse link <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>	
mounting position	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
fastening method	Contactor mounting
height	102 mm
width	45 mm
depth	84 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 (1 ... 10 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (1 ... 6 mm <sup>2</sup> ) 1x (18 ... 8)
<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
Electrical Safety	
<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>	
General Product Approval	



For use in hazardous locations	Test Certificates	Maritime application
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application	other
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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&amp;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.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



