

Overload relay 45...63 A For motor protection Size S3, Class 10  
 Stand-alone installation Main circuit: Screw terminal Auxiliary circuit:  
 Screw terminal Manual-Automatic-Reset !!! Phased-out product !!!  
 Successor is SIRIUS 3RU2 Preferred successor type is >>3RU2136-  
 4JB1<<



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] total typical	16.5 W
Insulation voltage with degree of pollution 3 rated value	1 000 V
Surge voltage resistance rated value	8 kV
Protection class IP	IP20
<ul style="list-style-type: none"> <li>on the front</li> </ul>	IP20
Shock resistance	8g / 10 ms
Type of protection	DMT 98 ATEX G 001
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	F

Ambient conditions	
Installation altitude at height above sea level	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	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

<b>Number of poles for main current circuit</b>	3
<b>Adjustable pick-up value current of the current-dependent overload release</b>	45 ... 63 A
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>	1 000 V

### Auxiliary circuit

<b>Number of NC contacts for auxiliary contacts</b>	1
<b>Number of NO contacts for auxiliary contacts</b>	1
<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0
<b>Operating 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>Operating current of auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 110 V</li> <li>• at 125 V</li> <li>• at 220 V</li> </ul>	1 A 0.22 A 0.22 A 0.11 A

### Protective and monitoring functions

<b>Trip class</b>	CLASS 10
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### Short-circuit protection

<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: 200 A gG: 125 A fuse gL/gG: 6 A, quick: 10 A

### Installation/ mounting/ dimensions

<b>Mounting position</b>	with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back
<b>Mounting type</b>	stand-alone installation
<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 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 6 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 6 mm</li> </ul> </li> </ul>	

### Connections/Terminals

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	No
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current 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 2x (2.5 ... 16 mm<sup>2</sup>)</li> <li>— stranded 2x (10 ... 50 mm<sup>2</sup>), 10 ... 70 mm<sup>2</sup></li> <li>— finely stranded with core end processing 2x (2.5 ... 35 mm<sup>2</sup>), 2.5 ... 50 mm<sup>2</sup></li> </ul> </li> <li>• at AWG conductors for main contacts 2x (10 ... 1/0), 1x (10 ... 2/0)</li> </ul>	
<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 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> <li>— finely stranded with core end processing 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</li> </ul> </li> <li>• at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)</li> </ul>	

### Certificates/approvals

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Miscellaneous](#)

[Confirmation](#)

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU1146-4JB1>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU1146-4JB1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4JB1>

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

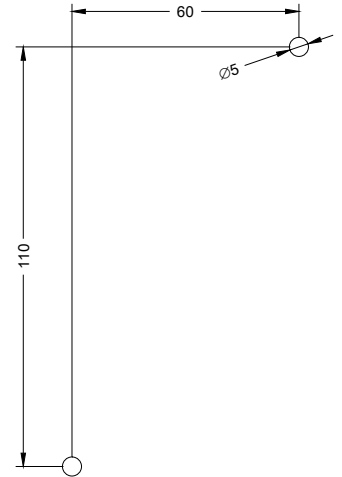
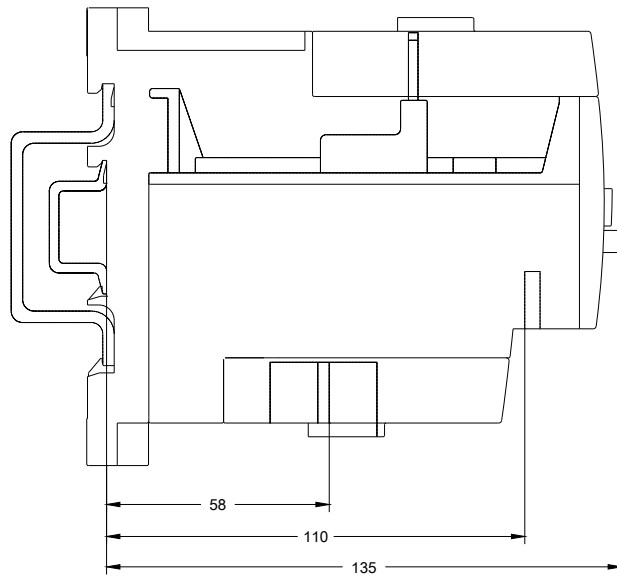
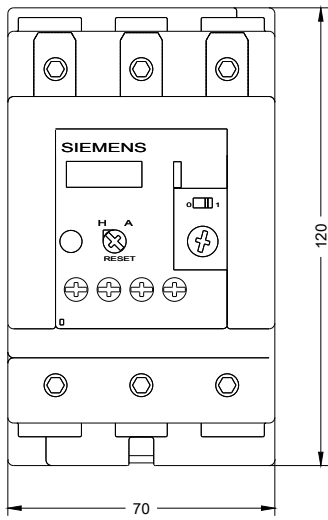
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU1146-4JB1&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU1146-4JB1&lang=en)

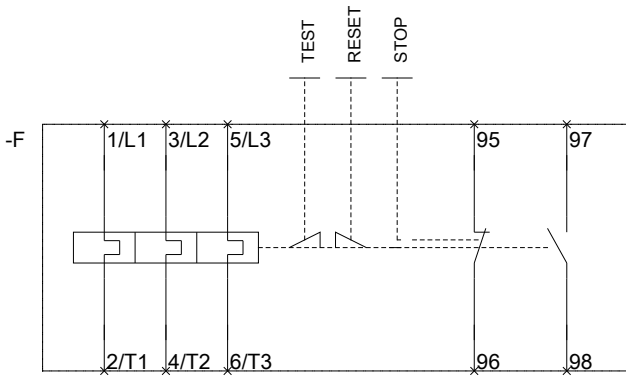
**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4JB1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU1146-4JB1&objecttype=14&gridview=view1>





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