



Evaluation unit for full motor protection (monostable) Size S00...S12, class 5...30 Stand-alone installation Main circuit: -- Auxiliary circuit: Screw terminal Manual-Automatic-Reset

product brand name	SIRIUS
product designation	solid-state overload relay
product type designation	3RB22
<b>General technical data</b>	
size of overload relay	S00 ... S12
size of contactor can be combined company-specific	S00 ... S12
power loss [W] for rated value of the current at AC in hot operating state	0.5 W
<ul style="list-style-type: none"> <li>per pole</li> </ul>	0.17 W
insulation voltage with degree of pollution 3 at AC rated value	300 V
surge voltage resistance rated value	4 kV
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	PTB 05 ATEX 3022
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	05/28/2009
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>during transport</li> </ul>	-40 ... +80 °C
relative humidity during operation	100 %
<b>Main circuit</b>	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	0.3 ... 630 A
operational current rated value	630 A
control supply voltage at AC	
<ul style="list-style-type: none"> <li>at 50 Hz rated value</li> </ul>	24 ... 240 V
<ul style="list-style-type: none"> <li>at 60 Hz rated value</li> </ul>	24 ... 240 V
<b>Auxiliary circuit</b>	
number of NC contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts	2
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> <li>at 24 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>at 110 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>at 120 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>at 125 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>at 230 V</li> </ul>	3 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 0.55 A 0.3 A 0.3 A 0.2 A

<b>Protective and monitoring functions</b>	
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<b>trip class</b>	CLASS 5, 10, 20 and 30 adjustable
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<b>Short-circuit protection</b>	
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<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 gL/gG: 6 A

<b>Installation/ mounting/ dimensions</b>	
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<b>mounting position</b>	any
<b>fastening method</b>	stand-alone installation
<b>height</b>	111 mm
<b>width</b>	45 mm
<b>depth</b>	95 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 0 mm 6 mm 0 mm  0 mm 0 mm 0 mm 0 mm 6 mm

<b>Connections/ Terminals</b>	
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<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> </ul>	screw-type terminals
<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>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul>	0.5 ... 2.5 mm <sup>2</sup> , 2x (0.5 ... 1.5 mm <sup>2</sup> ) 2x (24 ... 16)

<b>Safety related data</b>	
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<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>Certificates/ approvals</b>	
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<b>General Product Approval</b>	EMC
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[Confirmation](#)



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

[Type Test Certificates/Test Report](#)



Marine / Shipping

other



LRS



[Confirmation](#)

#### Further information

**Siemens has decided to exit the Russian market (see here).**

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

**Siemens is working on the renewal of the current EAC certificates.**

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=3RB2283-4AA1>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB2283-4AA1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB2283-4AA1>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RB2283-4AA1&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2283-4AA1&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB2283-4AA1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB2283-4AA1&objecttype=14&gridview=view1>



