



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                                                      |
| • per pole                                                                          | 0.17 W                                                     |
| insulation voltage with degree of pollution 3 at AC rated value                     | 300 V                                                      |
| surge voltage resistance rated value                                                | 4 kV                                                       |
| reference code according to IEC 81346-2                                             | F                                                          |
| Substance Prohibitance (Date)                                                       | 05/28/2009                                                 |
| SVHC substance name                                                                 | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8 |
| Weight                                                                              | 0.276 kg                                                   |
| <b>Ambient conditions</b>                                                           |                                                            |
| installation altitude at height above sea level maximum                             | 2 000 m                                                    |
| ambient temperature                                                                 |                                                            |
| • during operation                                                                  | -25 ... +60 °C                                             |
| • during storage                                                                    | -40 ... +80 °C                                             |
| • during transport                                                                  | -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                                                        |                                                            |
| • at 50 Hz rated value                                                              | 24 ... 240 V                                               |
| • at 60 Hz rated value                                                              | 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                                  |                                                            |
| • at 24 V                                                                           | 6 A                                                        |
| • at 110 V                                                                          | 6 A                                                        |
| • at 120 V                                                                          | 6 A                                                        |
| • at 125 V                                                                          | 6 A                                                        |
| • at 230 V                                                                          | 3 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<br>0.55 A<br>0.3 A<br>0.3 A<br>0.2 A                                                                                     |
| <b>Protective and monitoring functions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                              |
| <b>trip class</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CLASS 5, 10, 20 and 30 adjustable                                                                                            |
| <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 auxiliary switch required</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | fuse gL/gG: 6 A                                                                                                              |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                              |
| <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<br>0 mm<br>0 mm<br>0 mm<br>0 mm<br><br>0 mm<br>0 mm<br>0 mm<br>6 mm<br>0 mm<br><br>0 mm<br>0 mm<br>0 mm<br>0 mm<br>6 mm |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                              |
| <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>• for AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    | 0.5 ... 2.5 mm², 2x (0.5 ... 1.5 mm²)<br>2x (24 ... 16)                                                                      |
| <b>Electrical Safety</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                              |
| <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>Approvals Certificates</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                              |
| <b>General Product Approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                              |



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UL



EMV

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[Environmental Confirmations](#)

## Further information

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, ...)

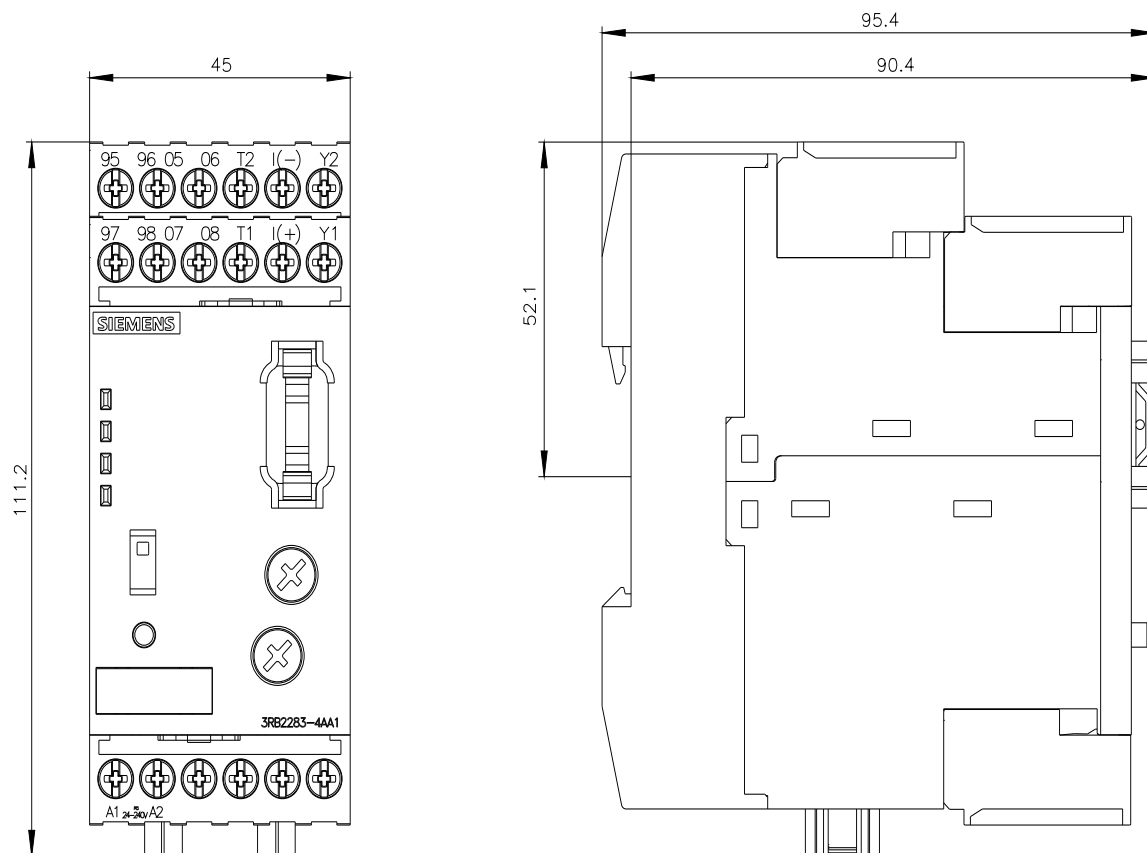
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RB2283-4AA1&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB2283-4AA1&lang=en)

