



Overload relay 57...75 A For motor protection Size S3, Class 10 Contactor mounting Main circuit: Screw terminal Auxiliary circuit: Screw terminal Manual-Automatic-Reset !!! Phased-out product !!! Successor is SIRIUS 3RU2 Preferred successor type is >>3RU2136-4RB0<<

product brand name	SIRIUS
product designation	thermal overload relay

### General technical data

size of overload relay	S3
size of contactor can be combined company-specific	S3
power loss [W] for rated value of the current at AC in hot operating state	18.9 W
<ul style="list-style-type: none"> <li>per pole</li> </ul>	6.3 W
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance rated value	8 kV
protection class IP on the front	IP20
shock resistance	8g / 10 ms
type of protection	DMT 98 ATEX G 001
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	07/01/2006

### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-20 ... +70 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-55 ... +80 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-55 ... +80 °C
relative humidity during operation	100 %

### Main circuit

number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	57 ... 75 A

### Auxiliary circuit

number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
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> </ul>	3 A
<ul style="list-style-type: none"> <li>at 110 V</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 120 V</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 125 V</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 230 V</li> </ul>	2 A
<ul style="list-style-type: none"> <li>at 400 V</li> </ul>	1 A
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> <li>at 24 V</li> </ul>	1 A
<ul style="list-style-type: none"> <li>at 110 V</li> </ul>	0.22 A
<ul style="list-style-type: none"> <li>at 125 V</li> </ul>	0.22 A

• at 220 V	0.11 A
<b>Protective and monitoring functions</b>	
<b>trip class</b>	CLASS 10
<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 main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 250 A gG: 160 A fuse gL/gG: 6 A, quick: 10 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back
<b>fastening method</b>	Contactactor mounting
<b>height</b>	120 mm
<b>width</b>	70 mm
<b>depth</b>	140 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>	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 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>	screw-type terminals screw-type terminals
<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</li> <li>— stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for main contacts</li> </ul>	2x (2.5 ... 16 mm <sup>2</sup> ) 2x (10 ... 50 mm <sup>2</sup> ), 10 ... 70 mm <sup>2</sup> 2x (2.5 ... 35 mm <sup>2</sup> ), 2.5 ... 50 mm <sup>2</sup> 2x (10 ... 1/0), 1x (10 ... 2/0)
<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</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul>	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 (0.75 ... 2.5 mm <sup>2</sup> ) 2x (20 ... 16), 2x (18 ... 14)
<b>Safety related data</b>	
<b>touch protection against electrical shock</b>	finger-safe
<b>Certificates/ approvals</b>	
<b>General Product Approval</b>	<b>For use in hazardous locations</b>



[Confirmation](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping	other	Railway
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[Miscellaneous](#)

[Confirmation](#)

[Special Test Certificate](#)

#### Further information

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=3RU1146-4KB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU1146-4KB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4KB0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU1146-4KB0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU1146-4KB0&lang=en)

Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4KB0/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU1146-4KB0&objecttype=14&gridview=view1>