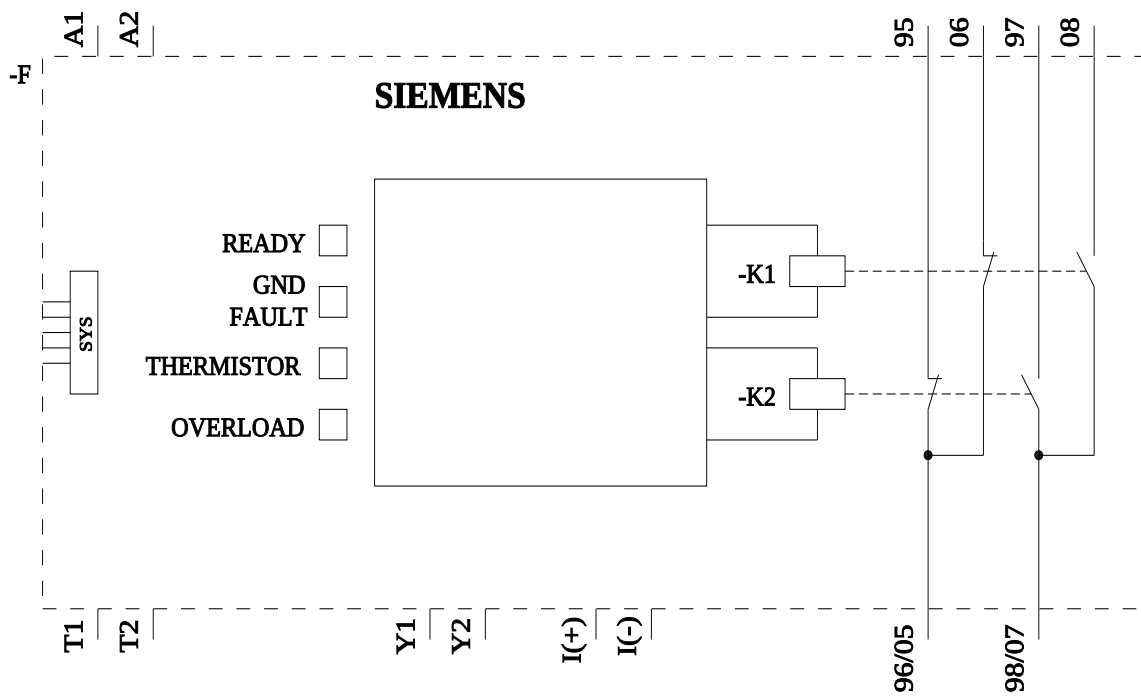
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<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>





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3/11/2024 

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